



## Advanced Accounting

*Debra C. Jeter & Paul K. Chaney (Wiley)*

*Course # 1163459, Version 2007, 43 CPE Credits*

**your self-study.**  
**your way.**

## Course CPE Information

### Course Expiration Date

Per AICPA and NASBA Standards (S9-06), QAS Self-Study courses must include an expiration date that is *no longer than one year from the date of purchase or enrollment*.

### Field of Study

Accounting. Some state boards may count credits under different categories—check with your state board for more information.

### Course Level

Advanced.

### Prerequisites

Previous knowledge of basic accounting concepts.

### Advance Preparation

None.

### Course Description

*Advanced Accounting* delivers a balanced and detailed approach to the conceptual and technical aspects of financial accounting and reporting. The materials include comprehensive coverage of the three key methods of consolidated financial reporting (cost, partial equity, and complete equity). In its 6th edition, this course draws attention to the similarities and differences of U.S. Standards versus international principles.

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Learning objectives, review questions, and qualified assessment © Copyright Western CPE 2017

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## **Instructional Design**

This Self-Study course is designed to lead you through a learning process using instructional methods that will help you achieve the stated learning objectives. You will be provided with course objectives and presented with comprehensive information and facts demonstrated in exhibits and/or case studies. Review questions will allow you to check your understanding of the material, and a qualified assessment will test your mastery of the course.

Please familiarize yourself with the following instructional features to ensure your success in achieving the learning objectives.

### **Course CPE Information**

The preceding section, “Course CPE Information,” details important information regarding CPE. If you skipped over that section, please go back and review the information now to ensure you are prepared to complete this course successfully.

### **Table of Contents**

The table of contents allows you to quickly navigate to specific sections of the course.

### **Learning Objectives and Content**

Learning objectives clearly define the knowledge, skills, or abilities you will gain by completing the course. Throughout the course content, you will find various instructional methods to help you achieve the learning objectives, such as examples, case studies, charts, diagrams, and explanations. Please pay special attention to these instructional methods, as they will help you achieve the stated learning objectives.

### **Review Questions**

The review questions accompanying this course are designed to assist you in achieving the course learning objectives. The review section is not graded; do not submit it in place of your qualified assessment. While completing the review questions, it may be helpful to study any unfamiliar terms in the glossary in addition to course content. After completing the review questions, proceed to the review question answers and rationales.

### **Review Question Answers and Rationales**

Review question answer choices are accompanied by unique, logical reasoning (rationales) as to why an answer is correct or incorrect. Evaluative feedback to incorrect responses and reinforcement feedback to correct responses are both provided.

### **Glossary**

The glossary defines key terms. Please review the definition of any words you are not familiar with.

### **Index**

The index allows you to quickly locate key terms or concepts as you progress through the instructional material.

## **Qualified Assessment**

Qualified assessments measure (1) the extent to which the learning objectives have been met and (2) that you have gained the knowledge, skills, or abilities clearly defined by the learning objectives for each section of the course. Unless otherwise noted, you are required to earn a minimum score of 70% to pass a course. If you do not pass on your first attempt, please review the learning objectives, instructional materials, and review questions and answers before attempting to retake the qualified assessment to ensure all learning objectives have been successfully completed.

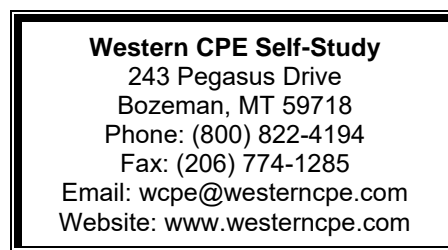
## **Answer Sheet**

Feel free to fill the Answer Sheet out as you go over the course. To enter your answers online, follow these steps:

1. Go to [www.westerncpe.com](http://www.westerncpe.com).
2. Log in with your username and password.
3. At the top right side of your screen, hover over “My Account” and click “My CPE.”
4. Click on the big orange button that says “View All Courses.”
5. Click on the appropriate course title.
6. Click on the blue wording that says “Qualified Assessment.”
7. Click on “Attempt assessment now.”

## **Evaluation**

Upon successful completion of your online assessment, we ask that you complete an online course evaluation. Your feedback is a vital component in our future course development.



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## ABOUT THE AUTHORS

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# PREFACE

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Convergence with international accounting standards has played an important role in virtually every project entered into by the Financial Accounting Standards Board (FASB) in recent years. Accounting for business combinations is no exception. In the Sixth Edition of *Advanced Accounting*, we compare and contrast U.S. standards and international principles throughout the book, drawing the readers' attention to remaining differences with an IFRS icon. The reader is made aware of important changes, both present and forecasted. We also incorporate the FASB's codification system for referencing standards.

This book is designed for advanced courses dealing with financial accounting and reporting in the following topical areas: business combinations, consolidated financial statements, international accounting, foreign currency transactions, accounting for derivative instruments, translation of financial statements of foreign affiliates, segment reporting and interim reporting, partnerships, fund accounting and accounting for governmental units, and accounting for non-government—nonbusiness organizations. The primary objective of this book is to provide a comprehensive treatment of selected topics in a clear and understandable manner. The changes related to FASB ASC Topics 805 and 810 (*SFAS No. 141R* and *160*) are integrated throughout the edition. As in previous editions, we strive to maintain maximum flexibility to the instructor in the selection and breadth of coverage for topics dealing with consolidated financial statements and other advanced topics.

We have further expanded the number and variety of exercises and problem materials at the end of each chapter. We include codification exercises that require the student to research the FASB's Codification to determine the appropriate GAAP for a variety of issues. In addition, we include financial statement analysis exercises that relate to real companies and practical applications in virtually every chapter. All chapters have been updated to reflect the most recent pronouncements of the Financial Accounting Standards Board and the Governmental Accounting Standards Board as of this writing.

In teaching consolidation concepts, a decision must be made about the recording method that should be emphasized in presenting consolidated workpaper procedures. The three major alternatives for recording investments in subsidiaries are the (1) cost method, (2) partial equity (or simple equity) method, and (3) complete equity (or sophisticated equity) method. A brief description of each method follows.

1. *Cost method.* The investment in subsidiary is carried at its cost, with no adjustments made to the investment account for subsidiary income or dividends. Dividends received by the parent company are recorded as an increase in cash and as dividend income.
2. *Partial equity method.* The investment account is adjusted for the parent company's share of the subsidiary's reported earnings or losses, and dividends received from the subsidiary are deducted from the investment account. Generally, no other adjustments are made to the investment in subsidiary account.
3. *Complete equity method.* This method is the same as the partial equity method except that additional adjustments are made to the investment in subsidiary account to reflect the effects of (a) the elimination of unrealized intercompany profits, (b) the amortization (depreciation) of the difference between cost and book value, and (c) the additional stockholders' equity transactions undertaken by the subsidiary that change the parent company's share of the subsidiary's stockholders' equity.

We continue to present all three methods, using generic icons to distinguish among the three methods. The instructor has the flexibility to teach all three methods, or to instruct the students to ignore one or two. If the student is interested in learning all three methods, he can, even if the instructor only focuses on one or two. Also, we believe this feature makes the book an excellent reference for the student to keep after graduation, so that he or she can adapt to any method needed.

## WHAT'S NEW IN THE TEXT?

- Author-created online videos explain some of the critical concepts of advanced accounting and walk students through how to solve selected problems throughout the book.
  - A continuous consolidation problem is introduced in Chapters 4 and 5. This allows students to build on concepts learned in prior chapters.
  - The coverage of certain topics has been expanded (such as contingent consideration and bargain purchases) to incorporate information gleaned from the FASB's Post-Implementation Review of FASB Statement No. 141R and to include more realistic real-world issues.
  - Chapter 11 on International Accounting has been updated to reflect the current status of international financial reporting standards (IFRS) around the world and the SEC's position with respect to U.S. adoption. In addition, we pay particular attention to the remaining major joint projects of the two boards (FASB and IASB), which include revenue recognition, accounting for leases, insurance contracts, and financial instruments.
  - The chapters on fund accounting and governmental accounting (Chapters 17 and 18) were updated to reflect the latest GASB pronouncements, including changes in the classification of the fund balance.
  - An appendix to Chapter 1 has been posted online at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter). This appendix illustrates a strategy or technique for analyzing a given company, such as a potential acquisition target. This strategy may be applied in some of the end-of-the-chapter Analyzing Financial Statements (AFS) problems. Several additional online appendices (including coverage of deferred taxes, as they pertain to individual topics throughout the text) may also be found at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter).
4. FASB's conceptual framework is discussed as it relates to Advanced Accounting in Chapter 1. We also include marginal references to *Related Concepts* throughout the book. The GASB's conceptual framework is discussed in Chapters 17 and 18.
  5. Questions or problems related to *Business Ethics* are included in the end-of chapter materials for every chapter.
  6. We include real-company annual reports or excerpts from reports with related questions (*Analyzing Financial Statements*) in the end-of-chapter materials and/or online for most chapters excluding Chapters 15 and 16.
  7. In Chapter 9 of the 6th edition, the homework material includes the effective interest, in addition to the straight-line method for amortization of bond premiums and discounts. The Sixth Edition also includes online appendices on deferred taxes which are related to the topics in Chapter 6 & 7. (Go to [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter).)
  8. The *in-the-news* boxes that appear throughout the book reflect recent business and economic events relevant to the subject matter.
  9. We have integrated *goodwill impairment* into some illustrations in the body of Chapter 5, as well as in several homework problems. We illustrate the goodwill impairment test described in FASB ASC topic 350 (*SFAS No. 142*), discussing its frequency, the steps laid out in the standard, and some of the likely implementation problems. The simplification of these tests for smaller companies is also discussed along with the role of qualitative factors for determining whether the steps are necessary. There are exercises on this topic in Chapters 2 and 5.
  10. At the beginning of Chapter 4 we discuss three methods of accounting for investments, depending on the level of ownership and the presumption of influence or control. We emphasize the importance of the complete equity method for certain investments that are not consolidated, or in the parent-only statements. In addition, online materials include an expanded discussion of the *accounting for investments*. (See [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter).)

## OTHER HIGHLIGHTED FEATURES OF THE TEXT

1. We include a feature that requires students to research the FASB Codification in order to locate the current standard that applies to various issues. These exercises appear before the problems at the end of each chapter and often, but not always, relate to topics addressed in that chapter. (Similar questions appear on the CPA exam.)
2. We include a discussion of international accounting standards on each topic where such standards exist, and compare and contrast U.S. GAAP and IFRS. An IFRS icon appears in the margins where this discussion occurs.
3. A discussion of the joint projects of the FASB and the IASB is incorporated throughout the textbook where appropriate, with an expanded discussion in Chapter 11.
11. *Learning objectives* are included in the margins of the chapters, and relevant learning objective numbers are provided with end-of-chapter materials.
12. We continue the use of *graphical illustrations*, which was introduced in prior editions.
13. A few short-answer questions (and solutions) are periodically provided throughout each chapter to enable students to test their knowledge of the content before moving on.
14. The organization of the worksheets applies a format that separates accounts to the income statement, the statement of retained earnings, and the balance sheet in distinct sections. The worksheets are placed near the relevant text.



15. All illustrations are printed upright on the page and labeled clearly for convenient study and reference.
16. Entries made on consolidated statements workpapers are presented in general journal form. These entries are shaded in blue to distinguish them from book entries, to facilitate exposition and study. To distinguish among parent company entries and workpaper entries in the body of the text, we present parent entries in gray and workpaper entries in blue.
17. Summaries appear at the end of each chapter, and a glossary of key terms is provided at the end of the book.
18. Chapters 17 through 19 reflect the latest GASB and FASB pronouncements related to fund accounting.

Clearly there are more topics in this text than can be covered adequately in a one semester or one-quarter course. We believe that it is generally better for both students and instructors to cover a selected number of topics in depth rather than to undertake a superficial coverage of a larger number of topics. Modules of material that an instructor may consider for exclusion in any one semester or quarter include the following:

- Chapters 7–9. An expanded analysis of problems in the preparation of consolidated financial statements.
- Chapter 10. Insolvency—liquidation and reorganization.
- Chapters 11–14. International accounting, foreign currency transactions and translation, and segment and interim reporting.
- Chapters 15 and 16. Partnership accounting.
- Chapters 17 through 19. Fund accounting, accounting for governmental units, and accounting for nongovernment–nonbusiness organizations (NNOs).

## SUPPLEMENTS

The following supplements are available on the book companion web site: Study Guide, Excel Templates, PowerPoint Slides, Instructors' Manual, Solutions Manual, Test Bank, and videos. These materials are accessible from [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter).

## WileyPLUS

*WileyPLUS* is an online learning and assessment environment, where students test their understanding of concepts, get feedback on their answers, and access learning materials like the eText and multimedia resources. Instructors can automate assignments, create practice quizzes, assess students' progress, and intervene with those falling behind.

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We wish to thank the following individuals for their suggestions and assistance in the preparation of this edition.

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Review Questions located at the end of every chapter

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## **Chapter 1 – Introduction to Business Combinations and the Conceptual Framework**

### **Learning Objectives**

After completing this section of the course, you will be able to:

- Identify historical trends in types of business combinations and cite the major reasons that firms combine.
- Identify the factors that managers should consider in exercising due diligence in business combinations.
- Identify defensive tactics used to attempt to block business combinations.
- Recognize differences between an asset and a stock acquisition.
- Cite the factors used to determine the price and the method of payment for a business combination.
- Calculate an estimate of goodwill by discounting expected future excess earnings over some time period.
- Recognize differences between the two alternative views of consolidated financial statements.
- Identify concepts and requirements with Statements of Financial Accounting Concepts (SFAC) and the projects undertaken by FASB and the International Accounting Standards Board (IASB) and their primary objectives.

# INTRODUCTION TO BUSINESS COMBINATIONS AND THE CONCEPTUAL FRAMEWORK

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## CHAPTER CONTENTS

- 1.1 GROWTH THROUGH MERGERS
- 1.2 NATURE OF THE COMBINATION
- 1.3 BUSINESS COMBINATIONS: WHY? WHY NOT?
- 1.4 BUSINESS COMBINATIONS: HISTORICAL PERSPECTIVE
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## 1.1 GROWTH THROUGH MERGERS

The merger between American Airlines and US Airways in 2013 has been the latest in a string of acquisitions in an industry described by Warren Buffett a few years earlier as typifying the “worst” sort of business. He went on to describe such a business as one that grows fast, earns next to nothing, and takes large amounts of capital to engender growth. Twenty-nine bankruptcies in 30 years support Buffett’s allegations. Still, the belief is growing that maybe now, at last, airlines have finally cut capacity sufficiently to earn profits in the long run.<sup>1</sup>

Growth through mergers and acquisitions (M&A) has become a standard in business not only in America but throughout the world. In the new millennium, the most recent in a series of booms in merger activity was sparked by cheaper credit and by global competition,

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<sup>1</sup> WSJ, “Airlines Haven’t Reached Escape Velocity,” by Justin Lahart, 4/1/2013.



in addition to the usual growth-related incentives predominant during the boom of the 1990s. By the end of 2008, however, uncertainty in the commercial credit markets had led to anxiety about whether merger transactions could continue to be achieved successfully in the current environment, and by the middle of 2009 M&A activity had nearly come to a halt. With plunging market values and tightened credit, the mix and nature of the financing components were clearly in flux, and major adaptations needed to consummate any new deals.

As the markets began to recover in the second half of 2009, however, merger transactions picked up once more. Banks made capital available for bigger companies, such as Kraft, who looked to acquire Cadbury, and corporate debt offerings soared. By 2010, several huge deals were in the works.

Merger activity has historically been highly correlated with the movement of the stock market. Increased stock valuation increases a firm's ability to use its shares to acquire other companies and is often more appealing than issuing debt. During the merger cycle of the 1990s, equity values fueled the merger wave. The slowing of merger activity in the early years of the 21st century provided a dramatic contrast to this preceding period. Beginning with the merger of Morgan Stanley and Dean Witter Discover and ending with the biggest acquisition to that date—WorldCom's bid for MCI—the year 1997 marked the third consecutive year of record mergers and acquisitions activity. The pace accelerated still further in 1998 with unprecedented merger activity in the banking industry, the auto industry, financial services, and telecommunications, among others. This activity left experts wondering why and whether bigger was truly better. It also left consumers asking what the impact would be on service. A wave of stock swaps was undoubtedly sparked by record highs in the stock market, and stockholders reaped benefits from the mergers in many cases, at least in the short run. Regulators voiced concern about the dampening of competition, and consumers were quick to wonder where the real benefits lay. Following the accounting scandals of 2001 (WorldCom, Enron, Tyco, etc.), merger activity lulled for a few years.

Also in 2001, the *Financial Accounting Standards Board (FASB)* voted in two major accounting changes related to business combinations. The first met with vehement protests that economic activity would be further slowed as a result and the second with excitement that it might instead be spurred. Both changes are detailed in Chapter 2.

By the middle of 2002, however, these hopes had been temporarily quelled. Instead of increased earnings, many firms active in mergers during the 1990s were forced to report large charges related to the diminished value of long-lived assets (mainly goodwill). Merger activity slumped, suggesting that the frenzy had run its course. Market reaction to the mergers that did occur during this period typified the market's doubts. When *Northrop Grumman Corp.* announced the acquisition of *TRW Inc.* for \$7.8 billion, the deal was praised but no market reaction was noted. In contrast, when Vivendi Universal admitted merger-gone-wrong woes, investors scurried.

By the middle of the first decade of the 21st century, however, the frenzy was returning with steady growth in merger activity from 2003 to 2006. In 2005, almost 18% of all M&A (mergers & acquisitions) deals were in the services sector. In a one-week period in June of 2006, \$100 billion of acquisitions occurred, including Phelps Dodge's \$35.4 billion acquisition of Inco Ltd. and Falconbridge Ltd. In addition, because of the economic rise in China and India, companies there were looking to increase their global foothold and began acquiring European companies. Thus cross-border deals within Europe accounted for a third of the global M&A deals.

However, by the end of 2008, a decline in overall merger activity was apparent as the U.S. economy slid into a recession, and some forecasters were predicting the next chapter in mergers and acquisitions to center around bankruptcy-related activity. Data from Thomson Reuters revealed that in 2008, bankruptcy-related merger activity increased for the first time in the last six years. For example, the number of Chapter 11 M&A purchases rose from 136 for the entire year of 2007 to 167 for the first ten months of 2008, with more to come. Overall mergers, on the other hand, decreased from \$87 billion in the United States (\$277 billion globally) during October 2007 to \$78 billion in the United States (\$259 billion globally) during October 2008, based on the Reuters data.


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"If we are going to ride the IASB and the IFRS [International Financial

Reporting Standards] horse, we want to make sure that it's as good as it can be. We want to make sure that the IASB is strong, is independent, is well resourced, and is properly funded in a broad-based and secure way."<sup>2</sup>


 IFRS


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"By 2006, the percentage of the mergers and acquisitions market

accounted for by private-equity firms had increased to approximately 15 percent from around 4 percent in 1990."<sup>4</sup>


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After several lean years, U.S. M&A volume reached \$1 trillion in

2013. Scott Barshay of Cravath, Swaine, & Moore, a major law firm, claims that this growth was caused by "a stronger economy, . . . Congress behaving more responsibly, and . . . all appearances of stability at the Fed."<sup>5</sup>

On December 4, 2007, FASB released two new standards, *FASB Statement No. 141 R*, Business Combinations, and *FASB Statement No. 160*, Noncontrolling Interests in Consolidated Financial Statements [ASC 805, "Business Combinations" and ASC 810, "Consolidations," based on FASB's new codification system]. These standards have altered the accounting for business combinations dramatically.

Both statements became effective for years *beginning after December 15, 2008*, and are intended to improve the relevance, comparability and transparency of financial information related to business combinations, and to facilitate the convergence with international standards. They represent the completion of the first major joint project of the FASB and the IASB (International Accounting Standards Board), according to one FASB member, G. Michael Crooch. The FASB also believes the new standards will reduce the complexity of accounting for business combinations. These standards are integrated throughout this text.

## Planning M&A in a Changing Environment and Under CHANGING Accounting Requirements

1. The timing of deals is critical. The number of days between agreement or announcement and deal consummation can make a huge difference.
2. The effects on reporting may cause surprises. More purchases qualify as business combinations than previously. Income tax provisions can trigger disclosures.
3. Assembling the needed skill and establishing the needed controls takes time. The use of fair values is expanded, and more items will need remeasurement or monitoring after the deal.
4. The impact on earnings in the year of acquisition and subsequent years will differ from that in past mergers, as will the effects on earnings of step purchases or sales.
5. Unforeseen effects on debt covenants or other legal arrangements may be lurking in the background, as a result of the changes in key financial ratios.<sup>3</sup>

Growth is a major objective of many business organizations. Top management often lists growth or expansion as one of its primary goals. A company may grow slowly, gradually expanding its product lines, facilities, or services, or it may skyrocket almost overnight. Some managers consider growth so important that they say their companies must "grow or die." In the past hundred years, many U.S. businesses have achieved their goal of expansion through business combinations. A **business combination** occurs when *the operations of two or more companies are brought under common control*.

## 1.2 NATURE OF THE COMBINATION

A business combination may be friendly or unfriendly. In a **friendly combination**, *the boards of directors of the potential combining companies negotiate mutually agreeable terms of a proposed combination*. The proposal is then submitted to the stockholders of the involved companies for approval. Normally, a two-thirds or three-fourths positive vote is required by corporate bylaws to bind all stockholders to the combination.

An **unfriendly (hostile) combination** results when *the board of directors of a company targeted for acquisition resists the combination*. A formal **tender offer** enables the acquiring firm to deal directly with individual shareholders. The tender offer, usually published in a newspaper, typically provides a price higher than the current market price for shares made available by a certain date. If a sufficient number of shares are not made

<sup>2</sup> "Change Agent: Robert Hertz discusses FASB's priorities, the road to convergence and changes ahead for CPAs," *Journal of Accountancy*, February 2008, p. 31.

<sup>3</sup> BDO Seidman, LLP, "Client Advisory," No. 2008-1, January 31, 2008.

<sup>4</sup> *The New York Post*, "Money to Burn," by Suzanne Kapner, March 28, 2006, p. 33.

<sup>5</sup> "Markets Buoyant, Merger Activity Picks Up," by David Gelles, *The New York Times*, DealBook, January 1, 2014.


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Men's  
Wearhouse  
acquired all  
the  
outstanding  
shares of Jos.

A Bank with a per share offer that represented a 56% premium over Jos. A. Bank's closing share price. During a six month period, Jos. A. Bank made several offers to acquire Men's Wearhouse. At the end of this six month period, Men's Wearhouse, using a Pac Man strategy, made an offer to acquire Jos. A. Bank. No rebranding of the companies is expected and Men's Wearhouse shareholders hope to benefit from \$100 to \$150 million in synergies.<sup>6</sup>

**LO 4** Defensive tactics are used.

available, the acquiring firm may reserve the right to withdraw the offer. Because they are relatively quick and easily executed (often in about a month), tender offers are the preferred means of acquiring public companies.

Although tender offers are the preferred method for presenting hostile bids, most tender offers are friendly ones, done with the support of the target company's management. Nonetheless, hostile takeovers have become sufficiently common that a number of mechanisms have emerged to resist takeover.

## Defense Tactics

Resistance often involves various moves by the target company, generally with colorful terms. Whether such defenses are ultimately beneficial to shareholders remains a controversial issue. Academic research examining the price reaction to defensive actions has produced mixed results, suggesting that the defenses are good for stockholders in some cases and bad in others. For example, when the defensive moves result in the bidder (or another bidder) offering an amount higher than initially offered, the stockholders benefit. But when an offer of \$40 a share is avoided and the target firm remains independent with a price of \$30, there is less evidence that the shareholders have benefited.

A certain amount of controversy surrounds the effectiveness, as well as the ultimate benefits, of the following defensive moves:

1. *Poison pill*: Issuing stock rights to existing shareholders enabling them to purchase additional shares at a price below market value, but exercisable only in the event of a potential takeover. This tactic has been effective in some instances, but bidders may take managers to court and eliminate the defense. In other instances the original shareholders benefit from the tactic. Chrysler Corp. announced that it was extending a poison pill plan until February 23, 2008, under which the rights become exercisable if anyone announces a tender offer for 15% or more, or acquires 15%, of Chrysler's outstanding common shares. Poison pills are rarely triggered, but their existence serves as a preventative measure.
2. *Greenmail*: The purchase of any shares held by the would-be acquiring company at a price substantially in excess of their fair value. The purchased shares are then held as treasury stock or retired. This tactic is largely ineffective because it may result in an expensive excise tax; further, from an accounting perspective, the excess of the price paid over the market price is expensed.
3. *White knight or white squire*: Encouraging a third firm more acceptable to the target company management to acquire or merge with the target company.
4. *Pac-man defense*: Attempting an unfriendly takeover of the would-be acquiring company.
5. *Selling the crown jewels*: The sale of valuable assets to others to make the firm less attractive to the would-be acquirer. The negative aspect is that the firm, if it survives, is left without some important assets.
6. *Leveraged buyouts*: The purchase of a controlling interest in the target firm by its managers and third-party investors, who usually incur substantial debt in the process and subsequently take the firm private. The bonds issued often take the form of high-interest, high-risk "junk" bonds. Leveraged buyouts will be discussed in more detail in Chapter 2.

## 1.3 BUSINESS COMBINATIONS: WHY? WHY NOT?

**LO 2** Reasons firms combine.

A company may expand in several ways. Some firms concentrate on **internal** expansion. A firm may expand internally by engaging in product research and development. Hewlett-Packard is an example of a company that relied for many years on new product

<sup>6</sup> "Men's Wearhouse Reaches \$1.8 Billion Deal to Acquire Jos. A. Bank," by Maggie McGrath, Forbes.com, March 11, 2014.

development to maintain and expand its market share. A firm may choose instead to emphasize marketing and promotional activities to obtain a greater share of a given market. Although such efforts usually do not expand the total market, they may redistribute that market by increasing the company's share of it.

For other firms, **external** expansion is the goal; that is, they try to expand by acquiring one or more other firms. This form of expansion, aimed at producing relatively rapid growth, has exploded in frequency and magnitude in recent years. A company may achieve significant cost savings as a result of external expansion, perhaps by acquiring one of its major suppliers.

In addition to rapid expansion, the business combination method, or external expansion, has several other potential advantages over internal expansion:

1. **Operating synergies** may take a variety of forms. Whether the merger is **vertical** (a merger between a supplier and a customer) or **horizontal** (a merger between competitors), combination with an existing company provides management of the acquiring company with an established operating unit with its own experienced personnel, regular suppliers, productive facilities, and distribution channels. In the case of vertical mergers, synergies may result from the elimination of certain costs related to negotiation, bargaining, and coordination between the parties. In the case of a horizontal merger, potential synergies include the combination of sales forces, facilities, outlets, and so on, and the elimination of unnecessary duplication in costs. When a private company is acquired, a plus may be the potential to eliminate not only duplication in costs but also unnecessary costs.

Management of the acquiring company can draw upon the operating history and the related historical database of the acquired company for planning purposes. A history of profitable operations by the acquired company may, of course, greatly reduce the risk involved in the new undertaking. A careful examination of the acquired company's expenses may reveal both expected and unexpected costs that can be eliminated. On the more negative (or cautious) side, be aware that the term "synergies" is sometimes used loosely. If there are truly expenses that can be eliminated, services that can be combined, and excess capacity that can be reduced, the merger is more likely to prove successful than if it is based on growth and "so-called synergies," suggests Michael Jensen, a professor of finance at the Harvard Business School.

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Views on whether synergies are real or simply a plug figure to justify a merger that shouldn't happen are diverse. Time Warner, for example, has fluctuated back and forth on this issue in recent years. President Jeffrey Bewkes recently was quoted as saying, "No division should subsidize another." When queried about the message his predecessors sent to shareholders, he said, "It's bull—"<sup>7</sup>

**GAINS FROM BULKING UP<sup>8</sup>**

| <i>Industry</i>           | <i>Key Benefit of Consolidation</i>  |
|---------------------------|--|
| Antenna towers            | Frees up capital and management time for wireless communications operators |
| Funeral homes             | Yields greater discounts on coffins, supplies, and equipment               |
| Health clubs              | Spreads regional marketing and advertising costs over more facilities      |
| Landfill sites            | Lets operators cope with the new environmental and regulatory demands      |
| Physician group practices | Reduces overhead and costs of medical procedures                           |

2. Combination may enable a company to compete more effectively in the **international marketplace**. For example, an acquiring firm may diversify its operations rather rapidly by entering new markets; alternatively, it may need to ensure its sources of supply or market outlets. Entry into new markets may also be undertaken to obtain cost savings realized by smoothing cyclical operations. Diminishing savings from cost-cutting

<sup>7</sup> WSJ, "After Years of Pushing Synergy, Time Warner Inc. Says Enough," by Matthew Karnitschnig, 6/2/06, p.A1.

<sup>8</sup> Business Week, "Buy 'Em Out, Then Build 'Em Up," by Eric Schine, 5/18/95, p. 84.



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More than a third of bankruptcy merger activity in 2008 took

place in financial services, with the sale of assets by Lehman Brothers (New York investment bank) and the \$2.8 billion acquisition by a consortium of Ashikaga Bank (Japan). Others included Thornwood Associates' \$900 million purchase of Federal-Mogul, Mendecino Redwood's \$600 million acquisition of Pacific Lumber, and NBTY's \$371 million purchase of Leiner Health Products.<sup>9</sup>

*within* individual companies makes combination more appealing. The financial crisis in Asia accelerated the pace for a time as American and European multinationals competed for a shrinking Asian market. However, a combination of growing competition, globalization, deregulation, and financial engineering has led to increasingly complex companies and elusive profits.

3. Business combinations are sometimes entered into to take advantage of **income tax** laws. The opportunity to file a consolidated tax return may allow profitable corporations' tax liabilities to be reduced by the losses of unprofitable affiliates. When an acquisition is financed using debt, the interest payments are tax deductible, creating a **financial synergy** or "tax gain." Many combinations in the past were planned to obtain the advantage of significant operating loss carryforwards that could be utilized by the acquiring company. However, the Tax Reform Act of 1986 limited the use of operating loss carryforwards in merged companies. Because tax laws vary from year to year and from country to country, it is difficult to do justice to the importance of tax effects within the scope of this chapter. Nonetheless, it is important to note that tax implications are often a driving force in merger decisions.
4. **Diversification** resulting from a merger offers a number of advantages, including increased flexibility, an internal capital market, an increase in the firm's debt capacity, more protection from competitors over proprietary information, and sometimes a more effective utilization of the organization's resources. In debating the tradeoffs between diversification and focusing on one (or a few) specialties, there are no obvious answers.
5. **Divestitures** accounted for 30% or more of the merger and acquisitions activity in each quarter from 1995 into mid-1998 and from 2001 to 2010. Shedding divisions that are not part of a company's core business became common during this period. In some cases the divestitures may be viewed as "undoing" or "redoing" past acquisitions. A popular alternative to selling off a division is to "spin off" a unit. Examples include AT&T's spin-off of its equipment business to form *Lucent Technologies Inc.*, Sears Roebuck's spin-off of *Allstate Corp.* and *Dean Witter Discover & Co.*, and Cincinnati Bell's proposed spin-off of its billing and customer-management businesses to form *Convergys Corp.*

Notwithstanding its apparent advantages, business combination may not always be the best means of expansion. An overriding emphasis on rapid growth may result in the pyramiding of one company on another without sufficient management control over the resulting conglomerate. Too often in such cases, management fails to maintain a sound enough financial equity base to sustain the company during periods of recession. Unsuccessful or incompatible combinations may lead to future divestitures.

In order to avoid large dilutions of equity, some companies have relied on the use of various debt and preferred stock instruments to finance expansion, only to find themselves unable to provide the required debt service during a period of decreasing economic activity. The junk bond market used to finance many of the mergers in the 1980s had essentially collapsed by the end of that decade.

Business combinations may destroy, rather than create, value in some instances. For example, if the merged firm's managers transfer resources to subsidize money-losing segments instead of shutting them down, the result will be a suboptimal allocation of capital. This situation may arise because of reluctance to eliminate jobs or to acknowledge a past mistake.

Some critics of the accounting methods used in the United States prior to 2002 to account for business combinations argued that one of the methods did not hold executives accountable for their actions if the price they paid was too high, thus encouraging firms to "pay too much." Although opinions are divided over the relative merits of the accounting alternatives, most will agree that the resulting financial statements should reflect the economics of the business combination. Furthermore, if and when the accounting standards

<sup>9</sup> "Water Cooler: What Players in the Mid Market Are Talking About," *Mergers & Acquisitions*, December 2008.

and the resulting statements fail even partially at this objective, it is crucial that the users of financial data be able to identify the deficiencies. Thus we urge the reader to keep in mind that an important reason for learning and understanding the details of accounting for business combinations is to understand the economics of the business combination, which in turn requires understanding any possible deficiencies in the accounting presentation.

## 1.4 BUSINESS COMBINATIONS: HISTORICAL PERSPECTIVE

### LO 1 Historical trends in types of M&A.

In the United States there have been three fairly distinct periods characterized by many business mergers, consolidations, and other forms of combinations: 1880–1904, 1905–1930, and 1945–present. During the first period, huge holding companies, or trusts, were created by investment bankers seeking to establish monopoly control over certain industries. This type of combination is generally called **horizontal integration** because it involves the combination of companies within the same industry. Examples of the trusts formed during this period are J. P. Morgan's U.S. Steel Corporation and other giant firms such as Standard Oil, the American Sugar Refining Company, and the American Tobacco Company. By 1904, more than 300 such trusts had been formed, and they controlled more than 40% of the nation's industrial capital.

The second period of business combination activity, fostered by the federal government during World War I, continued through the 1920s. In an effort to bolster the war effort, the government encouraged business combinations to obtain greater standardization of materials and parts and to discourage price competition. After the war, it was difficult to reverse this trend, and business combinations continued. These combinations were efforts to obtain better integration of operations, reduce costs, and improve competitive positions rather than attempts to establish monopoly control over an industry. This type of combination is called **vertical integration** because it involves the combination of a company with its suppliers or customers. For example, Ford Motor Company expanded by acquiring a glass company, rubber plantations, a cement plant, a steel mill, and other businesses that supplied its automobile manufacturing business. From 1925 to 1930, more than 1,200 combinations took place, and about 7,000 companies disappeared in the process.

The third period started after World War II and has exhibited rapid growth in merger activity since the mid-1960s, and even more rapid growth since the 1980s. The total dollar value of mergers and acquisitions grew from under \$20 billion in 1967 to over \$300 billion by 1995 and over \$1 trillion in 1998, and \$3.5 trillion by 2006. Even allowing for changes in the value of the dollar over time, the acceleration is obvious. By 1996, the number of yearly mergers completed was nearly 7,000. Some observers have called this activity **merger mania**, and most agreed that the mania had ended by mid-2002. However, by 2006, merger activity was soaring once more. Illustration 1-1 presents two rough graphs of the level of merger activity for acquisitions over \$10 million from 1972 to 2012 in number of deals, and from 1979 to 2012 in dollar volume. Illustration 1-2 presents summary statistics on the level of activity for the year 2012 by industry sector for acquisitions with purchase prices valued in excess of \$10 million.

This most recent period can be further subdivided to focus on trends of particular decades or subperiods. For example, many of the mergers that occurred in the United States from the 1950s through the 1970s were **conglomerate** mergers. Here the primary motivation for combination was often to diversify business risk by combining companies in different industries having little, if any, production or market similarities, or possibly to create value by lowering the firm's cost of capital. One conjecture for the popularity of this type of merger during this time period was the strictness of regulators in limiting combinations of firms in the same industry. One conglomerate may acquire another, as Esmark did when it acquired Norton-Simon, and conglomerates may spin off, or divest themselves of, individual businesses. Management of the conglomerate hopes to smooth earnings over time by counterbalancing the effects of economic forces that affect different industries at different times.

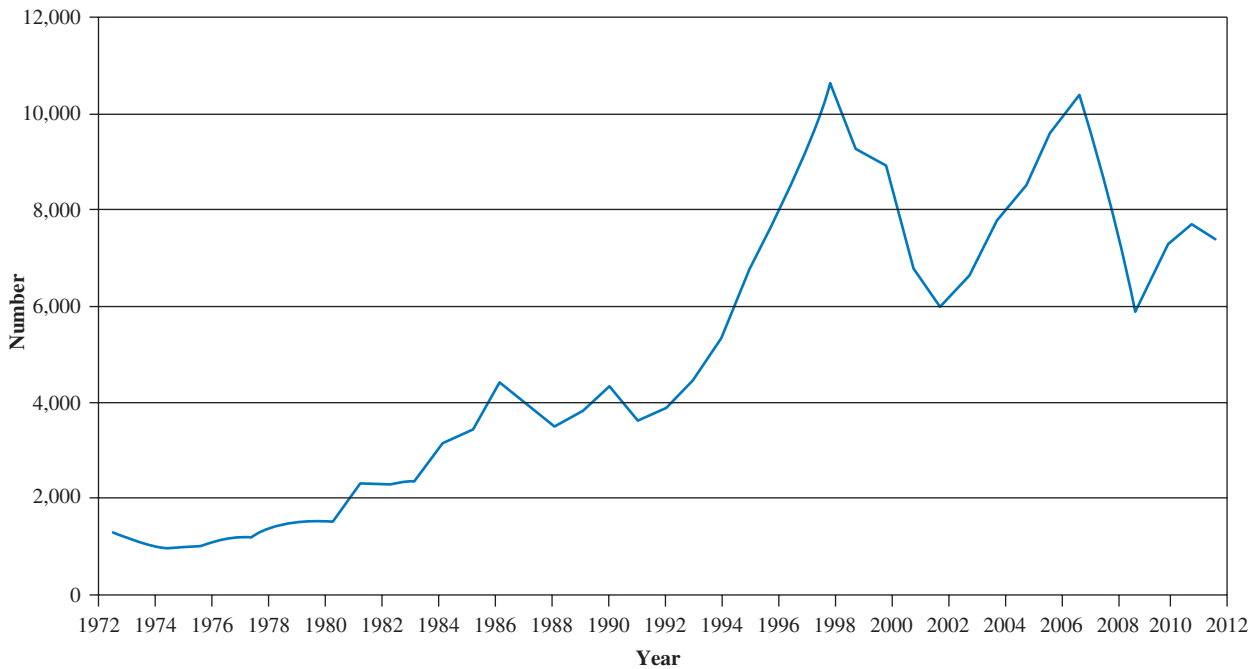
In contrast, the 1980s were characterized by a relaxation in antitrust enforcement during the Reagan administration and by the emergence of high-yield junk bonds to finance acquisitions. The dominant type of acquisition during this period and into the 1990s was the **strategic acquisition**, claiming to benefit from **operating synergies**. These synergies may arise when the talents or strengths of one of the firms complement the products or needs of

the other, or they may arise simply because the firms were former competitors. An argument can be made that the dominant form of acquisition shifted in the 1980s because many of the conglomerate mergers of the 1960s and 1970s proved unsuccessful; in fact, some of the takeovers of the 1980s were of a disciplinary nature, intended to break up conglomerates.

Deregulation undoubtedly played a role in the popularity of combinations in the 1990s. In industries that were once fragmented because concentration was forbidden, the

### ILLUSTRATION 1-1 PART A

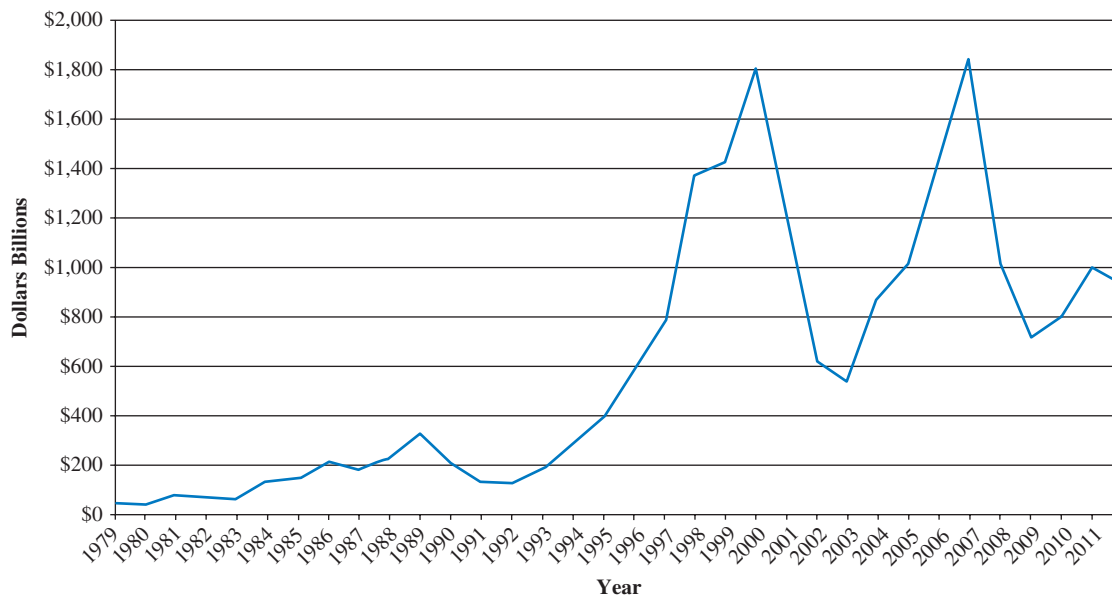
#### Number of Mergers and Acquisitions over \$10 Million 1972 to 2012



Data source: *Mergers and Acquisitions*, February 2002, 2004, 2006, 2009, 2010, 2013 March/April 1999, May/June.

### ILLUSTRATION 1-1 PART B

#### Value of Mergers and Acquisitions over \$10 Million 1979 to 2012



Data source: *Mergers and Acquisitions*, February 2013, 2010, 2009, 2006, 2004, 2002, March/April 1999, May/June 1989, 1982 Almanac & Index.

## ILLUSTRATION 1-2

## 10 Most Active Industries (Domestic Deals) by Number and Value of Transactions in 2012

| Industry                                    | Number of Deals |                 |                    | Value of Deals |                     |                      |
|---|-----------------|-----------------|--------------------|----------------|---------------------|----------------------|
|   | Rank            | Number of Deals | % of All M&A Deals | Rank           | Value (\$ billions) | % of Total M&A Value |
| Business Services                           | 1               | 957             | 18.8%              | 8              | 24.9                | 4.0%                 |
| Software                                    | 2               | 428             | 8.4%               | 7              | 28.8                | 4.6%                 |
| Real Estate                                 | 3               | 307             | 6.0%               | 4              | 35.7                | 5.7%                 |
| Health Services                             | 4               | 300             | 5.9%               | 3              | 45.0                | 7.2%                 |
| Oil & Gas                                   | 5               | 210             | 4.1%               | 2              | 67.0                | 10.7%                |
| Insurance                                   | 6               | 171             | 3.4%               | 10             | 41.6                | 6.6%                 |
| Commercial Banks                            | 7               | 169             | 3.3%               | –              | 31.0                | 4.9%                 |
| Investment and Commodity Firms              | 8               | 146             | 2.9%               | 9              | 22.2                | 3.5%                 |
| Measuring, Medical & Photographic Equipment | 9               | 140             | 2.7%               | 6              | 30.8                | 4.9%                 |
| Wholesale Trade—durable goods               | 10              | 139             | 2.7%               | –              | 25.8                | 4.1%                 |
| Drugs                                       | –               | 83              | 1.6%               | 5              | 32.6                | 5.2%                 |
| Electric, Gas, and Water Distributions      | –               | 83              | 1.6%               | 1              | 116.6               | 18.6%                |

Data source: *Mergers & Acquisitions*, February 2013, p. 37.

pace of mergers picked up significantly in the presence of deregulation. These industries include banking, telecommunications, and broadcasting. Although recent years have witnessed few deals blocked due to antitrust enforcement, an example of a major transaction dropped in 1996 because of a planned FTC (Federal Trade Commission) challenge was in the drugstore industry. The FTC challenged the impact of a proposed merger between *Rite Aid Corp.* and *Revco D.S. Inc.* on market power in several sectors of the East and Midwest. Nonetheless, subsequent deals in the industry saw both companies involved: Rite Aid acquired *Thrifty PayLess Holdings Inc.*, and *CVS Inc.* purchased Revco in February 1997.

Later, the Justice Department sued to block Primestar's acquisition of a satellite slot owned by *MCI* and *News Corp.* Other deals were dropped in the face of possible intervention, including a planned merger between CPA firms KPMG Peat Marwick and Ernst & Young in 1998. Nonetheless, over time the group of large CPA firms once referred to as the Big 8 has blended into the Big 4, raising concerns about a possible lack of competition in the audit market for large companies. The Justice Department reached a settlement in 2013 with American Airlines and US Airways requiring them to sell facilities at seven airports before being allowed to consummate the planned merger.<sup>10</sup>

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Before the announcement of the merger between AT&T and T-Mobile, phone handset makers such as HTC and Motorola had two major carriers (ATT and T-Mobile) who could buy their GSM-based phones. They just lost any ability to control price and profits on handsets because now a single buyer that can dictate what GSM phones come to market. Even with LTE becoming the standard for the 4G world, it would essentially be a market dominated by three buyers, which would place handset makers at the mercy of the giants.<sup>11</sup>

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Virtually every deal in the 2010 Wall Street lineup of potential mega-mergers faced regulatory challenges both in the United States and in Europe. Examples include Oracle and Sun; Exxon and XTO Energy; Yahoo and Microsoft, Kraft and Cadbury.

<sup>10</sup> CNN Money, "US Air and American Airlines Reach Deal with Justice to Allow Merger," by C. Isadore and E. Perez, 11/12/2013.

<sup>11</sup> *Gigaom.com* "In AT&T & T-Mobile Merger, Everybody Loses," by Om Malik, 3/20/2011.



## 1.5 TERMINOLOGY AND TYPES OF COMBINATIONS

### Lo 5 Stock versus asset acquisitions.

From an accounting perspective, the distinction that is most important at this stage is between an **asset acquisition** and a **stock acquisition**. In Chapter 2, we focus on the acquisition of the assets of the acquired company, where only the acquiring or new company survives. Thus the books of the acquired company are closed out, and its assets and liabilities are transferred to the books of the acquirer. In subsequent chapters, we will discuss the stock acquisition case where the acquired company and its books remain intact and consolidated financial statements are prepared periodically. In such cases, the acquiring company debits an account “Investment in Subsidiary” rather than transferring the underlying assets and liabilities onto its own books.

Note that the distinction between an asset acquisition and a stock acquisition does not imply anything about the medium of exchange or consideration used to consummate the acquisition. Thus a firm may gain control of another firm in a stock acquisition using cash, debt, stock, or some combination of the three as consideration. Alternatively, a firm may acquire the total assets of another firm using cash, debt, stock, or some combination of the three. There are two independent issues related to the consummation of a combination: what is acquired (assets or stock) and what is given up (the consideration for the combination). These are shown in Illustration 1-3.

In an asset acquisition, a firm must acquire 100% of the assets of the other firm. In a stock acquisition, a firm may obtain control by purchasing 50% or more of the voting common stock (or possibly even less). This introduces one of the most obvious advantages of the stock acquisition over the asset acquisition: a lower total cost in many cases. Also, in a stock acquisition, direct formal negotiations with the acquired firm’s management may be avoided. Further, there may be advantages to maintaining the acquired firm as a separate legal entity. The possible advantages include liability limited to the assets of the individual corporation and greater flexibility in filing individual or consolidated tax returns. Finally, regulations pertaining to one of the firms do not automatically extend to the entire merged entity in a stock acquisition. A stock acquisition has its own complications, however, and the economics and specifics of a given situation will dictate the type of acquisition preferred.

Other terms related to mergers and acquisitions merit mention. For example, business combinations are sometimes classified by method of combination into three types—statutory mergers, statutory consolidations, and stock acquisitions. However, the distinction between these categories is largely a technicality, and the terms **mergers**, **consolidations**, and **acquisitions** are popularly used interchangeably.

A **statutory merger** results when *one company acquires all the net assets of one or more other companies through an exchange of stock, payment of cash or other property, or issue of debt instruments (or a combination of these methods)*. The acquiring company survives, whereas the acquired company (or companies) ceases to exist as a separate legal entity, although it may be continued as a separate division of the acquiring company.

ILLUSTRATION 1-3

| <i>What Is Acquired:</i>                            | <i>What Is Given Up:</i>  |
|---|---|
| Net Assets of S Company<br>(Assets and Liabilities) | { <ol style="list-style-type: none"> <li>1. Cash</li> <li>2. Debt</li> <li>3. Stock</li> <li>4. Combination of Above</li> </ol> |
| Common Stock of S Company                           |   |

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Synergistic deals may be viable even in the current environment, given

adequate flexibility and preparation. Although the successful financing of large deals depends largely on capital markets, local middle market deals—say, less than \$20 million—more often rely on a combination of commercial loans, seller financing, and equity from private sources or a private equity group.<sup>12</sup>

Thus, if A Company acquires B Company in a statutory merger, the combination is often expressed as

#### Statutory Merger

$$\boxed{\text{A Company}} + \boxed{\text{B Company}} = \boxed{\text{A Company}}$$

The boards of directors of the companies involved normally negotiate the terms of a plan of merger, which must then be approved by the stockholders of each company involved. State laws or corporation bylaws dictate the percentage of positive votes required for approval of the plan.

A **statutory consolidation** results when *a new corporation is formed to acquire two or more other corporations through an exchange of voting stock; the acquired corporations then cease to exist as separate legal entities*. For example, if C Company is formed to consolidate A Company and B Company, the combination is generally expressed as

#### Statutory Consolidation

$$\boxed{\text{A Company}} + \boxed{\text{B Company}} = \boxed{\text{C Company}}$$

Stockholders of the acquired companies (A and B) become stockholders in the new entity (C). The combination of *Chrysler Corp.* and *Daimler-Benz* to form *Daimler-Chrysler* is an example of this type of consolidation. The acquired companies in a statutory consolidation may be operated as separate divisions of the new corporation, just as they may under a statutory merger. Statutory consolidations require the same type of stockholder approval as do statutory mergers.

A **stock acquisition** occurs when *one corporation pays cash or issues stock or debt for all or part of the voting stock of another company, and the acquired company remains intact as a separate legal entity*. When the acquiring company acquires a controlling interest in the voting stock of the acquired company (for example, if A Company acquires 50% of the voting stock of B Company), a parent–subsidiary relationship results.

### TEST YOUR KNOWLEDGE

1.1

**NOTE:** Solutions to *Test Your Knowledge* questions are found at the end of each chapter before the end-of-chapter questions.

#### Short Answer

- Name the following takeover defense tactics:
  - Issuing stock rights to existing shareholders, enabling them to purchase additional shares at a price below market value, but exercisable only in the event of a potential takeover. \_\_\_\_\_
  - The purchase of a controlling interest in the target firm by its managers and third-party investors, who usually incur substantial debt in the process and subsequently take the firm private. \_\_\_\_\_
  - Encouraging a third firm, more acceptable to the target company management, to acquire or merge with the target company. \_\_\_\_\_
- Which of the following can be used as consideration in a stock acquisition?
  - Cash
  - Debt
  - Stock
  - Any of the above may be used

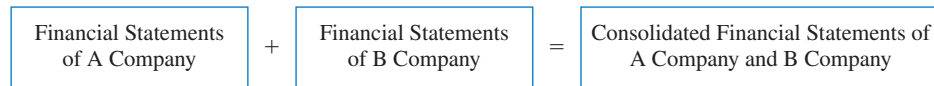
#### Multiple Choice

- Which one of the following statements is **incorrect**?
  - In an asset acquisition, the books of the acquired company are closed out, and its assets and liabilities are transferred to the books of the acquirer.

<sup>12</sup> “The Credit Puzzle,” by Lou Banach and Jim Gettel, *Mergers & Acquisitions*, December 2008.

Consolidated financial statements (explained in later chapters) are prepared and the business combination is often expressed as

#### Consolidated Financial Statements



## 1.6 TAKEOVER PREMIUMS

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During March 2006, the Capital One Financial Corporation agreed to

acquire the North Fork Bancorporation for about \$14.6 billion in cash and stock. North Fork shareholders received a mix of cash and Capital One shares, representing a 22.8% premium over the closing price of North Fork shares.<sup>13</sup>

A **takeover premium** is the term applied to the excess of the amount offered, or agreed upon, in an acquisition over the prior stock price of the acquired firm. It is not unusual for the takeover premium to be as high as 100% of the target firm's market share price before the acquisition, and the average hovered around 40% to 50% into the late 1990s. In the face of the already high stock prices of this period, speculation was mixed as to the future of takeover premiums. Some experts predicted the premiums would shrink, leading to "takeunders" in some cases where companies are acquired below the listed stock prices. These predictions found some subsequent fulfillment as premiums in 2006 declined to around 20%.

Possible reasons acquirers are willing to pay high premiums vary. One factor is that the acquirers' own stock prices may be at a level which makes it attractive to issue stock (rather than cash) to consummate the acquisition. Another factor is the availability of relatively cheap credit for mergers and acquisitions.

Bidders may have private information about the target firm suggesting that it is worth more than its current market value or has assets not reported on the balance sheet (such as in-process research and development). Alternatively, companies desperate to boost earnings may believe that growth by acquisitions is essential to survive in the global marketplace and that the competition necessitates the premiums. At the other end of the spectrum, a final possibility, which cannot be entirely ruled out, is that managers eager for growth may simply pay too much.

One research study presented evidence that higher premiums were offered for firms with high cash flows, relatively low growth opportunities, and high tax liabilities relative to their equity values.<sup>14</sup> Another study suggested that the bigger the ego of the acquiring firm's CEO, the higher the takeover premium, while still another suggested that any premium over 25% is extremely risky.<sup>15</sup> Some compensation analysts argue that the massive options payouts to executives combined with golden parachutes provide an unhealthy incentive for executives to negotiate mergers, citing Chrysler's merger with Daimler-Benz as an example.<sup>16</sup>

Takeover premiums have attracted so much attention that some strategists (e.g., Paine Webber's Edward Kerschner) have advised clients looking for investments to choose stocks that might get taken over. Cautious financial advisors point out that lofty stock prices are a double-edged sword for financial buyers because they mean high prices for both companies' stocks and costlier acquisitions. Also, when stock prices fluctuate, the agreed-upon purchase price may suddenly appear more or less attractive than it did at the time of agreement. For example, a proposed acquisition of *Comsat Corp.* by Lockheed Martin Corp. was announced in September 1998, with the acquisition valued at \$2.6 billion, of which 49% was to be paid in cash and the rest in Lockheed stock. When Lockheed Martin's stock price subsequently faltered enough to suggest a 16% drop in the total value of the transaction, Comsat shareholders questioned whether the consideration for the transaction was fairly priced.<sup>17</sup>

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Some statistics suggest that of "6000 acquisitions, only 900

return the cost of capital. It is easy to do deals. It is very difficult to make them succeed."<sup>18</sup>

<sup>13</sup> *The New York Times*, "Capital One Reported in Deal for North Fork," by Andrew Ross Sorkin and Eric Dash, March 13, 2006, p. A18.

<sup>14</sup> The study, entitled "Free Cash Flow and Stockholder Gains in Going Private Transactions," was conducted by Lehn and Poulsen (*Journal of Finance*, July 1989, pp. 771–787). Also see "The Case against Mergers," by Phillip Zweig, *Business Week*, 10/30/95, pp. 122–130.

<sup>15</sup> "Acquisition Behavior, Strategic Resource Commitments and the Acquisition Game: A New Perspective on Performance and Risk in Acquiring Firms," by Mark Sirower, doctoral dissertation, Columbia University, 1994.

<sup>16</sup> *WSJ*, "Chrysler Executives May Reap Windfall," by Gregory White, 5/13/98, p. A3.

<sup>17</sup> *WSJ*, "Lockheed Bid for Comsat Hits Obstacles," by Anne Marie Squeo, 6/11/99, p. A3.

<sup>18</sup> *M&A*, "How Acquirers Can Be Blindsided by the Numbers," May/June 1997, p. 29.

## 1.7 AVOIDING THE PITFALLS BEFORE THE DEAL

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In a survey of 101 corporations that completed a merger or acquisition transaction of at least \$100 million, KPMG found that 93% of companies queried believed that their deal enhanced shareholder value and over a third said they would not do anything different in subsequent deals. However, KPMG's objective examination of the deals showed that only 31% of these deals improved value. KPMG concluded that many companies may not be prepared to make an honest assessment of the success of their deals in order to avoid making mistakes in future deals.<sup>19</sup>

**LO 3** Factors to be considered in due diligence.

To consider the potential impact on a firm's earnings realistically, the acquiring firm's managers and advisors must exercise **due diligence** in considering the information presented to them. The factors to beware of include the following:

1. Be cautious in interpreting any **percentages** presented by the selling company. For example, the seller may be operating below capacity (say, at 60% of capacity), but the available capacity may be for a product that is unprofitable or that is concentrated at a specific location, while the desirable product line (which the acquirer wishes to expand) is already at capacity.
2. Don't neglect to include **assumed liabilities** in the assessment of the cost of the merger. The purchase price for a firm's assets is the sum of the cash or securities issued to consummate the merger **plus** any liabilities assumed. This is equivalent to viewing the purchase price for a firm's **net** assets (assets **minus** liabilities assumed) as the sum of the cash or securities issued to consummate the merger.

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An important part of a buyer's preparation involves the development of a due diligence report (sometimes by a public accounting firm) for the purpose of uncovering "skeletons in the closet" (like vendor reliance or customer concentrations). These reports offer a fairly objective perspective of the business, so sharing them with potential lenders is one way of building trust and confidence in the collateral and cash flow. Most lenders prefer a 1-to-1 loan-to-collateral ratio in any deal, and regular monitoring through a monthly borrowing base. A lot of the scrutiny by senior lenders gets directed to the buyer's credentials and familiarity with the industry.<sup>20</sup>

In addition to liabilities that are on the books of the acquired firm, be aware of the possibility of less obvious liabilities. FASB ASC Section 805–20–25 [recognition] requires an acquiring firm to recognize at fair value all assets acquired and liabilities assumed, whether or not shown in the financial statements of the acquired company.<sup>21</sup>

Furthermore, FASB ASC paragraph 805–30–25–5 states that any *contingent* assets or liabilities that are acquired or assumed as part of a business combination must be measured and recognized at their fair values (provided they satisfy the definition of assets or liabilities), **even if they do not meet the usual recognition criteria for recording contingent items** (FASB ASC paragraph 450–20–25–2).<sup>22</sup>

FASB ASC Topic 805 [Business Combinations] also states that any costs associated with restructuring or exit activities should not be treated as liabilities at the acquisition

<sup>19</sup> KPMG Transaction Services, "The Morning After—Driving for Post Deal Success," January 31, 2006.

<sup>20</sup> "The Credit Puzzle," by Lou Banach and Jim Gettel, Mergers & Acquisitions, December 2008.

<sup>21</sup> See the section later in the chapter on the FASB Codification.

<sup>22</sup> FASB ASC paragraph 450–20–25–2 (FASB Statement No. 5) states that, in general, contingent liabilities (and related losses) should be accrued if they are both probable and reasonably estimable while contingent assets (and gains) should usually not be reflected to avoid misleading implications about their realizability. These conditions still apply for noncontractual contingent liabilities unless it is *more likely than not* that an asset or liability exists. The number of deals with contingent payments nearly doubled between 1997 and 2006, while the dollar value of those deals more than doubled (with the earn-out value portion rising from 3.3 billion dollars in 1997 to a high of 6.1 billion dollars in 2001 and leveling back to 5.3 billion dollars in 2006). See Chapter 2 for further details.

## ILLUSTRATION 1-4

**Mode of Payment in M&A Deals**  
**% of all Deals**

| Year  | Cash Only |       | Stock Only |       | Earnouts |       |
|-------|-----------|-------|------------|-------|----------|-------|
|       | #         | %     | #          | %     | #        | %     |
| 2010  | 968       | 61.1% | 352        | 22.2% | 145      | 9.2%  |
| 2011  | 1093      | 61.3% | 379        | 21.3% | 189      | 10.6% |
| 2012  | 1143      | 66.2% | 292        | 16.9% | 139      | 8.0%  |
| 2013  | 965       | 65.0% | 286        | 19.3% | 118      | 7.9%  |
| 2014* | 65        | 60.7% | 23         | 21.5% | 7        | 6.5%  |

Source: Thomas SDC Platinum

\*Partial Year in 2014.

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"While everything in the offering memorandum may very well be true,

although not necessarily, the facts are designed to make the company look better than it would if an analyst were to dig into those facts."<sup>25</sup>

date unless they meet the criteria for recognition laid out in FASB ASC paragraph 420-10-15-2.<sup>23</sup> Instead, costs not meeting these criteria should be expensed in the period in which they are incurred. For example, future costs expected with regard to exiting an activity of the target, terminating the employment of the acquiree's employees, or relocation of those employees are not accounted for as part of the business combination.<sup>24</sup>

3. Watch out for the impact on earnings of the **allocation of expenses** and the effects of production increases, standard cost variances, LIFO liquidations, and by-product sales. For example, a firm that is planning to be acquired may grow inventory levels in order to allocate its fixed costs over more units, thus decreasing the cost of goods sold and increasing the bottom line. However, the inventory level that is acquired may be excessive and ultimately costly.
4. Note any **nonrecurring items** that may have artificially or temporarily boosted earnings. In addition to nonrecurring gains or revenues, look for recent **changes in estimates, accrual levels, and methods**. While material changes in method are a required disclosure under GAAP, the rules on materiality are fuzzy, and changes in estimates and accruals are frequently not disclosed (See Illustration 1-4).
5. Be careful of **CEO egos**. Striving to be number one may make business sense, but not everyone can hold that spot. One CEO drew both praise and criticism with his deal-of-the-month style. He stated, "There are the big dogs, there are the ankle-biters, and then there are those caught in the middle." The midsize firms have to combine, he claimed.<sup>26</sup>

## 1.8 DETERMINING PRICE AND METHOD OF PAYMENT IN BUSINESS COMBINATIONS

**LO 6** Factors affecting price and method of payment.

Whether an acquisition is structured as an asset acquisition or a stock acquisition, the acquiring firm must choose to finance the combination with cash, stock, or debt (or some combination). The cash-only financed portion of acquisition prices dropped approximately 10% from the early 2000s to an average of 63% between 2010 to 2014. The number of deals financed with stock-only increased by 6% to an average of 20% between 2010 and 2014. Earnouts were used in approximately 9% of acquisitions.

<sup>23</sup> FASB ASC paragraph 420-10-25-2 (*FASB Statement No. 146*) reiterates the definition of a liability and states that only present obligations to others are liabilities. It clarifies by specifying that an obligation becomes a present obligation when a past transaction or event leaves little or no discretion to avoid settlement, and that an exit or disposal plan, by itself, does not create a present obligation.

<sup>24</sup> FASB's new Codification system, referenced here, is discussed near the end of Chapter 1.

<sup>25</sup> *M&A*, "How Acquirers Can Be Blindsided by the Numbers," May/June 1997, p. 29.

<sup>26</sup> *WSJ*, "In the New Mergers Conglomerates Are Out, Being No. 1 Is In," by Bernard Wysocki Jr., 12/31/97, p. A1.

The mode of payment also affects the number of days it takes to complete the merger (from the announcement date to the effective date). The following schedule provides the average days to complete a merger for various modes of payment in an acquisition.

| Mode of Payment* | Days to Complete Acquisition |                 |
|------------------|------------------------------|-----------------|
|                  | Public Targets               | Private Targets |
| Common stock     | 158 days                     | 90 days         |
| Cash only        | 84 days                      | 67 days         |
| Earnout          | 75 days                      | 48 days         |

\* SDC Platinum (2010 to 2013).

As can be seen, if earnouts are used as part of the consideration, the time to complete the merger is significantly shorter (especially for private acquisitions, with an average of 48 days). Acquisitions using stock generally take much longer to complete. Information on the mode of payment in mergers and acquisitions is provided in Illustration 1-4.

The trends are often explained by fluctuating stock valuations. The higher the acquiring firm's stock valuation, the fewer shares are needed to pay for the acquisition. This means less dilution to existing shareholders, a frequent concern in the planning stages of a proposed acquisition. When stock prices slumped in the middle of 2001, merger activity slowed as well. But by the middle of the decade, both were booming once more. Then, merger activity rose steadily from 2002 to 2006, remained approximately the same in 2007 as in 2006, and then fell off by the end of 2008 as stock prices plunged and the economy slid into a recession. By 2010, many of the mega-mergers in the making were once again looking to use all (or mostly) stock, as the market moved up.

When a business combination is effected through an open-market acquisition of stock, no particular problems arise in connection with determining price or method of payment. Price is determined by the normal functioning of the stock market, and payment is generally in cash, although some or all of the cash may have to be raised by the acquiring company through debt or equity issues. Effecting a combination may present some difficulty if there are not enough willing sellers at the open-market price to permit the acquiring company to buy a majority of the outstanding shares of the company being acquired. In that event, the acquiring company must either negotiate a price directly with individuals holding large blocks of shares or revert to an open tender offer.

When a business combination is effected by a stock swap, or exchange of securities, both price and method of payment problems arise. In this case, the price is expressed in terms of a **stock exchange ratio**, which is generally defined as *the number of shares of the acquiring company to be exchanged for each share of the acquired company*, and constitutes a **negotiated price**. It is important to understand that each constituent of the combination makes two kinds of contributions to the new entity—net assets and future earnings. The accountant often becomes deeply involved in the determination of the values of these contributions. Some of the issues and the problems that arise are discussed in the following section.

In addition, it is not unusual, in an acquisition, for the acquiree to retain all cash as well as the responsibility for paying any interest bearing debt. A potential issue that can arise prior to the transaction close is that the acquiree has incentives to delay payments and collect large receivable balances. Thus acquisitions often include net working capital adjustments (true-up). The acquirer will receive additional consideration if net working capital is below agreed-upon target levels while the acquiree will receive additional consideration if the target amounts exceed the agreed-upon target amounts.

## Net Asset and Future Earnings Contributions

Determination of an equitable price for each constituent company, and of the resulting exchange ratio, requires the valuation of each company's net assets as well as their expected contribution to the future earnings of the new entity. The accountant is often called upon to

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In the merger run in 2005, the number of deals using stock decreased to about 11% of total deals, while in 2000, the percentage of deals using all stock averaged around 27%. Stock-for-stock swaps are more common when stock prices are increasing.<sup>27</sup>

<sup>27</sup> WSJ, "Year-End Review of Markets & Finance 2005," by Dennis Berman, 1/3/06, p. R1.

**EXCESS EARNINGS APPROACH TO ESTIMATING GOODWILL**

1. Identify a normal rate of return on assets for firms similar to the company being targeted. Statistical services are available to provide averages, or a normal rate may be estimated by examining annual reports of comparable firms. The rate may be estimated as a return on either total assets or on *net* identifiable assets (assets other than goodwill minus liabilities).
2. Apply the rate of return identified in step 1 to the level of identifiable assets (or net assets) of the target to approximate what the “normal” firm in this industry might generate with the same level of resources. We will refer to the product as “normal earnings.”
3. Estimate the expected future earnings of the target. Past earnings are generally useful here and provide a more objective measure than management’s projections, although both should be considered. Exclude any nonrecurring gains or losses (extraordinary items, gains and losses from discontinued operations, etc.) from past earnings if they are used to estimate future earnings.
4. Subtract the normal earnings calculated in step 2 from the expected target earnings from step 3. The difference is “excess earnings.” If the normal earnings are greater than the target’s expected earnings, then no goodwill is implied under this approach.
5. To compute estimated goodwill from “excess earnings,” we must assume an appropriate time period and a discount rate. The shorter the time period and the higher the discount rate, the more conservative the estimate. If the excess earnings are expected to last indefinitely, the present value of a perpetuity may be calculated simply by dividing the excess earnings by the discount rate. For finite time periods, use present-value tables or calculations to compute the present value of an annuity. Because of the assumptions needed in step 5, a range of goodwill estimates may be obtained simply by varying the assumed discount rate and/or the assumed discount period.
6. Add the estimated goodwill from step 5 to the fair value of the firm’s net identifiable assets to arrive at a possible offering price.

aid in determining net asset value by assessing, for example, the expected collectibility of accounts receivable, current replacement costs for inventories and some fixed assets, and the current value of long-term liabilities based on current interest rates. To estimate current replacement costs of real estate and other items of plant and equipment, the services of appraisal firms may be needed.

Estimation of the value of goodwill to be included in an offering price is subjective. A number of alternative methods are available, usually involving the discounting of expected future cash flows (or free cash flows), earnings, or excess earnings over some period of years. Generally, the use of free cash flows or earnings yields an estimate of the entire firm value (including goodwill), whereas the use of excess earnings yields an estimate of the goodwill component of total firm value. We next describe the steps in the excess earnings approach and then follow with an illustration.

**Estimating Goodwill and Potential Offering Price** Wanna Buy Company is considering acquiring *Hot Stuff Inc.* and is wondering how much it should offer. Wanna Buy makes the following computations and assumptions to help in the decision.

- a. Hot Stuff’s identifiable assets have a total fair value of \$7,000,000. Hot Stuff has liabilities totalling \$3,200,000. The assets include patents and copyrights with a fair value approximating book value, buildings with a fair value 50% higher than book value, and equipment with a fair value 25% lower than book value. The remaining lives of the assets are deemed to be approximately equal to those used by Hot Stuff.
- b. Hot Stuff’s pretax income for the year 2006 was \$1,059,000, which is believed by Wanna Buy to be more indicative of future expectations than any of the preceding years. The net income of \$1,059,000 included the following items, among others:

|  |          |
|--|----------|
| Amortization of patents and copyrights | \$50,000 |
| Depreciation on buildings              | 360,000  |
| Depreciation on equipment              | 80,000   |
| Extraordinary gain                     | 250,000  |
| Loss from discontinued operations      | 175,000  |
| Pension expense                        | 59,000   |

- c. The normal rate of return on net assets for the industry is 14%.

- d. Wanna Buy believes that any excess earnings will continue for seven years and that a rate of return of 15% is required on the investment.

Based on the assumptions above and ignoring tax effects, we will first calculate an estimation of the implied goodwill, and then use that estimate to arrive at a reasonable offering price for Hot Stuff.

*Normal earnings* for similar firms:  $(\$7,000,000 - \$3,200,000) \times 14\% = \$532,000$

*Expected earnings of target:*

|   |         |                |
|---|---------|----------------|
| Pretax income of Hot Stuff                    |         | \$1,059,000    |
| Add: Losses on discontinued operations        | 175,000 |                |
| Reduced depreciation on equipment             | 20,000  | 195,000        |
| Subtotal                                      |         | 1,254,000      |
| Subtract: Additional depreciation on building | 180,000 |                |
| Extraordinary gain                            | 250,000 | 430,000        |
| <b>Target's expected future earnings</b>      |         | <b>824,000</b> |

*Excess earnings* of target:  $\$824,000 - \$532,000 = \$292,000$  per year

Present value of excess earnings (ordinary annuity) for seven years at 15% (see Table A2 in Appendix PV at back of textbook):

*Estimated goodwill:*  $\$292,000 \times 4.16042 = \$1,214,843$

*Implied offering price* = Fair value of assets - Fair value of liabilities + Estimated goodwill  
 =  $\$7,000,000 - \$3,200,000 + \$1,214,843 = \$5,014,843$ .

In the illustration above, in arriving at the target's expected future earnings, we ignored the items that are expected to continue after the acquisition, such as the amortization of the patents and copyrights and the pension expense. We backed out nonrecurring gains and losses on extraordinary items or discontinued operations. We adjusted the prior reported earnings for the expected increase in depreciation on the building (50% higher than in the past), leading to a decrease in projected earnings. In contrast, we increased projected earnings for the decrease in equipment depreciation (25% lower than in the past). In practice, more specific information should be available as to which components of earnings are expected to continue at the same level, which might be reduced because of economies or cost-cutting plans, and which might increase because of transition costs. The better the information used in the computation, the better the estimate of goodwill and offering price.

Where the constituent companies have used different accounting methods, the accountant will often need to reconstruct their financial statements on the basis of agreed-upon accounting methods in order to obtain reasonably comparable data. Once comparable data have been obtained for a number of prior periods, they are analyzed further to project future contributions to earnings. The expected contributions to future earnings may vary widely among constituents, and the exchange ratio should reflect this fact. The whole process of valuation, of course, requires the careful exercise of professional judgment. Ultimately, however, the exchange ratio is determined by the bargaining ability of the individual parties to the combination.

Once the overall values of relative net asset and earnings contributions have been agreed on, the types of securities to be issued by the new entity in exchange for those of the combining companies must be determined. In some cases a single class of stock will be issued; in other cases equity may require the use of more than one class of security.

The concepts of earnings **dilution** and **accretion** are critical to the valuation of a merger. Does the merger increase or decrease expected earnings performance of the acquiring institution? From a financial and shareholder perspective, the price paid for a firm is hard to justify if earnings per share declines. When this happens, the acquisition is

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Upon the agreement to purchase Creo Inc. for \$900 million in cash, Eastman Kodak Company's CEO Daniel Carp stated that the "acquisition will result in some modest earnings dilution for the remainder of 2005." However, Carp expects that the Creo transaction will be accretive in 2006, adding "at least 5 cents to per-share operational earnings, driven by cost savings and revenue growth available to the combined entity."<sup>28</sup>

<sup>28</sup> *Business Wire*, "Kodak Announces Agreement to Acquire Creo Inc.," 1/31/05.




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Build-A-Bear Workshop, the teddy-bear-stuffing retailer, purchased

U.K.-based rival Bear Factory for \$41.4 million in cash to help solidify Build-A-Bear's global position. Build-A-Bear expected the acquisition to be accretive to earnings per share by 2007.<sup>30</sup>

considered **dilutive**. Conversely, if the earnings per share increases as a result of the acquisition, it is referred to as an **accretive** acquisition.

Many deals lower earnings per share initially but add significantly to value in later years. While initial dilution may not be a deal killer, however, many managers feel that they cannot afford to wait too long for a deal to begin to show a positive return. Opinions are divided, however, on what drives the market in relation to mergers and acquisitions, nor do research studies offer conclusive evidence on the subject. Bart Madden, a partner in a valuation advisory firm in Chicago, remarked, "I totally disagree that the market is EPS driven. From the perspective of the owner or manager of capital, what matters is cash in, cash out, not reported earnings."<sup>29</sup> He acknowledges, however, that CFOs, who "live in a world of accounting rules," are concerned about reported earnings.

**Evaluating Firm Performance** In Appendix 1A (online at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter)), we provide a structured approach using ratios to evaluate the performance of a firm. This approach could be used to evaluate the financial performance of a potential target or in evaluating the strength of an acquirer. The ratio approach begins by analyzing the change in return on equity (ROE). This ratio is then decomposed into a return on asset (ROA) and a leverage ratio (total assets divided by equity). These ratios are further decomposed into other relevant combinations of variables. This structured approach allows the user to zero in on areas that have changed or that need to be examined in more detail.

## 1.9 ALTERNATIVE CONCEPTS OF CONSOLIDATED FINANCIAL STATEMENTS

**LO 8** Economic entity and parent company concepts.

As mentioned previously, business combinations may take the form of asset acquisitions or stock acquisitions. When the combination is consummated as an asset acquisition, the books of the acquired company are closed out and the accounting takes place on the books of the acquirer, as illustrated in Chapter 2. When the combination is consummated as a stock acquisition, both companies continue to prepare journal and ledger entries separately through future periods. Periodically the two sets of books are combined into one through a procedure sometimes referred to as the **consolidating process** to produce a set of consolidated financial statements. Chapters 3 through 9 deal with many of the technical procedures needed to carry out this process. Here we present a brief introduction to the more theoretical concepts involved in accounting for the consolidated entity. The question that arises relates to the primary purpose of the consolidated financial statements and to the relationships between the affiliated companies and their shareholders, keeping in mind that a certain group of shareholders may own a portion of the acquired company (often referred to as the **subsidiary**) but none of the acquiring company (or **parent**).

Historically, practice in the U.S. has reflected a compromise between two general concepts of consolidation given various designations in the accounting literature. However, in FASB ASC topics 805 [Business Combinations] and 810 [Consolidation] (formerly *FASB Statements No. 141-R* and *No. 160*), the FASB indicates that the economic entity concept is now to be embraced more fully. Next, let us review the basic differences between the alternative concepts. For our purposes, we will refer to them as the **parent company concept** and the **economic entity concept** (sometimes called the **economic unit concept**). A third concept, **proportionate consolidation**, was rejected by the FASB.

Although only one of these—the economic entity concept—is embraced by current GAAP and thus integrated throughout this text, the two more popular concepts are described below (as defined by the Financial Accounting Standards Board).<sup>31</sup>

<sup>29</sup> CFO, "Say Goodbye to Pooling," by Ian Springsteel, February 1997, p. 79.

<sup>30</sup> *MSNBC.com*, "When Bears Collide," by Rick Aristotle Munarriz, 3/6/06.

<sup>31</sup> *FASB Discussion Memorandum*, "Consolidation Policy and Procedures" FASB (Norwalk, CT: September 10, 1991), pars. 63 and 64.

### **Parent Company Concept**

The parent company concept emphasizes the interests of the parent's shareholders. As a result, the consolidated financial statements reflect those stockholder interests in the parent itself, plus their undivided interests in the net assets of the parent's subsidiaries. The consolidated balance sheet is essentially a modification of the parent's balance sheet with the assets and liabilities of all subsidiaries substituted for the parent's investment in subsidiaries. Similarly, the consolidated income statement is essentially a modification of the parent's income statement with the revenues, expenses, gains, and losses of subsidiaries substituted for the parent's income from investment in subsidiaries. These multi-line substitutions for single lines in the parent's balance sheet and income statement are intended to make the parent's financial statements more informative about the parent's total ownership holdings.

### **Economic Entity Concept**

The economic entity concept emphasizes control of the whole by a single management. As a result, under this concept, consolidated financial statements are intended to provide information about a group of legal entities—a parent company and its subsidiaries—operating as a single unit. The assets, liabilities, revenues, expenses, gains, and losses of the various component entities are the assets, liabilities, revenues, expenses, gains, and losses of the consolidated entity. Unless all subsidiaries are wholly owned, the business enterprise's proprietary interest (assets less liabilities) is divided into the controlling interest (stockholders or other owners of the parent company) and one or more noncontrolling interests in subsidiaries. Both the controlling and the noncontrolling interests are part of the proprietary group of the consolidated entity. Under this concept, the entirety of subsidiaries assets, liabilities, revenues, and expenses are reflected in the consolidated financial statements. Noncontrolling interest in equity and in income serves to capture the portion not controlled by the parent.

The parent company concept represents the view that the primary purpose of consolidated financial statements is to provide information relevant to the controlling stockholders. The parent company effectively controls the assets and operations of the subsidiary. Noncontrolling stockholders do not exercise any ownership control over the subsidiary company or the parent company. Thus, the parent company concept places emphasis on the needs of the controlling stockholders, and the noncontrolling interest is essentially relegated to the position of a claim against the consolidated entity. Thus, the noncontrolling, or minority, interest should be presented as a liability in the consolidated statement of financial position under the parent company concept or, as described in the next section, as a separate component before stockholders' equity.

The economic entity concept represents the view that the affiliated companies are a separate, identifiable economic entity. Meaningful evaluation by any interested party of the financial position and results of operations of the economic entity is possible only if the individual assets, liabilities, revenues, and expenses of the affiliated companies making up the economic entity are combined. The economic entity concept treats both controlling and noncontrolling stockholders as contributors to the economic unit's capital. Thus, the noncontrolling, or minority, interest should be presented as a component of equity in the consolidated financial statement under the economic entity concept.

The FASB stated that it had considered and rejected the concept of proportionate consolidation for subsidiaries. This concept, although not used in current or past practice, has been advocated by some as an alternative to full consolidation. Under proportionate consolidation, the consolidated statements would include only a portion, based on the parent's ownership interest, of the subsidiary's assets, liabilities, revenues, expenses, gains, and losses. The FASB stated that because the consolidated entity has the power to direct the use of all the assets of a controlled entity, omitting a portion of those assets from the statements would not be representationally faithful. Similarly, omitting part of the revenues and expenses from the consolidated income statement would not be representationally faithful.

Differences between the concepts are relevant only to less than wholly owned subsidiaries; they center on conflicting views concerning answers to three basic questions:

1. What is the nature of a noncontrolling interest?
2. What income figure constitutes consolidated net income?
3. What values should be reported in the consolidated balance sheet?

A related issue concerns the percentage (total or partial) of unrealized intercompany profit to be eliminated in the determination of consolidated balances.

## Noncontrolling Interest

Under the **economic entity concept**, a *noncontrolling interest is a part of the ownership equity in the entire economic unit*. Thus, a noncontrolling interest is of the same general nature and is accounted for in essentially the same way as the controlling interest (i.e., as a component of owners' equity). Under the **parent company concept**, the nature and classification of a noncontrolling interest are unclear. The parent company concept views the consolidated financial statements as those of the parent company. From that perspective, the noncontrolling interest is similar to a liability; but because the parent does not have a present obligation to pay cash or release other assets, it is not a liability based on the FASB's technical definition of a "liability." Nor is it a true component of owners' equity since the noncontrolling investors in a subsidiary do not have an ownership interest in the subsidiary's parent. Consequently, the parent company concept theoretically supports reporting the noncontrolling interest below liabilities but above stockholders' equity in the consolidated balance sheet.

Of 2,493 acquisitions of a public target by a public acquirer between 2010 and early 2014, 176, or 7%, resulted in a noncontrolling interest reported in stockholders' equity. Of 4,192 acquisitions of a private target by a public acquirer, 148, or 3.5%, resulted in a noncontrolling interest (Thomson One SDC Platinum).

## Consolidated Net Income

Under the **parent company concept**, *consolidated net income consists of the realized combined income of the parent company and its subsidiaries after deducting noncontrolling interest in income*; that is, the noncontrolling interest in income is deducted as an expense item in determining consolidated net income. This view emphasizes that the parent company stockholders are directly interested in their share of the results of operations as a measure of earnings in relation to their investment and dividend expectations.

Under the **economic entity concept**, consolidated net income consists of the total realized combined income of the parent company and its subsidiaries. The total combined income is then allocated proportionately to the noncontrolling interest and the controlling interest. Noncontrolling interest in income is considered an allocated portion of consolidated net income, rather than an element in the determination of consolidated net income. The concept emphasizes the view that the consolidated financial statements represent those of a single economic unit with several classes of stockholder interest. Thus, noncontrolling interest in net assets is considered a separate element of stockholders' equity, and the noncontrolling interest in net income reflects the share of consolidated net income allocated to the noncontrolling stockholders.

## Consolidated Balance Sheet Values

In the case of less than wholly owned subsidiaries, the question arises as to whether to value the subsidiary assets and liabilities at the **total** fair value implied by the price paid for the controlling interest, or at their book value adjusted only for the excess of cost over book value paid by the parent company. For example, assume that P Company acquires a 60% interest in S Company for \$960,000 when the book value of the net assets and of the

stockholders' equity of S Company is \$1,000,000. The implied fair value of the net assets of S Company is \$1,600,000 ( $\$960,000/.6$ ), and the difference between the implied fair value and the book value is \$600,000 ( $\$1,600,000 - \$1,000,000$ ). For presentation in the consolidated financial statements, should the net assets of S Company be written up by \$600,000 or by 60% of \$600,000?

Application of the *parent company concept* in this situation restricts the write-up of the net assets of S Company to \$360,000 ( $.6 \times \$600,000$ ) on the theory that the write-up should be restricted to the amount actually paid by P Company in excess of the book value of the interest it acquires [ $\$960,000 - (.6 \times \$1,000,000) = \$360,000$ ]. In other words, the value assigned to the net assets should not exceed cost to the parent company. Thus, the net assets of the subsidiary are included in the consolidated financial statements at their book value (\$1,000,000) plus the **parent company's share** of the difference between fair value and book value ( $.6 \times \$600,000$ ) = \$360,000, or at a total of \$1,360,000 on the date of acquisition. Noncontrolling interest is reported at its percentage interest in the **reported book value** of the net assets of S Company, or \$400,000 ( $.4 \times \$1,000,000$ ).

Application of the *economic entity concept* results in a write-up of the net assets of S Company in the consolidated statements workpaper by \$600,000 to \$1,600,000 on the theory that the consolidated financial statements should reflect 100% of the net asset values of the affiliated companies. On the date of acquisition, the net assets of the subsidiary are included in the consolidated financial statements at their book value (\$1,000,000) plus the **entire difference** between their fair value and their book value (\$600,000), or a total of \$1,600,000. Noncontrolling interest is reported at its percentage interest in the **fair value** of the net assets of S Company, or \$640,000 ( $.4 \times \$1,600,000$ ).

Regardless of the concept followed, the controlling interest in the net assets of the subsidiary reported in the consolidated financial statements is the same and is equal to P Company's cost, as demonstrated here:

|   | <i>Parent Company<br/>Concept</i> | <i>Economic Unit<br/>Concept</i> |
|---|-----------------------------------|----------------------------------|
| Net assets of S Company included in consolidation | \$1,360,000                       | \$1,600,000                      |
| Less: Noncontrolling interest                     | 400,000                           | 640,000                          |
| Controlling interest (cost)                       | <u>\$ 960,000</u>                 | <u>\$ 960,000</u>                |

While U.S. standards have, in the past, been more consistent with the parent company concept with respect to write-up of net assets, the implementation of *FASB Statements No. 141R* and *160* [FASB ASC topics 805 and 810] results in a shift to the economic entity concept in this regard, among others.

## Intercompany Profit

There are two alternative points of view as to the amount of intercompany profit that should be considered unrealized in the determination of consolidated income. The elimination methods associated with these two points of view are generally referred to as **total** (100%) **elimination** and **partial elimination**.

Proponents of total elimination regard all the intercompany profit associated with assets remaining in the affiliated group to be unrealized. Proponents of partial elimination regard only the parent company's share of the profit recognized by the selling affiliate to be unrealized. Under total elimination, the entire amount of unconfirmed intercompany profit is eliminated from combined income and the related asset balance. Under partial elimination, only the parent company's share of the unconfirmed intercompany profit recognized by the selling affiliate is eliminated.

## Past and Future Practice

Past practice has viewed noncontrolling interest in income neither as an expense nor as an allocation of consolidated net income, but as a special equity interest in the consolidated entity's combined income that must be recognized when all the earnings of a less

than wholly owned subsidiary are combined with the earnings of the parent company. Noncontrolling interest in net assets has been viewed neither as a liability nor as true stockholders' equity, but rather as a special interest in the combined net assets that must be recognized when all the assets and liabilities of a less than wholly owned subsidiary are combined with those of the parent company.

*In contrast, under the new standards, the noncontrolling interest in income is viewed as an allocation of consolidated net income on the income statement, and the noncontrolling interest in net assets as a component of equity in the balance sheet.*

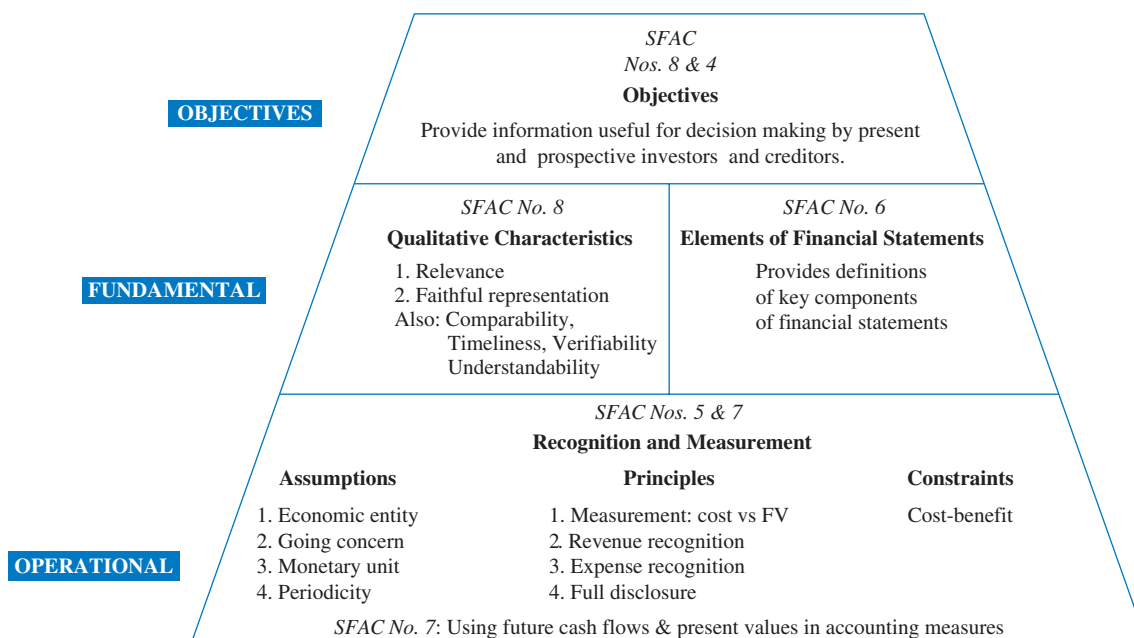
Past and future accounting standards are, however, consistent in requiring the total elimination of unrealized intercompany profit in assets acquired from affiliated companies, regardless of the percentage of ownership.

## 1.10 FASB'S CONCEPTUAL FRAMEWORK

The Financial Accounting Standards Board (FASB) began the process of developing a conceptual framework for financial reporting in 1976, a process that continues to the present. The much-needed objective of providing a basis for standard setting and controversy resolution has, as expected, proved to be challenging. The statements of concepts issued to date are summarized in Illustration 1-5. The reader should be aware that the FASB and the IASB are working on a joint project to converge their conceptual frameworks. The first phase has been completed with the issuance of Statement of Financial Accounting Concepts (SFAC) No. 8: Conceptual Framework for Financial Reporting—Chapter 1, *The Objective of General Purpose Financial Reporting*, and Chapter 3, *Qualitative Characteristics of Useful Financial Information* (a replacement of FASB Concepts Statements Nos. 1 and 2). New chapters and concepts are expected to be added. Concepts Statements are not part of the *FASB Accounting Standards Codification*, which is the source of authoritative GAAP recognized by the FASB to be applied by nongovernmental entities. The Board recognizes that in certain respects current generally accepted accounting principles may be inconsistent with those that may derive from the objectives and fundamental concepts set forth in

### ILLUSTRATION 1-5

#### Conceptual Framework for Financial Accounting and Reporting\*



Adapted from "Accounting for Financial Analysis," by W.C. Norby, *Financial Analysts Journal*, March–April 1982, p. 22.

Concepts Statements. However, a Concepts Statement does not (a) require a change in existing U.S. GAAP; (b) amend, modify, or interpret the Accounting Standards Codification; or (c) justify either changing existing generally accepted accounting and reporting practices or interpreting the Accounting Standards Codification based on personal interpretations of the objectives and concepts in the Concepts Statements.

**Joint Project of FASB and IASB on Conceptual Framework** The objective of the joint project is to develop an improved common conceptual framework that provides a sound foundation for developing future standards. Such a framework is believed to be essential to the two Boards' goal of developing standards that are principles-based, internally consistent, and internationally converged. The new framework is expected to deal with a wide range of issues, and will build on the existing IASB and FASB frameworks, while also considering developments subsequent to the issuance of those frameworks.

One of the goals of the Boards, which is shared by their constituents, is for the standards to be clearly based on consistent principles that are rooted in fundamental concepts rather than a collection of conventions. The objective is for the body of standards taken as a whole, as well as the application of those standards, to be based on a sound, comprehensive, and internally consistent framework. Another important goal is to converge the standards of the two Boards. As the Boards strive to more closely align their agendas to achieve standard convergence, they will be hampered unless they are basing decisions on the same basic framework.

**IFRS**

## Economic Entity vs. Parent Concept and the Conceptual Framework

The parent concept, discussed in the preceding section, was the essential approach used in the United States until 2008 for accounting for business combinations (although there were some exceptions to a wholly applied parent concept, as previously addressed). The parent company concept is tied to the *historical cost* principle, which suggests that the best measure of valuation of a given asset is the price paid. Historical cost thus suggests that the purchase price of an acquired firm should be relied on in assessing the value of the acquired assets, including goodwill. One problem that arises from a theoretical perspective is how to value the noncontrolling interest, or the portion of the acquired firm's assets which did not change hands in an arm's length transaction. The historical cost perspective would suggest that those assets (or portions thereof) remain at their previous book values. This approach might be argued to produce more *reliable* or "representationally faithful" values, addressed in the FASB's conceptual framework as a desirable attribute of accounting information (*SFAC No. 8*).

In contrast, the economic entity concept is itself an integral part of the FASB's conceptual framework and is named specifically in *SFAC No. 5* as one of the basic assumptions in accounting. The economic entity assumption views economic activity as being related to a particular unit of accountability, and the standard indicates that a parent and its subsidiaries represent *one economic entity* even though they may include *several legal entities*. Thus, the recent shift to the economic entity concept seems to be entirely consistent with the assumptions laid out by the FASB for GAAP.

The economic entity concept might also be argued to produce more *relevant*, if not necessarily more reliable, information for users. The two primary characteristics of relevance and reliability (or representational faithfulness) often find themselves in conflict in any given accounting debate. For example, the view of many users is that *market value accounting* would provide far more *relevant* information for users than continued reliance on historical cost in general. Proponents of historical cost, however, argue that market valuations suffer from too much subjectivity and vulnerability to bias, and are much *less* representationally faithful.

**IFRS**

In the joint project of the FASB and the IASB on the conceptual framework, the conclusion was reached that the entity perspective is more consistent with the fact that the vast majority of today's business entities have substance distinct from that of their capital providers. As such, the proprietary perspective does not reflect a realistic view of financial reporting. The Boards have not yet considered the effect that adoption of the entity perspective will have on phases of their project that have not yet been deliberated, and decisions related to those phases are being deferred.


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Embedded in many of FASB's recent pronouncements have been a number of indicators of a shift away from historical cost accounting in the direction of fair value accounting. This shift drew a great deal of attention, much of it negative, when the financial crisis of 2008 became apparent. Critics claimed that values were dropping to artificially low values, forcing banks to take large write-downs, launching a desperate cycle from which they might not recover. Dennis Beresford, an accounting professor at the University of Georgia and chairman of the FASB from 1987 to 1997, explained, "It's intended to be more or less for orderly markets. But we don't have orderly markets these days. It's not so much that mark to market has people complaining, but marking to a particular market. Today it's more of fire-sale prices."<sup>32</sup>

## Overview of FASB's Conceptual Framework

### Lo 9 Statements of Financial Accounting Concepts.

The *Statements of Financial Accounting Concepts* issued by the FASB include the following:

*SFAC No. 4: Objectives of Financial Reporting by Nonbusiness Organizations*

*SFAC No. 5: Recognition and Measurement in Financial Statements of Business Enterprises*

*SFAC No. 6: (replaces SFAC No. 3): Elements of Financial Statements*

*SFAC No. 7: Using Cash Flow Information and Present Value in Accounting Measurements*

*SFAC No. 8: (replaces SFAC Nos. 1 and 2): The Objective of General Purpose Financial Reporting and Qualitative Characteristics of Useful Financial Information*

Please refer to Illustration 1-5 for a brief summation of these statements. Our focus is on *SFAC No. 8, No. 6, and No. 5*. The remaining statements of concept include one that was subsequently replaced by *SFAC No. 6 (SFAC No. 3)*, one that relates primarily to the last three chapters of our textbook (*SFAC No. 4*), and *FASB Statement of Concept, No. 7*, which provides some information on the use of discounted cash flows and present values as a measurement approach. *SFAC No. 7* might be viewed as an expansion of *SFAC No. 5*, and is thus included in the same level in Illustration 1-5.

## Linking the Conceptual Framework to Advanced Accounting Issues

We begin with a brief discussion of the two *Statements of Concepts* which receive the least attention in the following paragraphs (*SFAC No. 4 and SFAC No. 7*). With respect to *SFAC No. 4*, the Board believes that the objectives of reporting for government-sponsored entities should be, in general, similar to those of business enterprises engaged in similar activities. Please see Chapters 17 through 19 for further discussion. Moving to *SFAC No. 7*, the use of present values is clearly relevant in the accounting for business combinations as it impacts the estimated valuation of goodwill (previously illustrated in Chapter 1), as well as other intangible assets acquired in a business combination. Just as clearly, the use of present values is hampered by issues of uncertainty, both about estimated cash flows and about appropriate discount rates. As stated in *SFAC No. 7*, the objective of using present values in an accounting measurement is to capture, to the extent possible, the economic difference between sets of estimated future cash flows. The standard provides some guidance in this regard.

Referring to Illustration 1-5, note that the primary qualities laid out in *SFAC No. 8* are relevance and faithful representation (formerly referred to as reliability). Additional desirable characteristics include comparability, timeliness, and understandability.

The quality of *comparability* was very much at stake in FASB's decision in 2001 to eliminate the *pooling of interests* method for business combinations. This method was also argued to violate the *historical cost* principle as it essentially ignored the value of the consideration (stock) issued for the acquisition of another company. Of even greater

<sup>32</sup> "Wall St. Points to Disclosure As Issue," by Carrie Johnson, Washingtonpost.com, September 23, 2008.

concern was the potential for two nearly identical acquisitions to yield very different balance sheets, merely because one was accounted for under the pooling of interests method while the other used purchase accounting.

The issue of comparability plays a role in the more recent shift from the parent concept to the economic entity concept, as the former method valued a portion (the noncontrolling interest) of a given asset at prior book values and another portion (the controlling interest) of that same asset at exchange-date market value. The result was a piecemeal valuation of assets on the consolidated balance sheet.

## Distinguishing between Earnings and Comprehensive Income

Opponents of the change to the economic entity view of consolidated financial statements may argue that the economic entity concept is less *conservative*, as it often revalues assets—in the case of a less than 100% acquisition—to a higher amount than has been reflected in an arm's length transaction by relying on the valuation *implied* by the purchase price. However, the constraint of conservatism is no longer included in FASB's constraints (*SFAC No. 8*).

Turning now to the elements of financial statements, see Illustration 1-6 for a summary of definitions. We might note that earnings is not defined as one of the elements included in *SFAC No. 6*. In fact, the FASB explicitly stated that it reserved the term earnings for possible use to designate a significant intermediate measure or component of comprehensive income. In *SFAC No. 5*, FASB states that “it is important to avoid focusing attention almost exclusively on the bottom line, earnings per share, or other highly simplified condensations.” *SFAC No. 5* goes on to state that “statements of earnings and of comprehensive income together reflect the extent to which, and the ways in which, the equity of an entity increased or decreased from all sources other than transactions with

### ILLUSTRATION 1-6

#### Definitions of Financial Statement Elements\*

**Assets.** Probable future economic benefits obtained or controlled by a particular entity as a result of past transactions or events.

**Liabilities.** Probable future sacrifices of economic benefits arising from present obligations of a particular entity to transfer assets or provide services to other entities in the future as a result of past transactions or events.

**Equity.** Residual interest in the assets of an entity that remains after deducting its liabilities, or the claims of the owners of the entity's assets.

**Investments by Owners.** Increase in net assets of a particular enterprise resulting from transfers to it from other entities of something of value to obtain or increase ownership interests (equity) in it.

**Distributions to Owners.** Decrease in net assets of a particular enterprise resulting from transferring assets, rendering services, or incurring liabilities by the enterprise to its owners (dividends or Draws).

**Comprehensive Income.** Change in equity (net assets) of an entity during a period from transactions and other events and circumstances from nonowner sources, i.e., all changes in equity during a period except from investments by owners and distributions to owners.

**Revenues.** Inflows or other enhancements of assets of an entity or settlement of its liabilities (or a combinations of both) during a period from delivering or producing goods, rendering services, or other activities that constitute the entity's ongoing major or central operations.

**Expenses.** Outflows or other using up of assets or incurrences of liabilities (or a combination of both) during a period of delivering or producing goods, rendering services, or carrying out other activities that constitute the entity's ongoing major or central operations.

**Gains.** Increases in equity (net assets) from peripheral or incidental transactions of an entity and from all other transactions and other events and circumstances affecting the entity during a period except from revenues or investments by owners.

**Losses.** Decreases in equity (net assets) from peripheral or incidental transactions of an entity and from all other transactions and other events and circumstances affecting the entity during a period except from expenses or distributions to owners.

\* “Elements of Financial Statements,” *Statement of Financial Accounting Concepts No. 6* (Stamford, Conn.: FASB, December 1985), pp. ix and x.



owners during a period.” The statement further expresses an expectation that the concept of earnings will evolve or develop over time. *SFAC No. 5* does, however, provide a working definition of earnings as follows:

Earnings is a measure of entity performance during a period. It measures the extent to which asset *inflows* (revenues and gains) associated with cash-to-cash cycles substantially completed during the period exceed asset *outflows* (expenses and losses) associated, directly or indirectly, with the same cycles.

In other words, earnings is essentially revenues and gains minus expenses and losses, with the exception of any losses or gains explicitly stated by FASB to bypass earnings and, instead, to be reported as a component of *other comprehensive income*.

What are examples of these “odd” gains and losses that bypass earnings under current GAAP? *SFAC No. 5* describes them as “principally certain holding gains or losses that are recognized in the period but are excluded from earnings such as some changes in market values of investments . . . and foreign currency translation adjustments.”

Not all changes in market values of investments are excluded from earnings, however. For example, the gains or losses recognized upon marking Trading Securities to market values *are* reported in earnings, while those on Available-for-Sale securities generally are not. Similarly, the gains or losses on foreign currency translation may or may not be reported in earnings, depending on whether the firm is using the temporal method (restatement) or the current method (translation) for its subsidiaries. In one case, the gain or loss appears in earnings. In the other, it appears as a component of *other comprehensive income*. This distinction is elaborated upon in Chapter 13, Translation of Financial Statements of Foreign Affiliates.

In short, these distinctions seem rather arbitrary and are thus, not surprisingly, confusing to students as well as to users of financial statements. The FASB’s choices in this regard appear to be affected by: (a) the volatility that a particular gain or loss might introduce into earnings, and whether that volatility is reflective of true economic performance (in which case it should be reported in earnings) or is reflective of something else (in which case it is more likely to fall into other comprehensive income); and (b) the attitude of various constituents, or the effect of lobbying, which is in turn largely related to (a).

In this text, we use the term *net income* to refer to *earnings*, and we do not focus on comprehensive income in most chapters. In the absence of gains or losses designated to bypass earnings, earnings and comprehensive income are the same. However, if the firm has foreign subsidiaries or has available-for-sale securities or other investments that are being marked to market at the balance sheet date, the reader should be aware that current GAAP distinguishes between net current income and comprehensive income. Other items that may arise include certain gains or losses related to a firm’s net pension liability; these too may bypass retained earnings and be reported instead as a component of *other comprehensive income*.

Be aware that any item which bypasses earnings will not appear in retained earnings (by definition, the accumulated earnings since incorporation minus dividends declared). Thus, other comprehensive income appears on the balance sheet as a separate component of stockholders’ equity, labeled “Accumulated Other Comprehensive Income.”

During June 2011, FASB voted to update FASB ASC topic 220 [Statement of Comprehensive Income], so that entities should present comprehensive income and its components either in a single *statement of comprehensive income* or as a consecutive statement immediately following the income statement. The single (combined) statement approach would still display net income as a subtotal, and continue on to display total comprehensive income on the same statement. Like most other current projects, this project reflects the joint efforts of the FASB and the IASB.



## Asset Impairment and the Conceptual Framework

*SFAC No. 5* provides the following guidance with respect to expenses and losses:

*Consumption of benefit.* Earnings are generally recognized when an entity’s economic benefits are consumed in revenue earnings activities (or matched to the period incurred or allocated systematically); or

*Loss or lack of benefit.* Expenses or losses are recognized if it becomes evident that previously recognized future economic benefits of assets have been reduced or eliminated, or that liabilities have increased, without associated benefits.

In 2001, the FASB abandoned its long-held position that all intangible assets must be amortized over their useful lives, not to exceed 40 years. In the place of this position was born a new standard. If the asset has a finite life, amortize it, as before, over its useful life. However, if the life is deemed indefinite, then do not amortize the asset. Instead, review it periodically (at least once a year) for impairment or decreased value. The former approach (that of amortization) illustrates a *consumption or benefit* approach to measuring expenses while the impairment standard illustrates a *loss or lack of benefit* approach.

Another of the principles laid out by the FASB in *SFAC No. 5* is that of **matching** expenses to revenues. The *consumption of benefit* approach emphasizes a more direct matching of expenses to revenues, while the *loss or lack of benefit* represents an example of those types of expenses that are most difficult, if not impossible, to match adequately to the generation of revenue. Thus, such losses as the impairment of goodwill reflect an attempt to recognize the loss of benefit in the period in which that loss is first identified.

Chapters 2 and 5 illustrate the impact of the impairment of goodwill (deemed to have an indefinite life) on the financial statements of the acquiring company and the consolidated entity, respectively.

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## 1.11 FASB CODIFICATION (SOURCE OF GAAP)

On July 1, 2009, the Financial Accounting Standards Board (FASB) launched the *FASB Accounting Standards Codification* as the single source of authoritative nongovernmental U.S. generally accepted accounting principles (GAAP). The Codification is effective for interim and annual periods ending after September 15, 2009. All existing accounting standards documents are superseded as described in FASB Statement No. 168, *The FASB Accounting Standards Codification and the Hierarchy of Generally Accepted Accounting Principles*. All other accounting literature not included in the Codification is nonauthoritative.<sup>33</sup>

While not intended to change existing U.S. GAAP, the purpose of the Codification is to integrate existing accounting standards by multiple standard-setters within levels A through D of the former GAAP hierarchy. Cross-references are provided to link the Codification to the original standards. The Codification also contains *relevant* portions of authoritative content issued by the Securities and Exchange Commission as well as selected SEC staff interpretations and administrative guidelines.

It does not include SEC staff speeches, testimony, or Current Issues and Rulemaking Projects (CIRPs), nor does it include pronouncements of the IASB. Nonetheless, one expectation of the Codification's implementation is that it will ease the convergence of U.S. GAAP and international standards (IFRS); and the material correlates at the topic and section levels to IFRS. As we move forward, future U.S. accounting standards will be issued in the form of an update to the appropriate topic or subtopic within the Codification.

The Codification is intended to simplify the classification of existing and future standards by restructuring all authoritative U.S. GAAP (other than that for governmental entities) into one online database under a common referencing system. The codification is organized in a tiered structure consisting of a framework of topics, subtopics, sections, and paragraphs on each subject. The Codification does not codify all GAAP since the GAAP

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<sup>33</sup> Rules and interpretive releases of the Securities and Exchange Commission (SEC) under authority of federal securities laws are also sources of authoritative GAAP for SEC registrants. In addition to the SEC's rules and interpretive releases, the SEC staff issues Staff Accounting Bulletins that represent practices followed by the staff in administering SEC disclosure requirements, and it utilizes SEC Staff Announcements and Observer comments made at Emerging Issues Task Force meetings to publicly announce its views on certain accounting issues for SEC registrants.

hierarchy also includes items such as practice, textbooks, articles, and other similar content. Thus instead of referring to specific FASB statements, the Codification will be referred to as *ASC*, which is the Accounting Standards Codification (ASC). In fact, the FASB will no longer issue statements (such as FAS No. 141), but will instead issue updates to the Codification. The updates will be referred to as *ASU* (or accounting standards update). The Codification replaces the GAAP hierarchy.

GAAP pronouncements are divided into 90 accounting topics and all topics are displayed using a consistent structure. In order to apply or search the Codification, one must understand its structure. References to the Codification contain four groupings of numbers. These four numbered items refer to (1) the topic, (2) the subtopic, (3) the section, and (4) the paragraph number for the appropriate accounting. Thus the code ASC 450-20-25-2 refers to topic 450, which is contingencies; subtopic 20, which is loss contingencies; section 25, which is recognition; and the 2 refers to the second paragraph.

Highest-level topics are organized in nine main areas, but are mainly grouped by financial statement. For instance, three general topics relate to the balance sheet (assets, liabilities, and equity) and two of the general topics relate to the income statement (revenues and expenses).

| <i>Groupings</i>     | <i>General Topics</i>     | <i>Topic Numbering</i> | <i>Number of Specific Topics in Each General Topic</i> |
|----------------------|---------------------------|------------------------|--|
|                      | <b>General Principles</b> | 105                    | 1  |
|                      | <b>Presentation</b>       | 200–299                | 15   |
| Balance Sheet Topics | <b>Assets</b>             | 300–399                | 9  |
|                      | <b>Liabilities</b>        | 400–499                | 9  |
|                      | <b>Equity</b>             | 505                    | 1  |
| Income Statement     | <b>Revenues</b>           | 605                    | 1  |
|                      | <b>Expenses</b>           | 700–799                | 8  |
| Other Topics         | <b>Broad Transactions</b> | 800–899                | 14   |
|                      | <b>Industry</b>           | 900–999                | 32   |
|                      | Total                     |                        | 90   |

- a. *General Principles (Topic 105)*. This topic establishes the *Accounting Standards Codification* (Codification) as the source of authoritative generally accepted accounting principles (GAAP). Rules and interpretive releases of the Securities and Exchange Commission (SEC) under authority of federal securities laws are also sources of authoritative GAAP for SEC registrants. Also, certain accounting standards allowed for the continued application of superseded accounting standards. Such grandfathered standards are typically not included in the Codification. Some of the grandfathered topics are listed in ASC 105-10-65-1.
- b. *Presentation (Topic Codes 205–299)*. There are 15 topics related to presentation of comparative financial statements. These topics do not address recognition, measurement, and derecognition matters. Not all presentation issues will be found in ASC 200 topics. Within each general topic (topics 300 and higher), section 45 describes “other presentation matters” specific to that particular general topic. These can always be found in ASC XXX-YY-45-xx. For instance, ASC 330-10-45-2 describes the guidance on presenting contract costs of certain construction-type contracts. The topics included in presentation are as follows:

#### **Presentation Topic (ASC 200 Topics)**

|     |                                      |
|-----|--------------------------------------|
| 205 | Presentation of Financial Statements |
| 210 | Balance Sheet                        |
| 215 | Statement of Shareholder Equity      |
| 220 | Comprehensive Income                 |
| 225 | Income Statement                     |
| 230 | Statement of Cash Flows              |
| 235 | Notes to Financial Statements        |

|     |  |
|-----|--|
| 250 | Accounting Changes and Error Corrections |
| 255 | Changing Prices                          |
| 260 | Earnings per Share                       |
| 270 | Interim Reporting                        |
| 272 | Limited Liability Entities               |
| 274 | Personal Financial Statements            |
| 275 | Risks and Uncertainties                  |
| 280 | Segment Reporting                        |

- c. *Financial Statement Accounts (Topic Codes 305–700)*. The Codification organizes topics in a financial statement order including Assets, Liabilities, Equity, Revenue, and Expenses. Topics include Receivables, Revenue Recognition, Inventory, and so on.

### **Balance Sheet Topics**

#### ***Assets (ASC 300 Topics)***

|     |  |
|-----|--|
| 305 | Cash and Cash Equivalents                    |
| 310 | Receivables                                  |
| 320 | Investments—Debt and Equity Securities       |
| 323 | Investments—Equity Method and Joint Ventures |
| 325 | Investments—Other                            |
| 330 | Inventory                                    |
| 340 | Other Assets and Deferred Costs              |
| 350 | Intangibles—Goodwill and Other               |
| 360 | Property, Plant, and Equipment               |

#### ***Liabilities (ASC 400 Topics)***

|     |  |
|-----|--|
| 405 | Liabilities                                    |
| 410 | Asset Retirement and Environmental Obligations |
| 420 | Exit or Disposal Cost Obligations              |
| 430 | Deferred Revenue                               |
| 440 | Commitments                                    |
| 450 | Contingencies                                  |
| 460 | Guarantees                                     |
| 470 | Debt   |
| 480 | Distinguishing Liabilities from Equity         |

#### ***Equity (ASC 500 Topics)***

|     |        |
|-----|--------|
| 505 | Equity |
|-----|--------|

### **Income Statement Topics**

#### ***Revenue (ASC 600 Topics)***

|     |                     |
|-----|---------------------|
| 605 | Revenue Recognition |
|-----|---------------------|

#### ***Expenses (ASC 700 Topics)***

|     |  |
|-----|--|
| 705 | Cost of Sales and Services                         |
| 710 | Compensations—General                              |
| 712 | Compensation—Nonretirement Postemployment Benefits |
| 715 | Compensation—Retirement Benefits                   |
| 718 | Compensation—Stock Compensation                    |
| 720 | Other Expenses                                     |
| 730 | Research and Development                           |
| 740 | Income Taxes                                       |

- d. *Broad Transactions (Topic Codes 805–899)*. These topics relate to multiple financial statement accounts and are generally transaction-oriented. Topics include Business Combinations, Consolidations, Derivatives, Nonmonetary Transactions, Related Party Disclosures, Leases, and so on.

#### **Broad Transactions (ASC 800 Topics)**

|     |                            |
|-----|----------------------------|
| 805 | Business Combinations      |
| 808 | Collaborative Arrangements |

|     |   |
|-----|---|
| 810 | Consolidation                           |
| 815 | Derivatives and Hedging                 |
| 820 | Fair Value Measurements and Disclosures |
| 825 | Financial Instruments                   |
| 830 | Foreign Currency Matters                |
| 835 | Interest                                |
| 840 | Leases                                  |
| 845 | Nonmonetary Transactions                |
| 850 | Related Party Disclosures               |
| 852 | Reorganizations                         |
| 855 | Subsequent Events                       |
| 860 | Transfers and Servicing                 |

- e. *Industries (Topic Codes 905–999)*. These 32 topics relate to accounting that is unique to an industry or type of activity. Topics include Airlines, Entertainment, Extractive Activities, Financial Services, Non-for-Profit Entities, Software, Real Estate, and so on.

#### Industry Topics (ASC 900 Topics)

|     |  |
|-----|--|
| 905 | Agriculture  |
| 908 | Airlines   |
| 910 | Contractors—Construction                           |
| 912 | Contractors—Federal Government                     |
| 915 | Development Stage Entities                         |
| 920 | Entertainment—Broadcasters                         |
| 922 | Entertainment—Cable Television                     |
| 924 | Entertainment—Casinos                              |
| 926 | Entertainment—Films                                |
| 928 | Entertainment—Music                                |
| 930 | Extractive Activities—Mining                       |
| 932 | Extractive Activities—Oil and Gas                  |
| 940 | Financial Services—Broker and Dealers              |
| 942 | Financial Services—Depository and Lending          |
| 944 | Financial Services—Insurance                       |
| 946 | Financial Services—Investment Companies            |
| 948 | Financial Services—Mortgage Banking                |
| 950 | Financial Services—Title Plant                     |
| 952 | Franchisors  |
| 954 | Health Care Entities                               |
| 958 | Not-for-Profit Entities                            |
| 960 | Plan Accounting—Defined Benefit Pension Plans      |
| 962 | Plan Accounting—Defined Contribution Pension Plans |
| 965 | Plan Accounting—Health and Welfare Benefit Plans   |
| 970 | Real Estate—General                                |
| 972 | Real Estate—Common Interest Realty Associations    |
| 974 | Real Estate—Real Estate Investment Trusts          |
| 976 | Real Estate—Retail Land                            |
| 978 | Real Estate—Time-Sharing Activities                |
| 980 | Regulated Operations                               |
| 985 | Software   |
| 995 | U.S. Steamship Entities                            |

Throughout this textbook, we reference the Codification by topic number only on occasion (i.e., FASB ASC 810 “Consolidations”) or in many instances using up to four groupings of numbers, which include the topic–subtopic–section–paragraph number (i.e., FASB ASC 810-20-25-4).

The Codification includes the following literature issued by various standard-setters that applies to all entities (other than governmental entities):

### Standards Issued by Standard-Setters other than the SEC

- a. Financial Accounting Standards Board (FASB)
  1. Statements (FAS)
  2. Interpretations (FIN)

3. Technical Bulletins (FTB)
4. Staff Positions (FSP)
5. Staff Implementation Guides (Q&A)
6. Statement No. 138 Examples
- b. Emerging Issues Task Force (EITF)
  1. Abstracts
  2. Topic D
- c. Derivative Implementation Group (DIG) Issues
- d. Accounting Principles Board (APB) Opinions
- e. Accounting Research Bulletins (ARB)
- f. Accounting Interpretations (AIN)
- g. American Institute of Certified Public Accountants (AICPA)
  1. Statements of Position (SOP)
  2. Audit and Accounting Guides (AAG)—only incremental accounting guidance
  3. Practice Bulletins (PB), including the Notices to Practitioners elevated to Practice Bulletin status by Practice Bulletin 1
  4. Technical Inquiry Service (TIS)—only for Software Revenue Recognition

## Standards Issued by the SEC

To increase the utility of the Codification for public companies, relevant portions of authoritative content issued by the SEC and selected SEC staff interpretations and administrative guidance have been included for reference in the Codification, such as:

- a. Regulation S-X (SX)
- b. Financial Reporting Releases (FRR)/Accounting Series Releases (ASR)
- c. Interpretive Releases (IR)
- d. SEC Staff Guidance in
  1. Staff Accounting Bulletins (SAB)
  2. EITF Topic D and SEC Staff Observer comments

## Changes to GAAP: Updating the FASB Standards

Updates to the Codification are called *Accounting Standards Updates* and are referenced as ASU YYYY-xx, where the *Ys* indicate the year the update was approved, and *xx* represents the number of the update for that year. For instance, ASU 2010-29 is the 29th update to the standards issued in 2010. Updates, by themselves, are not authoritative, but serve to update the Codification, provide background information, and provide the basis for the conclusions on the change. See online content at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter) for more detail on researching the Codification.

### SUMMARY

- 1 *Describe historical trends in types of business combinations.* Horizontal integration was popular from 1880 to 1904, while vertical integration became more prevalent from 1905 through 1930. The period beginning after World War II was called merger mania. From the 1950s through the 1970s, conglomerate mergers between companies in different industries occurred in the face of antitrust regulation restricting combinations within a particular industry. A relaxation of antitrust regulation in the 1980s and the emergence of high-yield junk bonds led to strategic acquisitions for firms seeking operating synergies. High stock prices in the 1990s created a wealth of mergers with stock the medium of exchange.
- 2 *Identify the major reasons firms combine.* Firms combine to achieve growth goals to obtain operating synergies, to compete more effectively in the international marketplace, to take advantage of tax laws in some cases, and to diversify or to eliminate competition.
- 3 *Identify the factors that managers should consider in exercising due diligence in business combinations.* Be aware of unrecorded liabilities; take care in interpreting percentages quoted by the selling company; examine the impact on earnings from allocated expenses, changes in LIFO reserves and inventory levels, and product sales; note any nonrecurring items, changes in estimates, accruals, or methods; and be careful of CEO egos.

- 4 *Identify defensive tactics used to attempt to block business combinations.* These tactics include poison pills, greenmail, white knights or white squires, pac-man defense, selling the crown jewels, and leveraged buyouts.
- 5 *Distinguish between an asset and a stock acquisition.* An asset acquisition involves the purchase of all of the acquired company's net assets, whereas a stock acquisition involves the attainment of control via purchase of a controlling interest in the stock of the acquired company.
- 6 *Indicate the factors used to determine the price and the method of payment for a business combination.* Factors include the effect of the acquisition on future earnings performance, (dilution or accretion), and the estimated value of the firm's identifiable net assets and implied goodwill. The method of payment is affected by the liquidity position of the purchaser firm, the willingness of the sellers to accept alternative forms of financing, and tax issues.
- 7 *Calculate an estimate of the value of goodwill to be included in an offering price by discounting expected future excess earnings over some period of years.* Identify a normal rate of return for firms similar to the company being targeted. Apply the rate of return to the level of identifiable assets of the target to approximate what the "normal" firm in this industry might generate. Estimate the expected future earnings of the target, and subtract the "normal" earnings to get "excess earnings." Assume an appropriate time period and a discount rate to calculate the discounted value of the excess earnings.
- 8 *Describe the two alternative views of consolidated financial statements: the economic entity and the parent company concepts.* Under the parent company concept, the consolidated financial statements reflect the stockholders' interests in the parent, plus their interests in the net assets of the subsidiaries. Thus the focus is on the interests of the parent's shareholders. The economic entity concept emphasizes control of the whole by a single management. As a result, consolidated financial statements provide information about a group of legal entities—a parent company and its subsidiaries—operating as a single unit.
- 9 *Discuss the Statements of Financial Accounting Concepts (SFAC).* These statements provide a framework for use by FASB in addressing topics that arise, and by users in interpreting and implementing FASB standards updates. They address definitions of key terms in financial reporting, its objectives, the role of cash flows and present values, qualitative characteristics of useful information, and underlying principles.
- 10 *Describe some of the current joint projects of the FASB and the International Accounting Standards Board (IASB), and their primary objectives.* Joint projects between the FASB and IASB include revenue recognition, leases, insurance contracts, and financial instruments. The objectives are to develop a converged set of standards based on fundamental concepts rather than a collection of rules.

Appendix 1A, "Evaluating Firm Performance," is available online at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter).

### TEST YOUR KNOWLEDGE SOLUTIONS

- 1.1 1. a. poison pill b. leveraged buyout (LBO) c. white knight 2. d 3. d

### QUESTIONS

- LO 2 1. Distinguish between internal and external expansion of a firm.
- LO 2 2. List four advantages of a business combination as compared to internal expansion.
- LO 1 3. What is the primary legal constraint on business combinations? Why does such a constraint exist?
- LO 2 4. Business combinations may be classified into three types based upon the relationships among the combining entities (e.g., combinations with suppliers, customers, competitors, etc.). Identify and define these types.
- LO 5 5. Distinguish among a statutory merger, a statutory consolidation, and a stock acquisition.
- LO 4 6. Define a tender offer and describe its use.
- LO 6 7. When stock is exchanged for stock in a business combination, how is the stock exchange ratio generally expressed?
- LO 4 8. Define some defensive measures used by target firms to avoid a takeover. Are these measures beneficial for shareholders?
- LO 5 9. Explain the potential advantages of a stock acquisition over an asset acquisition.
- LO 6 10. Explain the difference between an accretive and a dilutive acquisition.
- LO 8 11. Describe the difference between the economic entity concept and the parent company concept approaches to the reporting of subsidiary assets and liabilities in the consolidated financial statements on the date of the acquisition.
- LO 8 12. Contrast the consolidated effects of the parent company concept and the economic entity concept in terms of:
  - (a) The treatment of noncontrolling interests.
  - (b) The elimination of intercompany profits.
  - (c) The valuation of subsidiary net assets in the consolidated financial statements.
  - (d) The definition of consolidated net income.
- LO 8 13. Under the economic entity concept, the net assets of the subsidiary are included in the consolidated financial statements at the total fair value that is implied by the price paid by the parent company for its controlling interest. What practical or conceptual problems do you see in this approach to valuation?

- LO 9** 14. Is the economic entity or the parent concept more consistent with the principles addressed in the FASB's conceptual framework? Explain your answer.
- LO 9** 15. How does the FASB's conceptual framework influence the development of new standards?
- LO 9** 16. What is the difference between net income, or earnings, and comprehensive income?

### Business Ethics

From 1999 to 2001, Tyco's revenue grew approximately 24% and it acquired over 700 companies. It was widely rumored that Tyco executives aggressively managed the performance of the companies that they acquired by suggesting that before the acquisition, they should accelerate the payment of liabilities, delay recording the collections of revenue, and increase the estimated amounts in reserve accounts.

1. What effect does each of the three items have on the reported net income of the acquired company before the acquisition and on the reported net income of the combined company in the first year of the acquisition and future years?
2. What effect does each of the three items have on the cash from operations of the acquired company before the acquisition and on the cash from operations of the combined company in the first year of the acquisition and future years?
3. If you are the manager of the acquired company, how do you respond to these suggestions?
4. Assume that all three items can be managed within the rules provided by GAAP but would be regarded by many as pushing the limits of GAAP. Is there an ethical issue? Describe your position as: (A) an accountant for the target company and (B) as an accountant for Tyco.

## ANALYZING FINANCIAL STATEMENTS

### AFS1-1 Kraft and Cadbury PLC **LO 2** **LO 3**

On February 2, 2010, Cadbury's Board of Directors recommended that Cadbury's shareholders accept the terms of Kraft's final offer to acquire Cadbury. This ended one of the larger hostile takeovers that combined one company (Kraft) that reported using U.S. GAAP with an international company (Cadbury) that reported using IFRS as promulgated by the IASB and prepared financial statements in a foreign currency (the pound). The acquisition allowed Kraft to increase its presence in the food processing industry in the developing world and to acquire a company specializing in confectionary products.

On February 2, 2010, Kraft acquired 71.73% of Cadbury's shares for \$13.1 billion. Incremental interest costs for Kraft to finance the deal are estimated to be approximately \$500 million (based on borrowing of \$9.5 billion). This interest cost is expected to decrease over time. Cadbury earned approximately \$428 million in income (exchange rate adjusted) for 2009. One issue that merging companies always face when another company is acquired is whether the merger will be accretive or dilutive in the early years after the acquisition.

- (1) Discuss some of the factors that should be considered in analyzing the impact of this merger on the income statement for the next few years.
- (2) Discuss the pros and cons that Kraft might have weighed in choosing the medium of exchange to consummate the acquisition. Do you think they made the right decision? If possible, use figures to support your answer.
- (3) In addition to the factors mentioned above, there are sometimes factors that cannot be quantified that enter into acquisition decisions. What do you suppose these might be in the case of Kraft's merger with Cadbury?
- (4) This acquisition is complicated by the lack of consistency between the two companies' methods of accounting and currency. Discuss the impact that these issues are likely to have on the merged company in the years following the acquisition.

### AFS1-2 AFS1-2 Kraft Acquires Cadbury PLC **LO 3**

The following information from the financial statements of Kraft Foods and Cadbury PLC is available for the three years prior to their merger. Evaluate the performance of each company leading up to the year of the acquisition (2010). Note that Cadbury's financial statements are in millions of pounds, while Kraft's statements are in millions of dollars.

#### Required:

- A. Evaluate the health of the target company, and point out any trends that might have been worrisome to Kraft. Also indicate any strengths in the firm's performance. Hint: An appendix "Evaluating Firm Performance" is available online at [www.wiley.com/jeter](http://www.wiley.com/jeter) and may prove useful in addressing this question.



| <i>Kraft Foods (\$ millions)</i>       | <i>2007</i> | <i>2008</i> | <i>2009</i> |
|--|-------------|-------------|-------------|
| <b>Balance Sheet</b>                   |             |             |             |
| Assets                                 | 67,993      | 63,173      | 66,714      |
| Total Liabilities                      | 40,698      | 40,817      | 40,742      |
| Stockholders' Equity                   | 27,295      | 22,356      | 25,972      |
| <b>Selected Balance Sheet items</b>    |             |             |             |
| Market value of equity                 | 50,480      | 48,110      | 40,111      |
| Current Assets                         | 10,737      | 9,917       | 12,454      |
| Current Liabilities                    | 17,086      | 11,044      | 11,491      |
| Accounts Receivable                    | 5,197       | 4,704       | 5,197       |
| Inventory                              | 4,096       | 3,881       | 3,775       |
| Long-term Debt                         | 13,624      | 19,354      | 18,537      |
| Retained Earnings                      | 12,209      | 13,440      | 14,636      |
| <b>Income Statement</b>                |             |             |             |
| Total Revenues                         | 37,241      | 40,492      | 38,754      |
| Cost of Goods Sold                     | 24,651      | 27,164      | 24,819      |
| Gross Margin                           | 12,590      | 13,328      | 13,935      |
| Income continuing operations           | 2,590       | 1,678       | 2,810       |
| Net income                             | 2,590       | 2,884       | 3,021       |
| <b>Selected Income Statement items</b> |             |             |             |
| Interest Expense                       | 604         | 1,240       | 1,237       |
| Tax Expense                            | 1,137       | 658         | 1,136       |
| <b>Statement of Cash Flows</b>         |             |             |             |
| Cash from Operations (CFO)             | 3,571       | 4,141       | 5,084       |
| Cash interest paid                     | 628         | 968         | 1,308       |
| Cash taxes paid                        | 1,366       | 964         | 1,025       |
| <b>Cadbury (£ millions)</b>            |             |             |             |
|  | <b>2007</b> | <b>2008</b> | <b>2009</b> |
| <b>Balance Sheet</b>                   |             |             |             |
| Assets                                 | 11,338      | 8,895       | 8,129       |
| Total Liabilities                      | 7,165       | 5,361       | 4,607       |
| Stockholders' Equity                   | 4,173       | 3,534       | 3,522       |
| <b>Selected Balance Sheet items</b>    |             |             |             |
| Market value of equity                 | 9,581       | 8,241       | 12,266      |
| Current Assets                         | 2,600       | 2,635       | 2,125       |
| Current Liabilities                    | 4,614       | 3,388       | 2,434       |
| Accounts Receivable                    | 1,197       | 1,067       | 978         |
| Inventory                              | 821         | 767         | 748         |
| Long-term Debt                         | 1,120       | 1,194       | 1,349       |
| Retained Earnings                      | 2,677       | 2,498       | 3,502       |
| <b>Income Statement</b>                |             |             |             |
| Total Revenues                         | 4,699       | 5,384       | 5,975       |
| Cost of Goods Sold                     | 5,504       | 2,870       | 3,210       |
| Gross Margin                           | 2,195       | 2,514       | 2,765       |
| Income continuing operations           | 149         | 370         | 275         |
| Net income                             | 405         | 364         | 509         |
| <b>Selected Income Statement items</b> |             |             |             |
| Interest Expense                       | 88          | 50          | 172         |
| Tax Expense                            | 105         | 30          | 103         |
| <b>Statement of Cash Flows</b>         |             |             |             |
| Cash from Operations (CFO)             | 812         | 469         | 523         |
| Cash interest paid                     | 193         | 165         | 122         |
| Cash taxes paid                        | 235         | 153         | 163         |

**B.** Evaluate the health of Kraft Foods, and point out any positive or negative trends. Refer to the online appendix, "Evaluating Firm Performance."

## EXERCISES

**EXERCISE 1-1 Estimating Goodwill and Potential Offering Price LO 7**

Plantation Homes Company is considering the acquisition of Condominiums, Inc. early in 2015. To assess the amount it might be willing to pay, Plantation Homes makes the following computations and assumptions.

- A. Condominiums, Inc. has identifiable assets with a total fair value of \$15,000,000 and liabilities of \$8,800,000. The assets include office equipment with a fair value approximating book value, buildings with a fair value 30% higher than book value, and land with a fair value 75% higher than book value. The remaining lives of the assets are deemed to be approximately equal to those used by Condominiums, Inc.
- B. Condominiums, Inc.'s pretax incomes for the years 2012 through 2014 were \$1,200,000, \$1,500,000, and \$950,000, respectively. Plantation Homes believes that an average of these earnings represents a fair estimate of annual earnings for the indefinite future. However, it may need to consider adjustments to the following items included in pretax earnings:

|                                       |         |
|---------------------------------------|---------|
| Depreciation on buildings (each year) | 960,000 |
| Depreciation on equipment (each year) | 50,000  |
| Extraordinary loss (year 2014)        | 300,000 |
| Sales commissions (each year)         | 250,000 |

- C. The normal rate of return on net assets for the industry is 15%.

**Required:**

- A. Assume further that Plantation Homes feels that it must earn a 25% return on its investment and that goodwill is determined by capitalizing excess earnings. Based on these assumptions, calculate a reasonable offering price for Condominiums, Inc. Indicate how much of the price consists of goodwill. Ignore tax effects.
- B. Assume that Plantation Homes feels that it must earn a 15% return on its investment, but that average excess earnings are to be capitalized for three years only. Based on these assumptions, calculate a reasonable offering price for Condominiums, Inc. Indicate how much of the price consists of goodwill. Ignore tax effects.

**EXERCISE 1-2 Estimating Goodwill and Valuation LO 7**

Alpha Company is considering the purchase of Beta Company. Alpha has collected the following data about Beta:

|                           | <i>Beta Company<br/>Book Values</i> | <i>Estimated<br/>Market Values</i> |
|---------------------------|-------------------------------------|------------------------------------|
| Total identifiable assets | \$585,000                           | \$750,000                          |
| Total liabilities         | <u>320,000</u>                      | 320,000                            |
| Owners' equity            | <u>\$265,000</u>                    |                                    |

Cumulative total net cash earnings for the past five years of \$850,000 includes extraordinary cash gains of \$67,000 and nonrecurring cash losses of \$48,000.

Alpha Company expects a return on its investment of 15%. Assume that Alpha prefers to use cash earnings rather than accrual-based earnings to estimate its offering price, and that it estimates the total valuation of Beta to be equal to the present value of cash-based earnings (rather than excess earnings) discounted over five years. (Goodwill is then computed as the amount implied by the excess of the total valuation over the identifiable net assets valuation.)

**Required:**

- A. Compute (a) an offering price based on the information above that Alpha might be willing to pay, and (b) the amount of goodwill included in that price.
- B. Compute the amount of goodwill actually recorded, assuming the negotiations result in a final purchase price of \$625,000 cash.

**EXERCISE 1-3 Estimated and Actual Goodwill LO 7**

Passion Company is trying to decide whether or not to acquire Desiree Inc. The following balance sheet for Desiree Inc. provides information about book values. Estimated market values are also listed, based upon Passion Company's appraisals.

|                                   | <i>Desiree Inc.</i><br><i>Book Values</i> | <i>Desiree Inc.</i><br><i>Market Values</i> |
|-----------------------------------|---|---|
| Current assets                    | \$260,000                                 | \$ 260,000                                  |
| Property, plant & equipment (net) | 650,000                                   | 740,000                                     |
| Total assets                      | <u>\$910,000</u>                          | <u>\$1,000,000</u>                          |
| Total liabilities                 | \$400,000                                 | \$ 400,000                                  |
| Common stock, \$10 par value      | 160,000                                   |   |
| Retained earnings                 | <u>350,000</u>                            |   |
| Total liabilities and equities    | <u>\$910,000</u>                          |   |

Passion Company expects that Desiree will earn approximately \$150,000 per year in net income over the next five years. This income is higher than the 12% annual return on tangible assets considered to be the industry “norm.”

**Required:**

- A. Compute an estimation of goodwill based on the information above that Passion might be willing to pay (include in its purchase price), under each of the following additional assumptions:
  - (1) Passion is willing to pay for *excess* earnings for an expected life of five years (undiscounted).
  - (2) Passion is willing to pay for *excess* earnings for an expected life of five years, which should be capitalized at the industry normal rate of return.
  - (3) Excess earnings are expected to last indefinitely, but Passion demands a higher rate of return of 20% because of the risk involved.
- B. Comment on the relative merits of the three alternatives in part (A) above.
- C. Determine the amount of goodwill to be recorded on the books if Passion pays \$800,000 cash and assumes Desiree’s liabilities.

**ASC Exercises:** For all ASC Exercises indicate as part of your answer: the Codification topic, subtopic, section, and/or paragraph upon which your answer is based (unless otherwise specified). All ASC questions require access to the FASB Codification.<sup>a</sup>

- 
- ASCI-1** **Cross-Reference** The conditions determining whether a lease is classified as an operating lease or a capital lease were prescribed in *SFAS No. 13*, paragraph 7. Where is this located in this Codification?
- ASCI-2** **Cross-Reference** The rules defining the conditions to classify an item as extraordinary on the income statement were originally listed in *APB Opinion No 30*, paragraph 20. Where is this information located in the Codification?
- ASCI-3** **Disclosure** Suppose a firm entered into a capital lease, debiting an asset account and crediting a lease liability account for \$150,000. Does this transaction need to be disclosed as part of the statement of cash flows? If so, where?
- ASCI-4** **General Principles** Accounting textbooks under the former GAAP hierarchy were considered level 4 authoritative. Where do accounting textbooks stand in the Codification?
- ASCI-5** **Presentation** How many years of comparative financial statements are required under current GAAP?
- ASCI-6** **Overview** Can the provisions of the Codification be ignored if the item is immaterial?

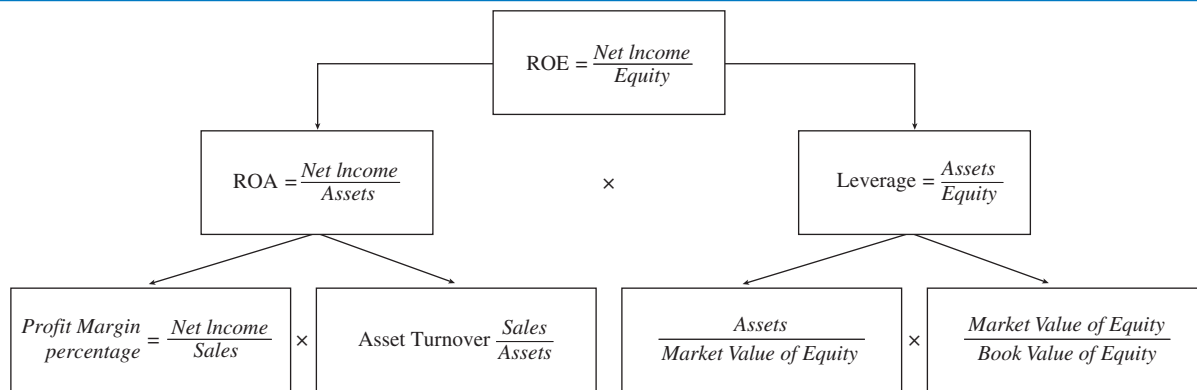
# Chapter 1

## APPENDIX 1A – EVALUATING FIRM PERFORMANCE (ONLINE)

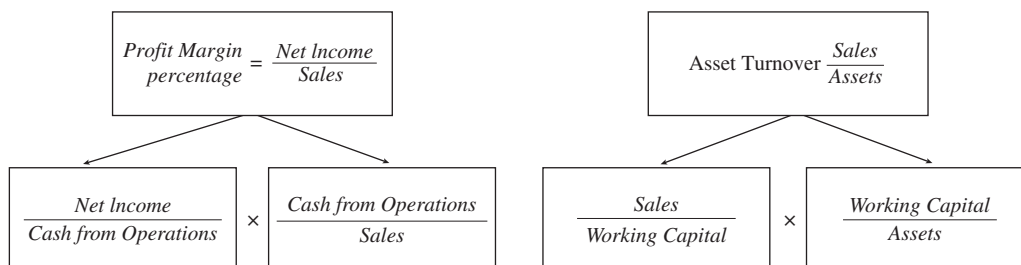
In this appendix, we provide a structured approach to evaluating firm performance. This approach can be used for many purposes. For example, it might be used to evaluate the potential performance of a proposed or completed merger. It might also be used as an analytical tool applied by auditors to evaluate the performance of an existing client. Individuals could use the approach as an initial step in determining investment opportunities. Depending on the objective of your analysis, a good starting point is to compute the return on equity (ROE) for the most recent years available. The structured approach decomposes this ratio into several commonly used ratios, which are subsequently decomposed further. The overall approach is summarized in Illustration A1-1.

### ILLUSTRATION A1-1

#### Structured Approach to Evaluate Firm Performance Panel A: Decomposing Return on Equity (ROE)



#### Panel B: Decomposing the Profit Margin Percentage Using Cash from Operations and Decomposing the Asset Turnover Ratio Using Working Capital



In this textbook and in our structured approach, we use the following definition of ROE (more complex definitions of ROE can be applied with similar results):

$$\text{ROE} = \frac{\text{Net Income}}{\text{Equity}} \quad (1)$$

Next this ratio is decomposed into two components: Return on Assets (ROA) and a Leverage ratio. These ratios are defined as:

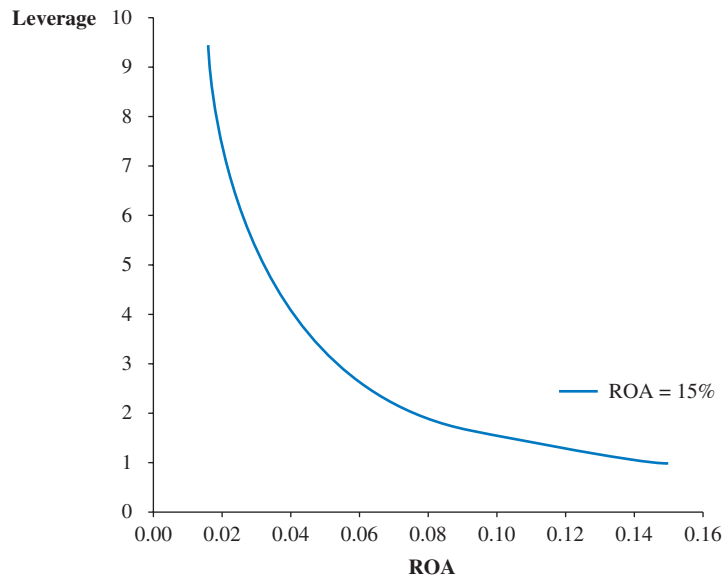
$$\text{ROA} = \frac{\text{Net Income}}{\text{Assets}} \quad (2)$$

$$\text{Leverage} = \frac{\text{Assets}}{\text{Equity}} = \frac{\text{Equity} + \text{Liabilities}}{\text{Equity}} \quad (3)$$

If you multiply these two ratios, Assets cancels out and you get ROE. Thus  $\text{ROE} = \text{ROA} \times \text{Leverage}$ . Assets divided by equity is considered a leverage ratio because Assets are equal to Liabilities plus Equity. Thus if the firm has more liabilities, this ratio is greater. The advantage of decomposing the ratios is that the ratio of interest can be graphed as a function of its decomposition. The graph of the decomposition of ROE is shown in Illustration A1-2.

#### ILLUSTRATION A1-2

##### ROE (15%) by ROA and Leverage



In Illustration A1-2, the solid line represents all possible combinations of ROA and leverage that equal an ROE of 15%. ROE amounts greater than 15% would appear above the solid line and ROE amounts less than 15% would appear below the solid line in the illustration. This illustration dramatizes the fact that if you pick two points on the solid line, they represent two companies with the same ROE but for very different reasons. A firm on the lower part of the solid line achieved its ROE with a high ROA with low amounts of leverage. A firm on the upper portion of the solid line achieved its ROE by using more debt in the capital structure but earning a lower ROA.

## ROA Decomposition

The next decomposition breaks down the ROA ratio. ROA is decomposed into two components: the Profit Margin Percentage and an Asset Turnover ratio. These ratios are defined as:

$$\text{Profit Margin Percentage} = \frac{\text{Net Income}}{\text{Sales}} \quad (4)$$

$$\text{Asset Turnover} = \frac{\text{Sales}}{\text{Assets}} \quad (5)$$

Again note that if you multiply these two ratios, Sales cancels out and you obtain the ROA ratio (ROA = Profit Margin  $\times$  Asset Turnover). The graph of the decomposition of ROA is shown in Illustration A1-3.

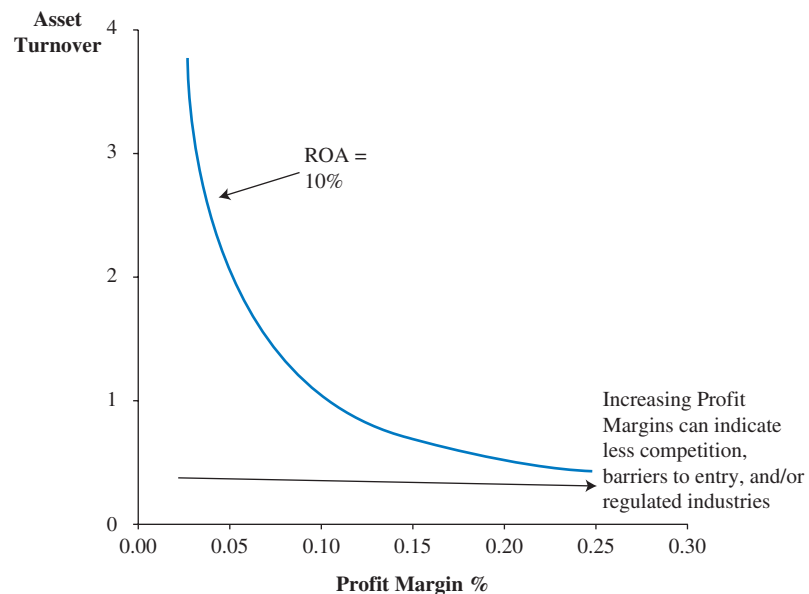
In Illustration A1-3, the solid line represents all possible combinations of the Asset Turnover ratio and Profit Margin percentage that equal an ROA of 10%. ROA amounts greater than 10% would appear above the solid line and ROA amounts less than 10% would appear below the solid line in the illustration. Thus, if you pick two widely spaced points on the solid line, they would represent two companies with the same ROA but for very different reasons. A firm on the lower part of the solid line achieved its ROA with a high profit margin but without generating a lot of revenues per dollar of assets. A firm on the upper portion of the solid line achieved its ROA by generating more sales per dollar of assets invested while earning a lower profit margin. As noted in the illustration, a higher profit margin may indicate a less competitive industry. Alternatively, it might indicate high profit margins resulting from barriers to entry in that industry, such as a very capital-intensive industry. Higher profit margins could be due to regulatory constraints that prevent other firms from entering the market.

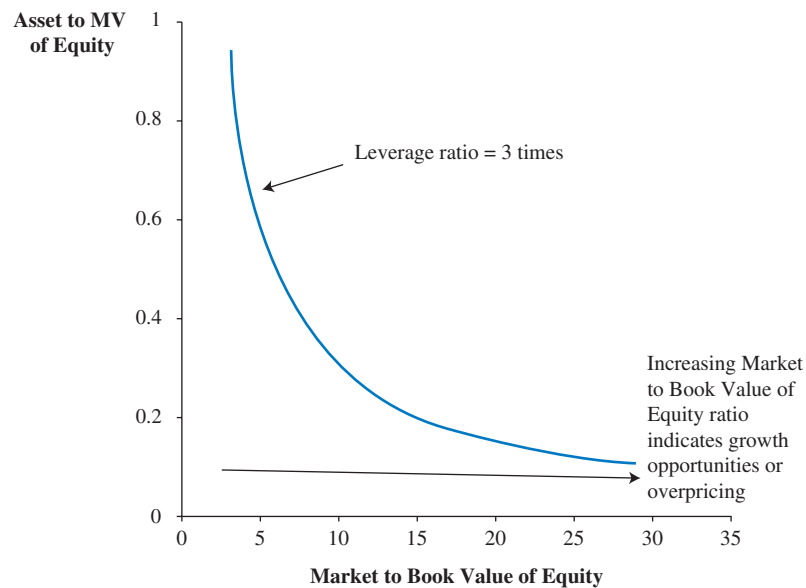
## Decomposing Leverage

The next decomposition breaks down the leverage ratio. Interpreting leverage goes beyond relying on book value to debt ratios. In measuring the level of debt it is important to consider the market value of the firm's equity. Therefore, leverage is decomposed into two

### ILLUSTRATION A1-3

#### ROA (10%) by Profit Margin % and Asset Turnover



**ILLUSTRATION A1-4****Leverage as Function of Asset/MVE and Market to Book Value of Equity**

components: the Asset to Market Value of Equity and the Market Value of Equity to Book Value of Equity (market to book ratio). These ratios are defined as:

$$\text{Asset to Market Value Percentage} = \frac{\text{Assets}}{\text{Market Value of Equity}} \quad (6)$$

$$\text{Market to Book Ratio} = \frac{\text{Market Value of Equity}}{\text{Book Value of Equity}} \quad (7)$$

Again note that if you multiply these two ratios, Market Value cancels out and you obtain the leverage ratio (Leverage = Asset to Market Value Percentage  $\times$  Market to Book Ratio). The graph of the decomposition of leverage is shown in Illustration A1-4.

Increasing market to book ratios often indicates increased growth opportunities for the firm, but could alternatively indicate overpricing. Thus, care must be taken in evaluating changes in these ratios.

## Decomposing the Profit Margin and the Asset Turnover Ratios

Because the income statement is prepared on an accrual basis, further analysis is needed to incorporate the firm's cash flow position. This decomposition examines the size of the firm's accruals and whether they increase or decrease a firm's earnings. Also, the decomposition takes into account the amount of cash from operations (CFO) that is generated by the reported level of revenues. The profit margin is decomposed into two components: Net Income to Cash from Operations and Cash from Operations to Total Revenues. These ratios are defined as:

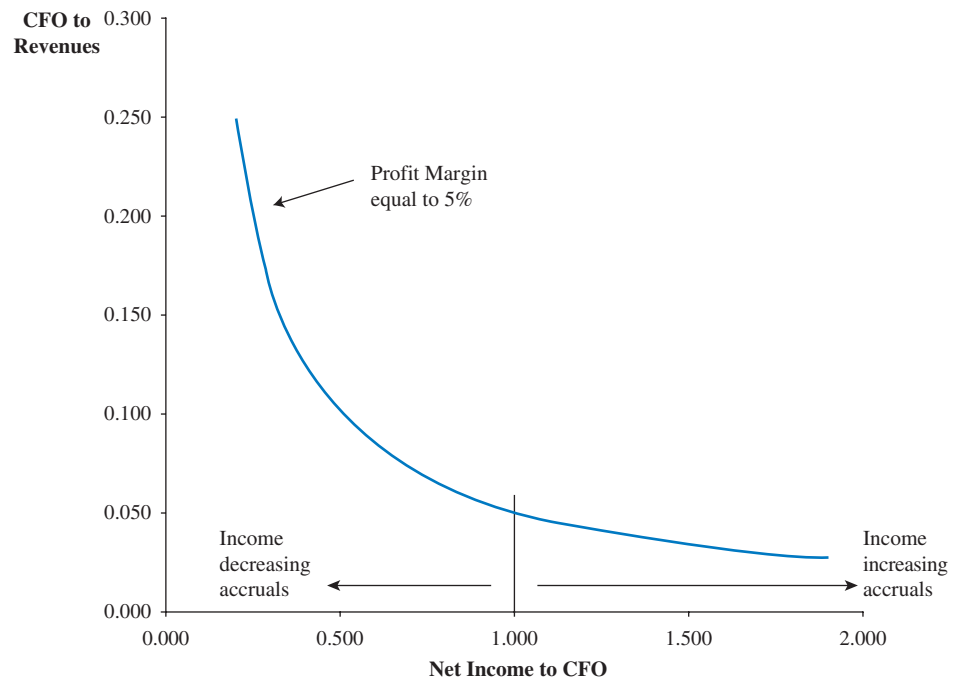
$$\text{Asset Net Income to Cash from Operations} = \frac{\text{Net Income}}{\text{Cash from Operations}} \quad (8)$$

$$\text{Cash from Operations to Revenues} = \frac{\text{Cash from Operations}}{\text{Revenues}} \quad (9)$$

The asset turnover ratio is decomposed using the firm's working capital (current assets less current liabilities). Working capital measures the firm's liquidity; changes in working

## ILLUSTRATION A1-5

## Profit Margin (5%) Decomposition



capital might indicate growth or alternatively could be a precursor to liquidity problems if the firm is struggling to sell its inventories or to collect its receivables, for example. The decomposition of the asset turnover ratio follows:

$$\text{Sales to Working Capital} = \frac{\text{Sales}}{\text{Working Capital}} \quad (10)$$

$$\text{Working Capital to Assets} = \frac{\text{Working Capital}}{\text{Assets}} \quad (11)$$

The graph for the profit margin decomposition is shown in Illustration A1-5. The solid line represents all the possible combinations of net income to CFO and CFO to revenues that result in a profit margin of 5%. The line representing higher profit margins would be located above the line and lower profit margins would be represented below the line. The graph provides insight into the accrual process. Consider the case where net income equals CFO (see the vertical line at 1.00). Points above 1.0 represent situations where accruals increase earnings and points below 1.0 represent cases where accruals decrease earnings. Thus if the firm's last three profit margin observations plot very close to the vertical line at net income to CFO of 1.0, this implies that the overall timing of the revenues and expenses reported on the income statement are very close to the overall timing of the cash collections and cash payments. Income increasing accruals might signal future cash from operations, while income decreasing accruals would be likely to indicate lower future cash flows.

Illustration A1-6 provides the graph of the decomposition of the asset turnover ratio. Clearly, if the firm can generate more revenues with lower working capital or lower assets, the asset turnover will increase.

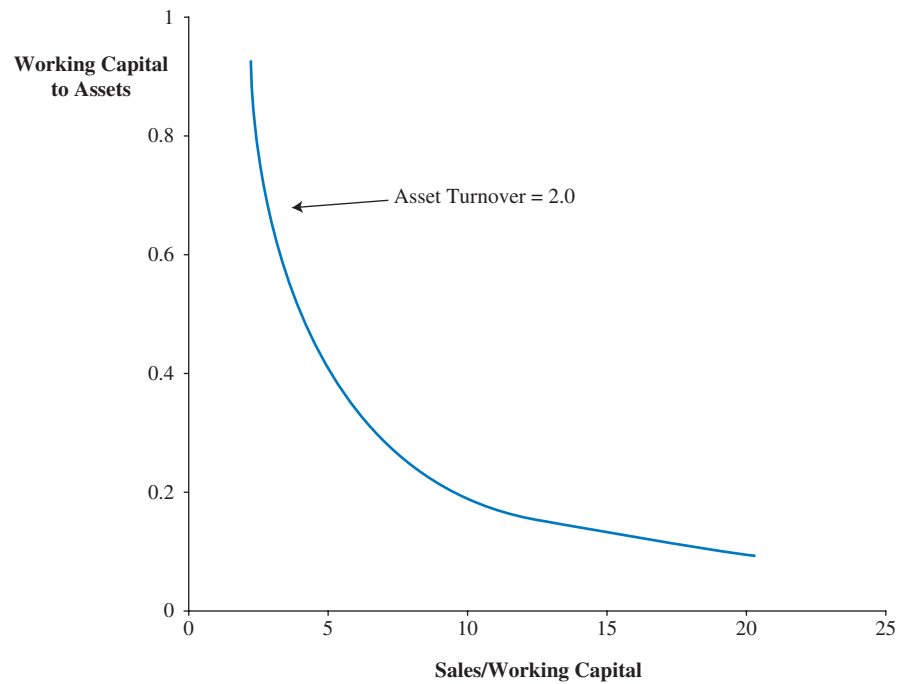
## Other Important Ratios

While the structured approach is a good start to financial analysis, it is not comprehensive. For instance, a common-size income statement is a great tool for analyzing various margins (such as the gross margin or operating margin) and locating areas of the income statement



## ILLUSTRATION A1-6

## Asset Turnover (= 2.0) Breakdown



where certain expenses are growing faster than revenues. Also, there are other groupings of ratios that bear mention. By *groupings*, we mean that these ratios should be considered jointly rather than individually. For instance, consider the following three ratios:

1. Gross margin percentage (sales less cost of goods sold divided by sales)
2. Receivables turnover (sales divided by receivables)
3. Inventory turnover (cost of goods sold divided by inventory)

Turnover ratios are useful because they compare an income statement number and a balance sheet number (the name of the turnover ratio always defines the item in the denominator of the ratio). The gross margin ratio might indicate that sales grew faster than cost of goods sold, while a decrease in the inventory turnover may provide a warning that the firm could have over-purchased inventory.

Two final ratios to consider in your evaluation are:

1. Long-term debt to assets
2. Cash interest coverage ratio (cash from operations plus cash interest and cash taxes divided by cash interest paid)

The first ratio measures the amount of debt included in the capital structure, while the second ratio provides a measure of the firm's ability to meet the cash interest payment.

## Chapter 1 – Review Questions

The review questions accompanying this course are designed to assist you in achieving the course learning objectives. The review section is not graded; do not submit it in place of your qualified assessment. While completing the review questions, it may be helpful to study any unfamiliar terms in the glossary in addition to course content. After completing the review questions, proceed to the review question answers and rationales.

1. Which of the following is accurate regarding merger and acquisition activity historically?
  - a. 2009 M&A activity reached historic highs and has trailed off since.
  - b. Low stock valuations in late 2008 and early 2009 fueled M&A activity.
  - c. Lower interest rates after 2009 spurred the largest growth in M&A activity since the 1990s.
  - d. 2008 saw a dramatic rise in bankruptcy-related M&A activity.
  
2. Which of the following types of M&A benefits was seen consistently from 2001 to 2010 accounting for more than 30% of the M&A activity each quarter during that period?
  - a. Diversification.
  - b. Expansion to international markets.
  - c. Financial “tax gain” synergies.
  - d. Divestitures.
  
3. Which of the following is accurate regarding a stock acquisition versus an asset acquisition?
  - a. A stock acquisition means that the acquiring firm will issue its own stock in order to acquire the stock of the other firm.
  - b. In an asset acquisition, the acquiring firm must acquire 100% of the assets of the other firm regardless of the medium of exchanged used to do so.
  - c. In an asset acquisition, the acquiring firm will issue its own stock in order to acquire the assets of the other company.
  - d. In a stock acquisition, the acquiring firm must acquire 100% of the stock of the other firm regardless of the medium of exchanged used to do so.
  
4. Which of the following statements is accurate regarding a statutory merger?
  - a. Only the acquiring company survives the merger as a legal entity.
  - b. The acquiring company may buy 100% of the stock of the acquired company or some smaller percentage depending on the dispersion of stock among stockholders.
  - c. Both companies will continue in existence for at least some period of time after the merger.
  - d. The board of the acquired company does not have much input into the terms of the merger.

5. Which of the following has different recognition rules for acquisitions which must be considered as part of due diligence?
  - a. LIFO inventory.
  - b. Indirect production expense allocations.
  - c. Contingent liabilities.
  - d. Changes in estimates.
  
6. Which of the following is accurate regarding the economic entity concept of consolidation?
  - a. The primary purpose of consolidated financial statements is to provide information relevant to the controlling stockholders.
  - b. It represents the view that the affiliated companies are a separate, identifiable entity and evaluation is only possible if all of the assets, liabilities and equity are combined.
  - c. The non-controlling or minority interest is presented as a liability.
  - d. The consolidated balance sheet is essentially a modification of the parent's balance sheet with the assets and liabilities of all subsidiaries substituted for the parent's investment in subsidiaries.
  
7. SFAC #6 fails to define:
  - a. Revenues.
  - b. Comprehensive income.
  - c. Investment by owners.
  - d. Earnings.

## Chapter 2 – Accounting for Business Combinations

### Learning Objectives

After completing this section of the course, you will be able to:

- Identify the major changes in the accounting for business combinations passed by the FASB in 2001 as well as changes made in December 2007, noting the reasons for both sets of changes.
- Cite elements of the goodwill impairment test, including its frequency, the steps laid out in the new standard, and some of the implementation problems.
- Cite the approach to reporting acquisition expenses.
- Identify the use of pro forma statements in business combinations.
- Identify the appropriate method for valuing assets, including goodwill, and liabilities in a business combination using the acquisition method.
- Identify how contingent consideration impacts the valuation of assets in a business combination using the acquisition method.
- Identify characteristics of leveraged buyouts.
- Cite disclosure requirements for business combinations.
- Recognize differences between GAAP and IFRS accounting for business combinations.

# ACCOUNTING FOR BUSINESS COMBINATIONS

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## CHAPTER CONTENTS

- 2.1 ACCOUNTING STANDARDS ON BUSINESS COMBINATIONS: BACKGROUND
- 2.2 PRO FORMA STATEMENTS AND DISCLOSURE REQUIREMENT
- 2.3 EXPLANATION AND ILLUSTRATION OF ACQUISITION ACCOUNTING
- 2.4 THE MEASUREMENT PERIOD (AND MEASUREMENT PERIOD ADJUSTMENTS)
- 2.5 CONTINGENT CONSIDERATION IN AN ACQUISITION
- 2.6 LEVERAGED BUYOUTS
- 2.7 IFRS VERSUS U.S. GAAP

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## 2.1 ACCOUNTING STANDARDS ON BUSINESS COMBINATIONS: BACKGROUND

In a controversial move, Dell Inc. announced a proposed \$24.4 billion deal to take itself private in 2013. CEO Brian Gladden claimed the deal delivered immediate value to shareholders, but critics felt the offer was too cheap and undervalued the company.<sup>1</sup>

In the wake of the Sarbanes-Oxley Act of 2002, a number of companies chose to go private in an effort to cut costs. The accounting for one type of privatization, the leverage buyout, is described in Section 2.6.

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<sup>1</sup> WSJ, “Dell to Sell Itself for \$24.4 Billion,” by Ben Worthen, I. Sherr, and S. Oride, 2/5/2013.

**LO 1** FASB's two major changes for business combinations.

FASB shook up the accounting community in the area of business combinations in December of 2007 by releasing two new standards. The first, *SFAS No. 141R*, "Business Combinations," completely replaced *FASB Statement No. 141*. This pronouncement supports the use of a single method in accounting for business combinations, and uses the term "acquisition method" in place of the previous term, "purchase method," to describe the preferred approach. Most of the primary conclusions reached in *SFAS No. 141* (and elaborated upon in the following paragraph) were carried forward without reconsideration. The differences addressed in the newer standard related to a number of criticisms that have haunted the accounting for business combinations for some time. These standards are now codified in FASB ASC topic 805 [Business Combinations].

### IFRS

One of the criticisms is that the standards of accounting for business combinations differ significantly between U.S. GAAP and International Financial Reporting Standards (IFRS). In 2002 the two principal standard setting boards, the FASB and the IASB (International Accounting Standards Board), agreed to reconsider the topic jointly with the objective of convergence, or finding a common and comprehensive standard that could be used both domestically and in cross-border situations. Nonetheless, the standards are not identical. Those differences are described at the end of this chapter.

The objective of the change was to recommend a single method that should result in more comparable and transparent financial statements. The essence of the change is that the acquired business should be recognized at its fair value on the acquisition date rather than its cost, regardless of whether the acquirer purchases all or only a controlling percentage (even if the combination is achieved in stages). In the past, when a business combination was achieved in stages (for example, a company purchases 20% of another company at one date, purchases an additional 20% a number of years later, and then achieves control by purchasing 12% at a still later date), the cost amounts from prior purchases (which might have occurred decades earlier) were combined with current values to create an accumulated total that reflected a mix of fair values and old book values being carried forward. This combination of amounts has long been criticized as lacking consistency, understandability, and usefulness. **Under current GAAP the fair values of all assets and liabilities on the acquisition date, defined as the date the acquirer obtains control of the acquiree, are reflected in the financial statements.** This change has the potential to affect the timing and the structure of deals.

### IN THE NEWS

The amendment to business combinations, put forward jointly by the International Accounting Standards Board (IASB) and U.S. Financial Accounting Standards Board (FASB), has its share of opponents. Various parties, including companies, analysts, accountants and regulatory bodies, tried to block the change, which they claimed was an effort by the standard setters to implement new rules rather than fine-tune the existing ones. The new standard places emphasis on fair values in a business combination, even in cases where less than 100% of the equity interests in the acquiree are purchased. Opponents state that the outcome of placing more goodwill on a company's financial statement is to produce artificial figures that fail to reflect the true value of a takeover transaction.<sup>2</sup>

The standards for business combinations now apply to business combinations involving only mutual entities, those achieved by contract alone, and the initial consolidation of variable interest entities (VIEs). Variable interest entities are discussed in Chapter 3.

A second standard, also issued on December 4, 2007, "Noncontrolling Interests in Consolidated Financial Statements," amended *Accounting Research Bulletin (ARB) No. 51* (now included in FASB ASC topic 810 [Consolidations]). This pronouncement established standards for the reporting of the noncontrolling interest when the acquirer obtains control without purchasing 100% of the acquiree. A noncontrolling (or minority) interest does not exist in net asset acquisitions, which are the focus of this chapter. Thus most of the discussion of this issue is deferred to Chapter 3.

<sup>2</sup> *Finance Week*, "Analysis: New Merger Rules to Increase Scrutiny in Deal-Making," 11/16/05, p. 14.

## CHANGES IN GAAP/ASC TOPIC 8051 WITH SIGNIFICANT IMPLICATIONS FOR DEALS

| Issue                                     | Prior GAAP  | Current GAAP   |
|---|---|--|
| Measurement date for securities issued    | Use a reasonable period of time before and after the terms are agreed to and announced.   | Use the fair value on the acquisition date.  |
| Acquisitions costs                        | Capitalize the costs.   | Expense as incurred.   |
| Acquisition of control but less than 100% | Minority interest is recorded at historical cost.   | Non-controlling interest is recorded at fair value along with 100% of the goodwill.  |
| In-process R&D                            | Included as part of purchase price, but then immediately expenses.  | Included as part of purchase price, treated as an asset.   |
| Negative goodwill                         | Reduction of certain noncurrent assets with the remained as extraordinary gain.   | No reduction of assets is recorded, record as a gain on the income statement.  |
| Contingent consideration                  | Record when determinable and reflect subsequent changes in the purchase price.  | Record at fair value on the acquisition date with subsequent changes recorded on the income statement.   |
| Business definition                       | A business is defined as a self-sustaining integrated set of activities and assets conducted and managed for the purpose of providing a return to investors. The definition would exclude early-stage development entities. | A business or a <i>group of assets</i> no longer must be self-sustaining. The business or group of assets must be capable of generating a revenue stream. This definition would include early-stage development entities.  |
| Decreases in ownership interest           | Include gains and losses on decreases in ownership interest in income.  | Decreases in ownership (if control is still maintained) are capital transactions. Decreases in ownership accompanied by a loss of control result in a gain or loss. The gain or loss is realized on the portion of interest sold an unrealized on the equity interests retained. |

### RELATED CONCEPTS

Requiring one method for all acquisitions makes financial statements more comparable across firms than allowing two methods for similar events.

**Earlier Standards** In a unanimous vote in 2001, the *Financial Accounting Standards Board (FASB)* reaffirmed a decision that had drawn strong opposition from businesses and had led some members of Congress to propose legislative intervention. But opposition softened when the Board voted to change the alternative method of accounting for mergers, purchase accounting, to make it less onerous. Companies had often tried to avoid ‘purchase accounting’ because it required them to add the intangible asset goodwill to their balance sheets and then write off the goodwill over 20 years or more, lowering profits. But the Board decided that it would no longer require, or even allow, the write-off of goodwill until the company concluded that its value was impaired. This could mean higher profits.<sup>3</sup>

Historically, two distinct methods of accounting for business combinations were permitted in the United States: purchase and pooling of interests. Although the majority of mergers were accounted for by the purchase method, in cases where the stock of one company was being exchanged for all the assets or most of the stock (90% or more) of the other, firms sometimes went to great lengths to satisfy an elaborate set of pooling criteria laid out by the U.S. standard setters. Today all mergers in the United States must be accounted for by the acquisition (or purchase) method.

<sup>3</sup> *New York Times*, “Board Ends Method of Accounting for Mergers,” by Floyd Norris, 1/25/01, p. C9.

With the issuance of *SFAS No. 141*, “Business Combinations,” [FASB ASC 805] and *SFAS No. 142*, “Goodwill and Other Intangible Assets,” [FASB ASC 350] in June 2001, the FASB culminated a project on business combinations brought to its agenda in August 1996 to reconsider *APB Opinion No. 16*, “Business Combinations,” and *APB Opinion No. 17*, “Intangible Assets.” Although some companies’ management and even analysts responded initially with rosy predictions that the earnings numbers would look a lot *better* for companies with large amounts of goodwill, less than a year later many of these same firms were writing off large chunks of goodwill under the new impairment rules.

**Lo 2** FASB’s two major changes of 2001.

In a pronouncement issued in June 2001, **the Board reaffirmed its proposal to prohibit the popular method referred to as the pooling of interests and decided that goodwill would no longer be amortized and would instead be tested periodically for impairment in a manner different from other assets.** Specifically, use of the pooling method has been prohibited for business combinations initiated since June 30, 2001. Goodwill acquired in a business combination completed since June 30, 2001, should not be amortized.

IN  
THE  
NEWS

The Board included the following statements in justifying the changes: Analysts and other users of financial statements indicated that it was difficult to compare the financial results of entities because different methods of accounting for business combinations were used. Users of financial statements also indicated a need for better information about intangible assets because those assets are an increasingly important economic resource for many entities and are an increasing proportion of the assets acquired in many business combinations. Company managements indicated that the differences between the pooling and purchase methods of accounting for business combinations affected competition in markets for mergers and acquisitions.

As might be predicted, responses to the changes ranged from complaints that the FASB had “given away the store”<sup>4</sup> to praise that the combined changes would yield enhanced flexibility for businesses.

Others, such as Morgan Stanley Dean Witter’s Trevor Harris, argued from the onset that there should be no long-term effect on stock prices and that any initial price effect from the changed accounting standards was merely a momentum play.<sup>5</sup>

While fans of the standards regarding goodwill accounting applauded their flexibility, critics questioned whether the goodwill impairment test opens the door for manipulation of earnings via the timing of write-offs, and some suggested an increase in hostile activity.

## Goodwill Impairment Test

**Lo 3** Goodwill impairment assessment.

For **public companies**, goodwill is no longer amortized on the income statement. Instead, goodwill of each reporting unit is tested for impairment on an annual basis. The annual goodwill impairment test may be performed any time during the fiscal year, provided the test is performed at the same time every year. Different reporting units may be tested for impairment at different times. In January 2014, FASB amended the standard for **private companies**, allowing them to elect an alternative model. Under this alternative, goodwill is amortized over a period not to exceed 10 years, and a simplified impairment model is used.

For purposes of the goodwill impairment test for **public companies**, all goodwill must be assigned to a reporting unit. Public entities may first assess *qualitative* factors to determine whether it is more likely than not that the fair value of the reporting unit is less than its carrying amount. Qualitative factors include items such as general economic conditions, increased competitive environment, declining cash flows, etc. If the assessment of the qualitative factors indicate that it is more likely than not (a likelihood greater than 50%) that the fair value of the reporting unit is less than its carrying amount (with goodwill), the entity must perform a two-step *quantitative* goodwill impairment test.

<sup>4</sup> *WSJ*, “FASB Backs Down on Goodwill-Accounting Rules,” 12/7/00, page A2.

<sup>5</sup> *WSJ*, “Goodwill Hunting: Accounting Change May Lift Profits, but Stock Prices May Not Follow Suit,” by Jonathan Weil, 1/25/01, p. C1.



In the *first step*, the reporting unit must determine if the carrying value is greater than zero. If the carrying amount of a reporting unit is zero or less, the second step is performed when it is more likely than not that a goodwill impairment exists. Circumstances that determine whether it is more likely than not would include unanticipated competition, loss of key personnel, an adverse action by a regulator, and so on. If the carrying amount of a reporting unit is greater than zero and its fair value *exceeds* its carrying amount, goodwill of the reporting unit is considered not impaired; thus, the second step of the impairment test is unnecessary. If the carrying amount of a reporting unit is greater than zero and its fair value is *less than* its carrying amount, goodwill of the reporting unit is considered impaired; thus, the second step of the impairment test is needed. In the *second step*, the carrying value of the goodwill is compared to its implied fair value. See Illustration 2-1 for a visual illustration of this process.

### IN THE NEWS

*What is a reporting unit?* A reporting unit is the level at which management reviews and assesses the operating segment's performance—in other words, discrete business lines or units that can be grouped by geography and can produce stand-alone financial statements (for example, four operating divisions reporting to the corporate parent). A company can use a reporting unit one level below the operating segment for impairment testing if components of an operating segment engage in business activities for which discrete financial information is available, have economic characteristics different from the other components of the operating segments, and are at the level at which goodwill benefits are realized.

### IN THE NEWS

*How tough is it to establish a value for the reporting unit?*

Businesses may not like the impairment rules because of the difficulty they have determining the fair value of the segment. However, if the reporting unit is a whole company, the current stock price will represent fair value. Although many finance managers object that current trading price doesn't always reflect fair value, CPAs like this measure because it is objective and verifiable.<sup>6</sup>

The calculation of the implied fair value of goodwill used in the impairment test is similar to the method illustrated later in this chapter for valuing the goodwill at the date of the combination. The FASB specifies that an entity should allocate the fair value of the reporting unit at the review date to all of its assets and liabilities (including unrecognized intangible assets other than goodwill) as if the unit had been acquired in a combination where the fair value of the unit was the purchase price. The excess of that purchase price over the fair value of identifiable net assets (assets minus liabilities) is the implied fair value of the goodwill.

After a goodwill impairment loss is recognized, the adjusted carrying amount of the goodwill becomes its new accounting basis. Subsequent reversal of a previously recognized impairment loss is prohibited once the measurement of that loss has been completed.

If an impairment test for goodwill occurs at the same time as an impairment test for any other asset, the FASB instructs that the other asset should be tested for impairment first. FASB also specifies that intangible assets other than goodwill should be amortized over their useful lives (if finite lives exist) and reviewed for impairment in accordance with FASB ASC 350–30–35–17, 18.

## Illustration of Determining Goodwill Impairment

### RELATED CONCEPTS

Verifiability is specified in SFAC No. 8 as an enhancing attribute of accounting information.

As a preliminary test, the entity should assess qualitative factors to determine if it is *more likely than not* that the fair value of the reporting unit is below its book value. If it is, then there are two steps in determining whether the value of goodwill has been impaired.

Assume:

On the date of acquisition:

|                                       |                  |
|---------------------------------------|------------------|
| Fair value of the reporting unit      | \$450,000        |
| Fair value of identifiable net assets | <u>350,000</u>   |
| Goodwill                              | <u>\$100,000</u> |

<sup>6</sup> *Journal of Accountancy*, "Say Goodbye to Pooling and Goodwill Amortization," by S. R. Moehrle and J. A. Reynolds-Moehrle, September 2001, p. 31.

On the first periodic review date:

The first step determines if there is a potential impairment. Step two will be needed only if the carrying value of the reporting unit (including goodwill) is larger than the fair value of the reporting unit. If the carrying value is less, no impairment is considered.

*Step One: Does potential impairment exist (i.e., is step two needed)?*

|  |           |         |
|--|-----------|---------|
| Fair value of the reporting unit                     | \$400,000 |         |
| Carrying value of reporting unit (includes goodwill) |           | 410,000 |

Potential goodwill impairment must be further considered if the carrying value of the reporting unit is larger than \$400,000. Since this occurs, proceed to step two.

Step two determines the amount of the impairment (if any). In step two, the fair value of goodwill is determined by comparing the fair value of the reporting unit at the periodic review date to the fair value of the identifiable net assets at this time. (The difference is the implied value of goodwill on this date.)

*Step Two: What is the amount of goodwill impairment (if any)?*

|  |                  |
|--|------------------|
| Fair value of the reporting unit                     | \$400,000        |
| Fair value of identifiable net assets at review date | <u>325,000</u>   |
| Fair value of goodwill (implied)                     | <u>\$ 75,000</u> |

Since the carrying value of goodwill is \$100,000 and the remaining fair value of goodwill is \$75,000, goodwill impairment of \$25,000 must be reported.

|                            |                  |
|----------------------------|------------------|
| Carrying value of goodwill | \$100,000        |
| Fair value of goodwill     | <u>75,000</u>    |
| Goodwill impairment loss   | <u>\$ 25,000</u> |

See Illustration 2-1.

## Disclosures Mandated by FASB

FASB ASC paragraph 805–30–50–1 requires the following disclosures for goodwill:

1. The total amount of acquired goodwill and the amount expected to be deductible for tax purposes.
2. The amount of goodwill by reporting segment (if the acquiring firm is required to disclose segment information), unless not practicable.

FASB ASC paragraph 350–20–45–1 specifies the presentation of goodwill in the balance sheet and income statement (if impairment occurs) as follows:

- a. The aggregate amount of goodwill should be a separate line item in the balance sheet.
- b. The aggregate amount of losses from goodwill impairment should be shown as a separate line item in the operating section of the income statement unless some of the impairment is associated with a discontinued operation (in which case it is shown net-of-tax in the discontinued operations section).

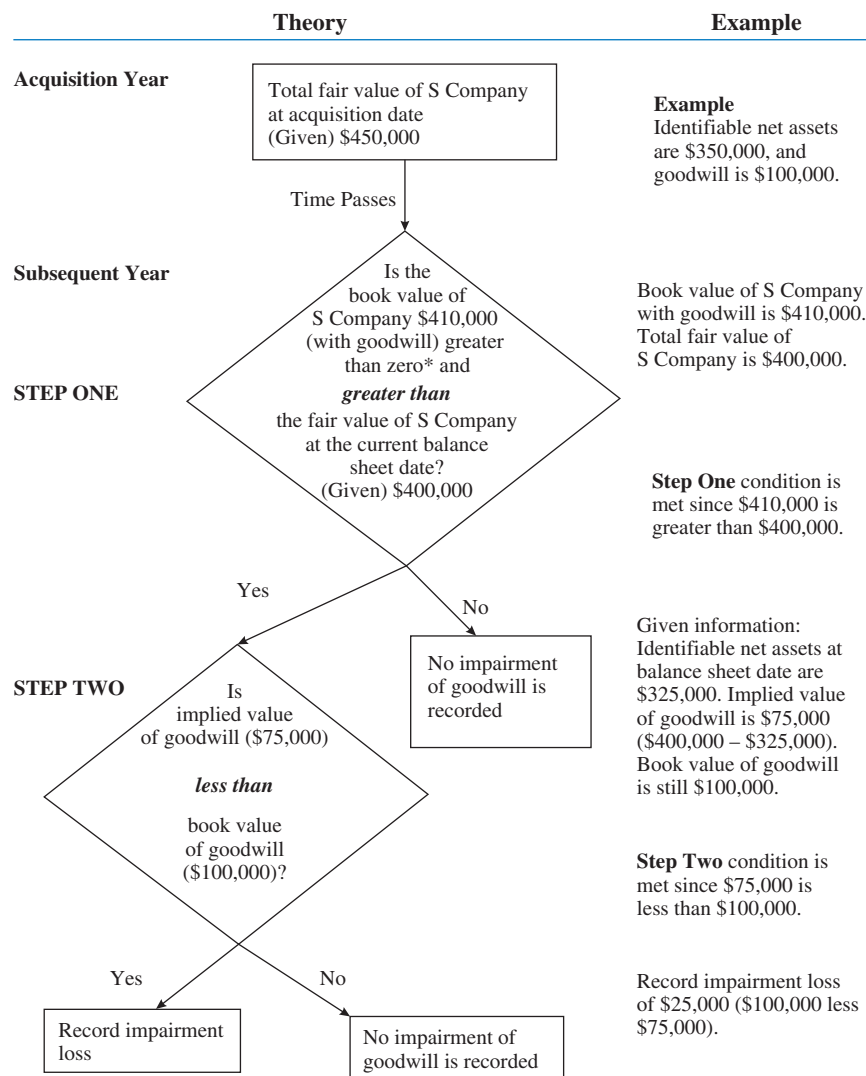
In a period in which an impairment loss occurs, FASB ASC paragraph 350–20–45–2 mandates the following disclosures in the notes:

1. A description of the facts and circumstances leading to the impairment.
2. The amount of the impairment loss and the method of determining the fair value of the reporting unit.
3. The nature and amounts of any adjustments made to impairment estimates from earlier periods, if significant.

### RELATED CONCEPTS

*Full disclosure suggests that all important aspects of acquisitions should be revealed to readers of the financial statements. This includes the reasons for subsequent impairment losses.*

### ILLUSTRATION 2-1 Goodwill Impairment Tests



**IN THE NEWS** CBS Corp. announced that it wrote down the goodwill value of its television and radio assets by \$9.5 billion to \$13.5 billion, resulting in a sizable fourth quarter loss. It is the second consecutive year CBS has taken a goodwill write-down under the accounting rule that requires an annual test for impairment of intangible assets. The most recent write-down is reflective of continued challenges and slow growth in the radio and broadcast television industries.<sup>7</sup>

\*If the carrying value of the reporting unit is zero or less, the second step of the impairment test is performed to measure the amount of impairment loss, if any, when it is more likely than not that a goodwill impairment exists. See FASB ASC paragraph 350-20-35-30 for such circumstances.

**Lo 9** New disclosure requirements for business combinations.

**Other Required Disclosures** FASB ASC paragraph 805–10–50–2 states that to meet its objectives, the acquirer should disclose pertinent information for each material business combination that takes place during the reporting period, to include the following:

- The name and a description of the acquiree.
- The acquisition date.
- The percentage of voting equity instruments acquired.
- The primary reasons for the business combination, including a description of the factors that contributed to the recognition of goodwill.
- The fair value of the acquiree and the basis for measuring that value on the acquisition date.

<sup>7</sup> WSJ, "CBS Posts \$9.14 Billion Loss on Hefty Asset Write-Downs," Brooks Barnes, 2/23/06.

- The fair value of the consideration transferred, including the fair value of each major class of consideration.
- The amounts recognized at the acquisition date for each major class of assets acquired and liabilities assumed in the form of a condensed balance sheet.
- The maximum potential amount of future payments the acquirer could be required to make under the terms of the acquisition agreement.



IN  
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A portion of auditors' testimony in the case against former Enron Corp. Chairman Kenneth Lay focused on the "alleged downward manipulation of charges for goodwill expenses." Prosecutors argued that Mr. Lay misled the company's auditors in October 2001 regarding Enron's plans for a water-distribution unit in order to avoid big charges to earnings. The accounting rules introduced in 2001 require a company to write-down an asset if it doesn't meet certain standards, which in the water-distribution's case included whether the company had a costly growth plan. Without such a plan, Enron would have been forced to recognize impairment in an amount in the hundreds of millions of dollars. At the time of the audit, Lay claimed the company planned to spend over \$1 billion on the unit; this statement contradicted earlier claims that the company was going to sell the water operation, a non-core business.<sup>8</sup>

## Other Intangible Assets

An acquired intangible asset other than goodwill should be amortized over its useful economic life if the asset has a limited useful life. Such assets should be reviewed for impairment in accordance with FASB ASC Section 350–30–35 [Intangibles—Subsequent Measurement]. However, if an acquired intangible asset other than goodwill has an indefinite life, it should not be amortized until its life is determined to be finite. Instead it should be tested annually (at a minimum) for impairment.



IN  
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FASB recognized the possible impact of the standard on earnings volatility in the following statements: Because goodwill and some intangible assets are no longer amortized, the reported amounts of goodwill and intangible assets (as well as total assets) do not decrease at the same time and in the same manner as under previous standards. There may be more volatility in reported income than under previous standards because impairment losses are likely to occur irregularly and in varying amounts.

## Treatment of Acquisition Expenses

### LO 4 Reporting acquisition expenses.

Under FASB ASC paragraph 805–10–25–23, acquisition-related costs are excluded from the measurement of the consideration paid, because such costs are not part of the fair value of the acquiree and are not assets. This is a change from past GAAP where the purchase method required only indirect costs to be expensed, while direct costs were capitalized as part of the purchase price. **Direct expenses** incurred in the combination include *finder's fees, as well as advisory, legal, accounting, valuation, and other professional or consulting fees.* **Indirect**, ongoing costs include *the cost to maintain a mergers and acquisitions department, as well as other general administrative costs such as managerial or secretarial time and overhead that are allocated to the merger but would have existed in its absence.* Both direct and indirect costs are expensed, and the cost of issuing securities is also excluded from the consideration and accounted for separately from the business combination accounting. Expected restructuring costs (with no obligation at the acquisition date) are also accounted for separately from the business combination. In the absence of more explicit guidance, we assume that **security issuance costs** are assigned to the valuation of the security, thus reducing the additional contributed capital for stock issues or adjusting the premium or discount on bond issues.

<sup>8</sup> WSJ, "Enron Former Auditors Testify on Charges, Reserve Accounts," by Gary McWilliams and John R. Emshwiller, 3/21/06, p. C3.

**ACQUISITION COSTS—AN ILLUSTRATION**

Suppose that SMC Company acquires 100% of the net assets of Bee Company (net book value of \$100,000) by issuing shares of common stock with a fair value of \$120,000. With respect to the merger, SMC incurred \$1,500 of accounting and consulting costs and \$3,000 of stock issue costs. SMC maintains a mergers department that incurred a monthly cost of \$2,000. The following illustrates how these direct and indirect merger costs and the security issue costs are recorded.

**ACQUISITION ACCOUNTING:**

|   |       |         |
|---|-------|---------|
| Professional Fees Expense (Direct)                | 1,500 |         |
| Merger Department Expense (Indirect)              | 2,000 |         |
| Other Contributed Capital (Security Issue Costs)* | 3,000 |         |
| Cash  |       | \$6,500 |

\* FASB ASC paragraph 805-10-25-23 states that the costs to issue debt or equity securities shall be recognized in accordance with other applicable GAAP.

## 2.2 PRO FORMA STATEMENTS AND DISCLOSURE REQUIREMENT

### LO 5 Use of pro forma statements.

Pro forma statements, sometimes called **as-if** statements, are prepared to show the effect of planned or contemplated transactions by showing how they might have affected the historical financial statements if they had been consummated during the period covered by those statements. Pro forma statements serve two functions in relation to business combinations: (1) to provide information in the **planning** stages of the combination and (2) to **disclose** relevant information subsequent to the combination.

First, pro forma statements are often prepared before the fact for combinations under consideration. When management is contemplating the purchase price offer, for example, a number of pro forma statements may be produced, using different assumed purchase prices and projecting one or more years into the future, or alternatively restating a past period as though the firms had been combined. After the boards of directors of the constituents have reached tentative agreement on a combination proposal, pro forma statements showing the effects of the proposal may be prepared for distribution to the stockholders of the constituents for their consideration prior to voting on the proposal. If the proposed combination involves the issue of new securities under *Securities and Exchange Commission (SEC)* rules, pro forma statements may be required as part of the registration statement.

When a pro forma statement is prepared, the tentative or hypothetical nature of the statement should be clearly indicated, generally by describing it as “pro forma” in the heading and including a description of the character of the transactions given effect to. Further description of any other adjustments should be clearly stated on the statement or in related notes. A pro forma balance sheet (based on data presented in Illustration 2-3) that might be prepared for use by the companies’ stockholders is presented in Illustration 2-2. The normal procedure is to show the audited balance sheet as of a given date, individual adjustments for the proposed transaction, and resulting account balances.

Second, pro forma presentation is a valuable method of disclosing relevant information to stockholders and other users subsequent to the combination. Some types of pro forma presentation are required by FASB ASC subparagraph 805-10-50-2(h) if the combined enterprise is a public business enterprise.

If a material business combination (or series of combinations material in the aggregate) occurred during the year, **notes** to financial statements should include on a pro forma basis:

1. Results of operations for the current year as though the companies had combined at the beginning of the year, unless the acquisition was at or near the beginning of the year.
2. Results of operations for the immediately preceding period as though the companies had combined at the beginning of that period if comparative financial statements are presented.

## ILLUSTRATION 2-2

**P Company Pro Forma Balance Sheet  
Giving Effect to Proposed Issue of Common Stock for All the Net Assets  
of S Company January 1, 2015**

| <i>Assets</i>                 | <i>Audited Balance Sheet</i> | <i>Adjustment</i> | <i>Pro Forma Balance Sheet</i> |
|-------------------------------|------------------------------|-------------------|--------------------------------|
| Cash and receivables          | \$ 250,000                   | \$ 170,000        | \$ 420,000                     |
| Inventories                   | 260,000                      | 140,000           | 400,000                        |
| Land                          | 600,000                      | 400,000           | 1,000,000                      |
| Buildings & equipment         | 800,000                      | 1,000,000         | 1,800,000                      |
| Accumulated depreciation      | (300,000)                    |                   | (300,000)                      |
| Goodwill                      | <u>—0—</u>                   | 230,000           | <u>230,000</u>                 |
| Total assets                  | <u>\$1,610,000</u>           |                   | <u>\$3,550,000</u>             |
| <i>Liabilities and Equity</i> |                              |                   |                                |
| Current liabilities           | \$ 110,000                   | 150,000           | 260,000                        |
| Bonds payable                 | <u>—0—</u>                   | 350,000           | 350,000                        |
| Common stock                  | 750,000                      | 450,000           | 1,200,000                      |
| Other contributed capital     | 400,000                      | 990,000           | 1,390,000                      |
| Retained earnings             | <u>350,000</u>               |                   | <u>350,000</u>                 |
| Total equities                | <u>\$1,610,000</u>           |                   | <u>\$3,550,000</u>             |

**TEST YOUR KNOWLEDGE** 

**NOTE:** Solutions to *Test Your Knowledge* questions are found at the end of each chapter before the end-of-chapter questions.

## Multiple Choice

- Which of the following statements is *true* with respect to the accounting for business combinations under U.S. GAAP?
  - Incomparability of financial statements under the previous rules permitting two distinct methods of accounting for business combinations (purchase and pooling) was corrected by making amortization of goodwill optional.
  - Under the current standards, impairment of goodwill is not accounted for because it does not affect the actual profit of the company.
  - The acquired business should be recognized at its fair value on the acquisition date, regardless of whether the acquirer purchases all or only a controlling percentage.
  - Any goodwill acquired in previous acquisitions should continue to be amortized after the year 2001 for the continuity of the accounting practice.
- Goodwill impairment exists only if the fair value of the business unit:
  - Equals the carrying value of the reporting unit (including goodwill).
  - Is greater than the carrying value of the reporting unit (including goodwill).
  - Is less than the carrying value of the reporting unit (including goodwill).
  - None of the above.
- Which of the following is *incorrect*?
  - Under acquisition accounting, direct acquisition costs are recorded by decreasing goodwill as a contra account.
  - Under acquisition method accounting, indirect acquisition costs (such as expenses incurred by a firm's permanent M&A department) are expensed.
  - Security issue costs, such as brokerage fees, reduce the Excess Paid In Capital account (i.e., are recorded as a debit to that account).
  - Accounting and consulting fees incurred in a business combination are expenses under the current standards for acquisitions.

## 2.3 EXPLANATION AND ILLUSTRATION OF ACQUISITION ACCOUNTING

As the term implies, the acquisition method treats the combination as the acquisition of one or more companies by another. Four steps are required in accounting for a business combination:

- Identify the acquirer.
- Determine the acquisition date.


 IN  
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Bank of New York will swap its retail banking business for J.P. Morgan

Chase's corporate trust unit plus \$150 million in cash. The Bank of New York's retail and regional middle-market businesses were valued at \$3.1 billion while J.P. Morgan Chase's corporate trust business was valued at \$2.8 billion. The difference results in a net cash payment, after negotiations, to Bank of New York.<sup>9</sup>

**LO 6** Valuation of acquired assets and liabilities assumed.


 IN  
THE  
NEWS

St. Jude Medical, Inc. announced that it will acquire Irvine Biomedical,

Inc. (IBI), an Irvine, California-based company that develops electrophysiology (EP) catheter products used by physician specialists to diagnose and treat cardiac rhythm disorders. St. Jude foresees recording an in-process R&D charge of \$8 to \$10 million at closing in connection with this acquisition. Apart from this in-process R&D charge, the transaction will not impact St. Jude's existing EPS guidance for 2004.<sup>10</sup>

3. Measure the fair value of the acquiree.
4. Measure and recognize the assets acquired and liabilities assumed.

Assets acquired by issuing shares of stock of the acquiring corporation are recorded at the fair values of the stock given or the assets received, whichever is more clearly evident. If the stock is actively traded, its quoted market price, after making allowance for market fluctuations, additional quantities issued, issue costs, and so on, is normally better evidence of fair value than are appraisal values of the net assets of an acquired company. Thus, an adjusted market price of the shares issued is commonly used. Where the issued stock is of a new or closely held company, however, the fair value of the assets received must generally be used. Any security issuance costs, whether bonds or stocks, incurred to consummate the merger are deducted from the value assigned to the debt or equity.

Identifiable assets acquired (including intangibles other than goodwill) and liabilities assumed should be recorded at their fair values at the date of acquisition. Any excess of total cost over the sum of amounts assigned to identifiable assets and liabilities is recorded as goodwill. Goodwill should not be amortized but should be adjusted downward only when it is "impaired" as described in the preceding section.

In the past, managers seeking to reduce the amount of goodwill recorded as a result of the acquisition sometimes found creative ways to avoid or reduce goodwill prior to the issuance by increasing the amounts allocated to other accounts. One tactic involved identifying *in-process research and development (R&D)* in the acquired company. FASB standards require that R&D costs be expensed as incurred, not capitalized. In an interpretation of the standard on R&D, FASB stated that some forms of R&D, including a specific research project in progress, which transferred in an acquisition, should also be expensed. Furthermore, the amount to be expensed was to be determined not by the original cost of the actual R&D but by the amount paid by the acquiring company. **However, under current GAAP, in-process R&D is measured and recorded at fair value as an asset on the acquisition date.** This requirement does not extend to R&D in contexts other than business combinations. In any event, the importance of maintaining supporting documentation for any amounts assigned to R&D is clear.

When the net amount of the fair values of identifiable assets less liabilities *exceeds the total cost* of the acquired company, the acquisition is sometimes referred to as a **bargain gain**. When a bargain acquisition occurs, either some of the acquired assets must be adjusted downward or a gain must be recognized to balance the accounts. Because of its reluctance to recognize income in a purchase or acquisition (where the usual facets of revenue recognition are absent), the FASB had, *in the past*, required that most long-lived assets be written down on a pro rata basis in such a situation before recognizing any gain. If the initial measurement of an acquisition results in a bargain purchase, FASB ASC paragraph 805-30-25-4 requires the acquirer *to reassess* whether it has correctly identified all of the assets acquired and all of the liabilities assumed *before* recognizing a gain on a bargain purchase. As part of the required reassessment, the acquirer needs to review the procedures used to measure the amounts recognized at the acquisition date. It does not, however, require that any asset be marked down *below* its fair value. Once that determination is established, then **the excess of acquisition-date fair value of net assets over the consideration paid is recognized in income.**

**Acquisition Example** Assume that on January 1, 2015, P Company, in a merger, *acquired the assets* and assumed the liabilities of S Company. P Company gave one of its \$15 par value common shares to the former stockholders of S Company for every two shares of the \$5 par value common stock they held. Throughout this text, the company names P and S are frequently used to distinguish a parent company from a subsidiary. In an asset acquisition, these terms are inappropriate because the books of the acquired firm

<sup>9</sup> *MarketWatch.com*, "Bank of New York, J.P. Morgan Swap Assets," by Kathie O'Donnell, 4/8/06.

<sup>10</sup> *Business Wire*, "St. Jude Medical Announces Agreement to Acquire Irvine Biomedical, Inc.," 8/10/04.

**ILLUSTRATION 2-3****Balance Sheets of P and S Companies January 1, 2015**

|   | <i>P Company</i>   |                    | <i>S Company</i>   |                   |
|---|--------------------|--------------------|--------------------|-------------------|
|   | <i>Book Value</i>  | <i>Book Value</i>  | <i>Book Value</i>  | <i>Fair Value</i> |
| Cash and receivables  | \$ 250,000         | \$ 180,000         | \$ 170,000         |                   |
| Inventories   | 260,000            | 100,000            | 140,000            |                   |
| Land  | 600,000            | 120,000            | 400,000            |                   |
| Buildings & equipment   | 800,000            | 900,000            | 1,000,000          |                   |
| Accumulated depreciation—buildings & equipment                                    | (300,000)          | (300,000)          |                    |                   |
| <i>Total assets</i>   | <u>\$1,610,000</u> | <u>\$1,000,000</u> | <u>\$1,710,000</u> |                   |
| Current liabilities   | \$ 110,000         | \$ 110,000         | \$ 150,000         |                   |
| Bonds payable, 9%, due 1/1/2021, interest payable semiannually on 6/30 and 12/31* | —0—                | 400,000            | 350,000            |                   |
| <i>Total liabilities</i>  | <u>\$ 110,000</u>  | <u>\$ 510,000</u>  | <u>\$ 500,000</u>  |                   |
| <i>Stockholders' Equity</i>   |                    |                    |                    |                   |
| Common stock, \$15 par value, 50,000 shares                                       | 750,000            |                    |                    |                   |
| Common stock, \$5 par value, 60,000 shares  |                    | 300,000            |                    |                   |
| Other contributed capital   | 400,000            | 50,000             |                    |                   |
| Retained earnings   | 350,000            | 140,000            |                    |                   |
| Total Stockholders' equity  | <u>1,500,000</u>   | <u>490,000</u>     |                    |                   |
| Total liabilities and stockholders' equity  | <u>\$1,610,000</u> | <u>\$1,000,000</u> |                    |                   |
| Net assets at book value (Assets minus liabilities)                               | <u>\$1,500,000</u> | <u>\$ 490,000</u>  |                    |                   |
| Net assets at fair value  |                    |                    | <u>\$1,210,000</u> |                   |

\* Bonds payable are valued at their present value by discounting the future payments at the current market rate.

are dissolved at the time of acquisition. Nonetheless, the distinction is useful to avoid confusion between the acquirer and the acquired.

P Company common stock, which was selling at a range of \$50 to \$52 per share during an extended period prior to the combination, is considered to have a fair value per share of \$48 after an appropriate reduction is made in its market value for additional shares issued and for issue costs. The total value of the stock issued is \$1,440,000 ( $\$48 \times 30,000$  shares). Balance sheets for P and S companies (along with relevant fair value data) on January 1, 2015, are presented in Illustration 2-3. Because the book value of the bonds is \$400,000, bond discount in the amount of \$50,000 ( $\$400,000 - \$350,000$ ) must be recorded to reduce the bonds payable to their present value.

To record the exchange of stock for the net assets of S Company, P Company will make the following entry:

|   |           |         |
|---|-----------|---------|
| Cash and Receivables                                | 170,000   |         |
| Inventories   | 140,000   |         |
| Land  | 400,000   |         |
| Buildings & Equipment (net)                         | 1,000,000 |         |
| Discount on Bonds Payable                           | 50,000    |         |
| Goodwill (1,440,000 - 1,210,000**)                  | 230,000   |         |
| Current Liabilities                                 |           | 150,000 |
| Bonds Payable                                       |           | 400,000 |
| Common Stock* (30,000 × \$15)                       |           | 450,000 |
| Other Contributed Capital* (30,000 × [\$48 - \$15]) |           | 990,000 |

\* The sum of common stock and other contributed capital is \$1,440,000.

\*\* Fair value of net assets =  $\$1,710,000 - \$500,000 = \$1,210,000$ .



**ILLUSTRATION 2-4****P Company Balance Sheet after Acquisition, January 1, 2015**

|   |           |                    |
|---|-----------|--------------------|
| Cash and receivables                                    |           | \$ 420,000         |
| Inventories   |           | 400,000            |
| Land  |           | 1,000,000          |
| Buildings & equipment                                   | 1,800,000 |                    |
| Accumulated depreciation—buildings & equipment          | (300,000) | 1,500,000          |
| Goodwill  |           | 230,000            |
| Total assets  |           | <u>\$3,550,000</u> |
| Current liabilities                                     |           | \$ 260,000         |
| Bonds payable   | \$400,000 |                    |
| Less: Bond discount                                     | 50,000    | 350,000            |
| <i>Total liabilities</i>                                |           | 610,000            |
| Common stock, \$15 par value, 80,000 shares outstanding | 1,200,000 |                    |
| Other contributed capital                               | 1,390,000 |                    |
| Retained earnings                                       | 350,000   |                    |
| Stockholders' equity                                    |           | <u>2,940,000</u>   |
| Total liabilities and equity                            |           | <u>\$3,550,000</u> |

After the merger, S Company ceases to exist as a separate legal entity. Note that under the acquisition method the cost of the net assets is measured by the fair value (30,000 shares  $\times$  \$48 = \$1,440,000) of the shares given in exchange. Common stock is credited for the par value of the shares issued, with the remainder credited to other contributed capital. Individual assets acquired and liabilities assumed are recorded at their fair values. Plant assets are recorded at their fair values in their current depreciated state (without an initial balance in accumulated depreciation), the customary procedure for recording the purchase of new or used assets. Bonds payable are recorded at their fair value by recognizing a premium or a discount on the bonds. After all assets and liabilities have been recorded at their fair values, an excess of cost over fair value of \$230,000 remains and is recorded as goodwill.

A balance sheet prepared after the acquisition of S Company is presented in Illustration 2-4.

If an acquisition takes place within a fiscal period, GAAP requires the inclusion of the acquired company's revenues and expenses in the purchaser's income statement only from the date of acquisition forward. Income earned by the acquired company prior to the date of acquisition is considered to be included in the net assets acquired.

## Income Tax Consequences in Business Combinations

The fair values of specific assets acquired and liabilities assumed in a business combination may differ from the income tax bases of those items. A deferred tax asset or liability should be recognized for differences between the assigned values and tax bases of the assets and liabilities recognized in a business combination. The treatment of income tax consequences is addressed in Appendix 2A, which is available at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter).

## Bargain Acquisition Illustration (Purchase Price Below Fair Value of Identifiable Net Assets)

When the price paid to acquire another firm is lower than the fair value of identifiable net assets (assets minus liabilities), the acquisition is referred to as a *bargain*. Although less common than acquisitions involving goodwill, bargain acquisitions do occur and require

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Chicago-based Abbott Laboratories completed its \$4.1 billion cash

acquisition of Guidant Corp.'s vascular-device business. Abbott originally agreed to the purchase during the bidding war between Johnson & Johnson and Boston Scientific over cardiac-device maker Guidant. Abbott's vascular operations generated just \$253 million in revenues in 2005 while Guidant's had more than \$1 billion in 2005. Abbott said it expects the combined vascular group to have revenue of \$3 billion in 2006. Experts consider Abbott to have obtained a solid bargain in its purchase.<sup>11</sup>

the application of specific rules to conform to generally accepted accounting principles. However, FASB simplified this issue.

- Any previously recorded goodwill on the seller's books is eliminated (and no new goodwill recorded).
- A **gain** is reflected in current earnings of the acquiree to the extent that the fair value of net assets exceeds the consideration paid.<sup>12</sup>

**Example of a Bargain Purchase** Assume that Payless Company pays \$17,000 cash for all the net assets of Shoddy Company when Shoddy Company's balance sheet shows the following book values and fair values:

|                                     | <i>Book Value</i> | <i>Fair Value</i> |
|-------------------------------------|-------------------|-------------------|
| Current Assets                      | \$ 5,000          | \$ 5,000          |
| Buildings (net)                     | 10,000            | 15,000            |
| Land                                | 3,000             | 5,000             |
| <b>Total Assets</b>                 | <b>\$18,000</b>   | <b>\$25,000</b>   |
| Liabilities                         | \$ 2,000          | \$ 2,000          |
| Common Stock                        | 9,000             |                   |
| Retained Earnings                   | 7,000             |                   |
| <b>Total Liabilities and Equity</b> | <b>\$18,000</b>   |                   |
| Net Assets at Book Value            | \$16,000          |                   |
| Net Assets at Fair Value            |                   | \$23,000          |

## RELATED CONCEPTS

Because a gain incurred on purchase of assets, or a related firm, does not meet the conceptual view of appropriate *revenue recognition* (no earnings process has occurred), FASB continues to strive to find the best approach for bargain acquisitions.

Cost of the acquisition (\$17,000) minus the fair value of net assets acquired (\$23,000) produces a bargain, or an excess of fair value of net assets acquired over cost of \$6,000.

The entry by Payless Company to record the acquisition is then:

|  |        |        |
|--|--------|--------|
| Current Assets                           | 5,000  |        |
| Buildings                                | 15,000 |        |
| Land                                     | 5,000  |        |
| Liabilities                              |        | 2,000  |
| Cash                                     |        | 17,000 |
| Gain on acquisition of Shoddy (ordinary) |        | 6,000  |

## 2.4 THE MEASUREMENT PERIOD (AND MEASUREMENT PERIOD ADJUSTMENTS)

The measurement period is the period after the acquisition date during which the acquirer may adjust the provisional amounts recognized for a business combination. The measurement period provides the acquirer with a reasonable time to obtain the information necessary to identify and measure any of the following as of the acquisition date:

- The identifiable assets acquired, liabilities assumed, and any noncontrolling interest in the acquiree
- Any consideration transferred to the acquiree

<sup>11</sup> *Chicago Tribune*, "Abbott Completes Vascular Purchase," James P. Miller, 4/22/06.

<sup>12</sup> Under previous GAAP, the excess of fair value over cost was allocated to reduce long-lived assets (with certain specified exceptions) in proportion to their fair values in determining their assigned values. If the long-lived assets were reduced to zero, and still an excess remained, an extraordinary gain was recognized under *SFAS No. 141*. Prior to *SFAS No. 141*, negative goodwill was recorded as a deferred credit and amortized. Current GAAP does not permit the recording of negative goodwill in this manner nor is the recognized gain to be treated as extraordinary.

- c. In a business combination achieved in stages, any previous equity interest held by the acquirer
- d. The amount recognized as goodwill or the gain from a bargain purchase

When the initial accounting for a business combination is incomplete by the end of the first reporting period, the acquirer should use provisional amounts in the financial statements for any item in which the accounting is incomplete. During the measurement period, the acquirer is required to **retrospectively adjust** the provisional amounts recognized at the acquisition date to reflect *new information* obtained about facts and circumstances *that existed at the acquisition date*.

Also during the measurement period, the acquirer recognizes additional assets or liabilities if new information is obtained about facts and circumstances that existed at the acquisition date which, if known, would have resulted in the recognition of those assets and liabilities. The **measurement period ends** as soon as the acquirer receives the information it was seeking about facts and circumstances that existed at the acquisition date, or learns that more information is not obtainable. However, **the measurement period shall not exceed one year** from the acquisition date.

The acquirer recognizes an increase (decrease) in the provisional amount recognized for an identifiable asset (liability) by means of a decrease (increase) in goodwill. During the measurement period, the acquirer should recognize adjustments to the provisional amounts as if the accounting for the business combination had been completed at the acquisition date. Further, the acquirer should revise comparative information for prior periods presented in financial statements if needed, including changes in depreciation, amortization, or other income effects recognized in completing the initial accounting.

**After the measurement period ends**, the acquirer only revises the accounting for a business combination to correct an error.

## 2.5 CONTINGENT CONSIDERATION IN AN ACQUISITION

### LO 7 Contingent consideration and valuation of assets.

Purchase agreements sometimes provide that the purchasing company will give additional consideration to the seller if certain specified future events or transactions occur. The contingency may require the payment of cash (or other assets) or the issuance of additional securities. Current GAAP requires that all contractual contingencies, as well as non-contractual liabilities for which it is **more likely than not** that an asset or liability exists, be measured and recognized at fair value on the acquisition date.\* This includes contingencies based on earnings, (often referred to as earnouts) guarantees of future security prices, and contingent payouts based on the outcome of a lawsuit. For example, if the acquirer agrees to transfer additional equity interests, cash or other assets to the former owners of the acquiree at some future date if *specified targets are met*, the acquirer should measure and recognize the fair value of the *contingent consideration* as of the acquisition date. That consideration would be classified as either debt or equity on the basis of other generally accepted accounting principles.

*SFAS No. 141R* (FASB ASC Topic 805 Business Combinations) changed the accounting for earnouts both on the measurement date and on subsequent dates (potential remeasurement of related liabilities or assets). In an earnout, for instance, the acquiring firm might agree to pay additional cash if the revenue of the acquired firm exceeds some specified future amount. Alternatively, future payments might be based upon gross margin, or earnings targets, or contingent upon the achievement of certain milestones such as regulatory approval of a drug. If there is *significant uncertainty* surrounding the future performance of a target, the acquiring firm often includes earnouts as part of the consideration

\* "Otherwise, non-contractual liabilities are recorded under other applicable GAAP (see FASB ASC Topic 450 Contingencies)."

paid to help mitigate the risk of overpayment. Since 2010, public acquirers in the United States have used earnouts in approximately 9% of all acquisitions.

*SFAS No. 141R* requires the acquirer to recognize contingent consideration and to measure the fair value of the consideration at the acquisition date. Typically, these are level 3 fair value liabilities.<sup>13</sup> Under the prior FASB standard, contingent consideration obligations usually were not recognized at the acquisition date, and were typically only recognized when the contingency was resolved and consideration was issued or became issuable.

Whether the consideration is classified as a liability or equity is based on FASB ASC Topic 480, Distinguishing Liabilities from Equity. An arrangement will generally be classified as a liability if it is settled with a variable number of a buyer's equity shares and creates

1. a fixed obligation known at inception,
2. an obligation, the amount of which varies inversely with changes in the fair value of the buyer's equity shares, or
3. an obligation, the amount of which varies based on something other than the fair value of the buyer's equity shares.

Equity classification generally requires that a fixed number of shares be paid and that the performance target be based on the operations of the acquirer or acquiree (and not on an external index).

Examples of equity shares used in contingent consideration that would be treated as a liability include: (1) the acquirer is required to issue additional shares if the acquirer's share price drops below a certain price after a year; (2) the acquirer's obligation is based on something other than the acquirer's operations, such as the S&P 500 index or oil price futures; and (3) the number of contingent shares changes based on different levels of the acquirer's or target's revenue. The FASB decided that obligations for contingent consideration classified as equity should not be remeasured after the acquisition date. Furthermore, many contingent consideration obligations that qualify for classification as liabilities meet the definition of a derivative.

The fair value of the contingent consideration (if classified as a liability) is remeasured each fiscal quarter with the resulting **change in fair value reported as a gain or a loss in operating income**. If the earnout is to be paid in stock (and the stock qualifies for equity classification), the changes in fair value are **never recognized** in income; once the earnout is resolved, any adjustment is made to equity.

The adjustment to fair value for contingent consideration classified as a liability is counterintuitive in the following sense. If the likelihood of an earnout payment increases because the likelihood of meeting the performance targets increases, a loss is recorded (this creates a larger liability because larger future cash payments are expected). The counterintuitive aspect is that this situation implies favorable performance by the target. On the other hand, if the likelihood of an earnout payment decreases, a gain is recorded. Thus if the target's performance is poor, a gain is likely to be recorded. To complicate the interpretation further, we note that the change in the liability may be offset against a change in value of the assets, with a concomitant offsetting in the income statement. For instance, if a fair value gain on contingent consideration is recorded because of poor performance, this might be offset by a loss on impairment of goodwill or other assets.

Since the issuance of *SFAS No. 141R*, contingent consideration has accounted for, on average, 34% of total deal value. Cadman, Carrizosa, and Faurel (2011)<sup>14</sup> report that 46%

<sup>13</sup> Level 3 obligations are obligations that cannot be determined using observable inputs, such as market prices. Fair values of these obligations require estimates.

<sup>14</sup> Cadman, B., R. Carrizosa, and L. Faurel, *The Information Content and Contracting Consequences of SFAS 141(R): the Case of Earnout Provisions*, 2012.

of the *maximum* potential earnout value, on average, is recorded on the books of the acquirer on the date of acquisition as the fair value of the contingent consideration. Thus a significant amount of debt is added to the books when the acquisition includes contingent consideration because most contingent consideration is classified as liabilities rather than as equity.

Potential methods for estimating the fair value of contingent consideration are quite varied. The income approach, for instance, involves estimating expected cash flows under various scenarios and discounting these using some appropriate discount rate and levels of probability for each.

**Contingent consideration classified as a liability:** Assume that P Company acquired all the net assets of S Company (current assets of \$20,000, buildings for \$400,000, and liabilities of \$50,000 for cash of \$510,000). P Company also agreed to pay an additional \$150,000 to the former stockholders of S Company if the post combination revenues over the next two years equaled or exceeded \$800,000 and \$200,000 if the revenues exceeded \$1,000,000. The fair value of the contingent consideration was estimated to be \$60,000. P Company will make the following entry on the date of acquisition:

|                          |         |         |
|--------------------------|---------|---------|
| Current assets           | 20,000  |         |
| Buildings                | 400,000 |         |
| Goodwill                 | 200,000 |         |
| Liabilities              |         | 50,000  |
| Contingent consideration |         | 60,000  |
| Cash                     |         | 510,000 |

Since the contingent consideration is classified as a liability, P Company must remeasure the contingent consideration each quarter and recognize the change in income.

If by the end of the first year, the likelihood has increased that the revenue target will be met, P Company should assess an increase in the fair value of the contingent consideration. If the fair value at the end of year one increased to \$100,000, P Company would make the following entry:

**Increase in Liability:**

|                                    |        |        |
|------------------------------------|--------|--------|
| Loss from contingent consideration | 40,000 |        |
| Contingent Consideration           |        | 40,000 |

If on the other hand, it has become unlikely that either target will be met, P Company should remove the liability altogether, and would make the following entry:

**Decrease in Liability:**

|                                    |        |        |
|------------------------------------|--------|--------|
| Contingent Consideration           | 60,000 |        |
| Gain from contingent consideration |        | 60,000 |

**Contingent consideration classified as equity:** In the previous example, even if the contingent consideration were to be paid in common shares, the contingent consideration would be classified as a liability because the number of shares needed to satisfy the obligation is variable.<sup>14A</sup>

Suppose that in the previous example, P Company agreed to issue an additional 10,000 shares of \$1 par value common stock to the former stockholders of S Company if the post-combination revenues over the next two years equaled or exceeded \$800,000. The fair value

<sup>14A</sup> If shares are issued to satisfy contingent consideration, a variable number of shares can be issued and still meet the equity classification if the settlement amount *varies directly with the acquirer's equity share price* (considered an input used to determine the fair value of a fixed option arrangement).

of the contingent consideration was estimated to be \$40,000. P Company should make the following entry on the date of acquisition:

|  |         |         |
|--|---------|---------|
| Current assets                           | 20,000  |         |
| Buildings                                | 400,000 |         |
| Goodwill                                 | 180,000 |         |
| Liabilities                              |         | 50,000  |
| Paid in capital contingent consideration |         | 40,000  |
| Cash                                     |         | 510,000 |

P Company would not remeasure the paid in capital balance based on changes in the fair value of the common stock. Suppose that the contingent consideration was paid. P Company would make the following entry:

**Consideration is paid:**

|  |        |        |
|--|--------|--------|
| Paid in capital contingent consideration | 40,000 |        |
| Common stock (10,000 shares at \$1 par)  |        | 10,000 |
| Paid in capital—common stock             |        | 30,000 |

If on the other hand, it became unlikely that the target would be met, P Company would make the following entry:

**Consideration is not paid:**

|  |        |        |
|--|--------|--------|
| Paid in capital contingent consideration | 40,000 |        |
| Paid in capital—from unsatisfied targets |        | 40,000 |

Approximately 90% of earnout contracts are based on the performance of the acquired firm, while 9% are based on the performance of the combined firm. One percent of earnouts are not directly related to either and might be based on other indices such as oil futures. When the earnout is based on the performance of the acquired firm, approximately 60% of these are based on revenue and 26% are based on achieving milestones (patent approval). Very few are actually based on earnings.

Although earnouts may be helpful in getting past negotiating obstacles and possibly in reducing up-front payouts for buyers, they suffer from drawbacks in implementation. In particular, they are very difficult to administer and may trigger post-deal conflicts between buyers and sellers. Their primary niche is in the acquisition of private companies where management retention is a key issue. Between 2010 and 2014, earnouts were used in 10% of acquisitions when a public company acquired a private company, but earnouts were used in only 2.8% of acquisitions when a public company acquired another public company. Other places where they are used include cross-border deals and deals where corporate sellers wish to maintain a share in future performance.

Earnouts are more significant in service-related industries and high-growth and high-tech industries. The average earnout period is around 3.6 years with approximately 18% of earnouts extending over five years. Illustration 2-5 summarizes recent trends related to the use of contingent payments.

**ILLUSTRATION 2-5**

**Deals Reporting the Amount of Contingent Consideration (Earnouts) Public Acquirers 2010 to 2014 \$ Millions**

| Year  | No. of Deals | Value | Earn-out/Deal Value |
|-------|--------------|-------|---------------------|
| 2010  | 121          | 47.3  | 34.7%               |
| 2011  | 154          | 37.8  | 32.9%               |
| 2012  | 110          | 57.9  | 30.9%               |
| 2013  | 100          | 72.5  | 34.5%               |
| 2014* | 6            | 19.2  | 40.4%               |

Source: Thomson SDC Platinum.

\*Partial year 2014.

**TEST YOUR KNOWLEDGE****2.2**

**NOTE:** Solutions to *Test Your Knowledge* questions are found at the end of each chapter before the end-of-chapter questions.

**Multiple Choice**

- In the year of a material business combination, pro forma disclosures must include all of the following except:
  - Revenue
  - Net income
  - Tax expenses
  - Nonrecurring items
- Which of the following statements best describes the current authoritative position with regard to the accounting for contingent consideration?
  - If contingent consideration depends on both future earnings and future security prices, an additional cost of the acquired company should be recorded only for the portion of consideration dependent on future earnings.
  - The measurement period for adjusting provisional amounts always ends at the year-end of the period in which the acquisition occurred.
  - A contingency based on security prices has no effect on the determination of cost to the acquiring company.
  - The purpose of the measurement period is to provide a reasonable time to obtain the information necessary to identify and measure the fair value of the acquiree's assets and liabilities, as well as the fair value of the consideration transferred.
- Which of the following statements concerning bargain purchases (purchase price below fair value of identifiable assets) is *correct*?
  - Any previously recorded goodwill on the seller's books is eliminated and no new goodwill is recorded.
  - Long-lived assets, including in-process R&D and excluding marketable securities, are recorded at fair market value minus an adjustment for the bargain, under current GAAP.
  - An extraordinary gain is recorded in the event that all long-lived assets other than marketable securities are reduced to the original purchase price, under current GAAP.
  - Current assets, long-term investments in marketable securities (other than those accounted for by the equity method), assets to be disposed by sale, deferred tax assets, prepaid assets relating to pension or other post-retirement benefit plans, and assumed liabilities are the only accounts that are always recorded at fair market value, under current GAAP.

**2.6 LEVERAGED BUYOUTS****Lo 8** Leveraged buyouts.**IN  
THE  
NEWS**

Kohlberg Kravis Roberts & Co. (KKR) agreed to purchase Flextronics

Software Systems for \$900 million, making the deal India's biggest leveraged buyout ever. Under the agreement, Singapore-based Flextronics International Ltd., the world's largest producer of electronics for other companies, will sell 85% of the unit to KKR. The investment in Flextronics Software surpasses General Electric Co.'s 2004 sale of its Indian call-center group to buyout firms General Atlantic Partners LLC and Oak Hill Capital Partners LP for \$500 million.<sup>15</sup>

A *leveraged buyout (LBO)* occurs when a group of employees (generally a management group) and third-party investors create a new company to acquire all the outstanding common shares of their employer company. The management group contributes whatever stock they hold to the new corporation and borrows sufficient funds to acquire the remainder of the common stock. The old corporation is then merged into the new corporation. The LBO market rose dramatically from 2002 to 2007, as evidenced in Illustration 2-6, before dropping off in 2008 and 2009. In 2010, the number of leveraged buyouts increased by 53% over the number in 2009 and has continued to increase in numbers through 2012.

The basic accounting question relates to the net asset values (fair or book) to be used by the new corporation. Accounting procedures generally followed the rules advocated by the Emerging Issues Task Force in *Consensus Position No. 88-16*, which did not view LBOs as business combinations. *FASB Statement No. 141R* did not comprehensively address this issue but did indicate that this position was no longer applicable. The essence of the change suggests that the economic entity concept should be applied here as well; thus leveraged buyout (LBO) transactions are now to be viewed as business combinations.

**2.7 IFRS VERSUS U.S. GAAP**

As mentioned in Chapter 1, the project on business combinations was the first of several joint projects undertaken by the FASB and the IASB in their move to converge standards globally. Nonetheless, complete convergence has not yet occurred. Most significantly the international standard currently allows the user a choice between writing all assets,

<sup>15</sup> *Bloomberg.com*, "KKR Acquires Flextronics Software in India's Biggest Buyout," by Vivek Shankar, 4/17/06.

including goodwill, up fully (100% including the noncontrolling share), as required now under U.S. GAAP, or continuing to write goodwill up only to the extent of the parent's percentage of ownership. This difference will be illustrated more fully in subsequent chapters in the context of stock (rather than asset) acquisitions. Other differences and similarities are summarized in Illustration 2-7.

**ILLUSTRATION 2-6****The Leveraged Buyout Market (LBO) 2002-2012**

| <i>Year</i> | <i>No. of Deals</i> | <i>% of all Deals</i> |
|-------------|---------------------|-----------------------|
| 2002        | 187                 | 3.1%                  |
| 2003        | 197                 | 3.0%                  |
| 2004        | 366                 | 4.7%                  |
| 2005        | 520                 | 6.1%                  |
| 2006        | 754                 | 7.8%                  |
| 2007        | 815                 | 7.8%                  |
| 2008        | 576                 | 6.8%                  |
| 2009        | 287                 | 4.9%                  |
| 2010        | 438                 | 6.4%                  |
| 2011        | 593                 | 7.6%                  |
| 2012        | 666                 | 6.4%                  |

Data Source: *Mergers and Acquisitions*, February 2009, 2010, 2011.

**ILLUSTRATION 2-7****Comparison of Business Combinations and Consolidations under U.S. GAAP and IFRS\***

| <i>U.S. GAAP</i>  | <i>IFRS</i>   |
|---|---|
| 1. Fair value of <b>contingent consideration</b> recorded at acquisition date, with subsequent adjustments recognized through earnings if contingent liability (no adjustment for equity).                          | 1. IFRS 3R uses the same approach.  |
| 2. <b>Contingent assets and liabilities</b> assumed (such as warranties) are measured at fair value on the acquisition date if they can be reasonably estimated. If not, they are treated according to SFAS No. 5.  | 2. Under IFRS 3R a contingent liability is recognized at the acquisition date if its fair value can be reliably measured.                                       |
| 3. <b>Noncontrolling interest</b> is recorded at fair value and is presented in equity.   | 3. Noncontrolling interest can be recorded either at fair value or at the proportionate share of the net assets acquired. Also presented in equity.             |
| 4. <b>Special purpose entities (SPEs)</b> are consolidated if the most significant activities of the SPE are controlled. Qualified SPEs (QSPEs) are no longer exempted from consolidation rules.                    | 4. Special purpose entities (SPEs) are consolidated if controlled. QSPEs are not addressed.   |
| 5. <b>Direct acquisition costs</b> (excluding the costs of issuing debt or equity securities) are expensed.   | 5. IFRS 3R uses the same approach.  |
| 6. <b>Goodwill</b> is not amortized, but is tested for impairment using a two-step process.   | 6. Goodwill is not amortized, but is tested for impairment using a one-step process.  |
| 7. <b>Negative goodwill</b> in an acquisition is recorded as an ordinary gain in income (not extraordinary).  | 7. IAS 36 uses the same approach.   |
| 8. <b>Fair value</b> is based on exit prices, i.e. the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. | 8. Fair value is the amount for which an asset could be exchanged or a liability settled between knowledgeable, willing parties in an arm's length transaction. |

**IFRS***(continued)*



## ILLUSTRATION 2-7 (continued)

## Comparison of Business Combinations and Consolidations under U.S. GAAP and IFRS\*

| U.S. GAAP   | IFRS   |
|---|--|
| 9. <b>Purchased in-process R&amp;D</b> is capitalized with subsequent expenditures expensed. The capitalized portion is then amortized.   | 9. Purchased in-process R&D is capitalized with the potential for subsequent expenditures to be capitalized. The capitalized portion is then amortized.                                      |
| 10. Parent and subsidiary <b>accounting policies do not need</b> to conform.  | 10. Parent and subsidiary accounting policies <b>do need</b> to conform.   |
| 11. <b>Restructuring plans</b> are accounted for separately from the business combination and generally expensed (unless conditions in <i>SFAS No. 146</i> [ASC 420] are met).          | 11. Similar accounting under IFRS 3 and amended IAS 27.  |
| 12. <b>Measurement period</b> ends at the earlier of a) one year from the acquisition date, or b) the date when the acquirer receives needed information to consummate the acquisition. | 12. IFRS 3 is similar to U.S. GAAP.  |
| 13. For <b>step acquisitions</b> , all previous ownership interests are adjusted to fair value, with any gain or loss recorded in earnings.   | 13. IFRS 3 is similar to U.S. GAAP.  |
| 14. <b>Reporting dates</b> for the parent and subsidiary can be different up to three months. Significant events in that time must be <i>disclosed</i> .                                | 14. Permits a three-month difference if impractical to prepare the subsidiary's statements on the same date; however, <i>adjustments</i> are required for significant events in that period. |
| 15. Potential voting rights are generally not considered in determining <b>control</b> .  | 15. Potential voting rights are considered if currently exercisable.   |

IFRS

\* For complete coverage of the differences between IFRS and U.S. GAAP, see *IFRS 2010, Interpretation and Application of International Financial Reporting Standards*, by Epstein and Jermakowicz, 2010 (John Wiley & Sons, Inc.).

## SUMMARY

- 1 *Describe the changes in the accounting for business combinations approved by the FASB in 2007, and the reasons for those changes.* Under FASB ASC 805, the fair values of all assets and liabilities on the acquisition date are reflected in the financial statements, even if control is obtained with less than 100% ownership and even if control is achieved in stages rather than all at once. The scope includes business combinations involving only mutual entities, those achieved by contract alone, and the initial consolidation of variable interest entities (VIEs). *SFAS No. 160* [ASC 810-10-45-15 and 16] establishes standards for the reporting of the noncontrolling interest when the acquirer obtains control without purchasing 100% of the acquiree.
- 2 *Describe the two major changes in the accounting for business combinations approved by the FASB in 2001, as well as the reasons for those changes.* Of the two methods of accounting historically used in the United States—**purchase** (now called acquisition) and **pooling of interests**—pooling is now prohibited. The goodwill often recorded under the acquisition method is no longer amortized but instead is reviewed periodically for impairment. The standard setters believe that virtually all business combinations are acquisitions and should be based on the fair values exchanged.
- 3 *Discuss the goodwill impairment test, including its frequency, the steps laid out in the standard, and some of the implementation problems.* At least once a year, qualitative factors are considered initially to assess the likelihood of goodwill impairment. If indicated, goodwill impairment for each reporting unit is tested in a two-step process at least. In the first step, the fair value of a reporting unit is compared to its carrying amount (goodwill included) at the date of the periodic review. If the fair value at the review date is less than the carrying amount, then the second step is necessary. In the second step, the carrying value of the goodwill is compared to its implied fair value. Determining the fair value of the unit may prove difficult in cases where there are no quoted market prices. See Illustration 2-1 for an illustration of the goodwill impairment rules.
- 4 *Explain how acquisition expenses are reported.* Acquisition-related costs are excluded from the measurement of the consideration paid. Current GAAP requires that both direct and indirect costs be expensed and that the cost of issuing securities be excluded from the consideration and accounted for separately.
- 5 *Describe the use of pro forma statements in business combinations.* Pro forma statements are prepared to show the effect of planned or contemplated transactions on the financial statements. Pro forma statements serve: (1) to provide information in the **planning** stages of the combination and (2) to **disclose** relevant information subsequent to the combination.
- 6 *Describe the valuation of assets, including goodwill, and liabilities acquired in a business combination accounted for by the acquisition method.* Assets and liabilities acquired are recorded at their fair values. Any excess of cost over the fair value of net assets acquired is recorded as goodwill.

- 7** Explain how contingent consideration affects the valuation of assets acquired in a business combination accounted for by the acquisition method. On the date of the acquisition, the purchaser records the contingent consideration at its fair value as an adjustment to the original purchase transaction. Adjustments to provisional amounts may be made throughout the measurement period only if they reveal additional information about conditions that existed at the acquisition date. After the measurement date, subsequent adjustments for any contingent consideration recorded as a liability are recognized in the income statement; contingent consideration recorded as equity is not remeasured.
- 8** Describe a leveraged buyout. A leveraged buyout (LBO) occurs when a group of employees (generally a management group) and third-party investors create a new company to acquire all the outstanding common shares of their employer company. The LBO term results because most of the capital of the new corporation comes from borrowed funds.
- 9** Describe the disclosure requirements according to current GAAP related to each business combination that takes place during a given year. Required disclosures include: the name and a description of the acquiree; the acquisition date; the percentage of voting equity instruments acquired; the primary reasons for the business combination; the fair value of the acquiree and the basis for measuring that value on the acquisition date; the fair value of the consideration transferred; the amounts recognized at the acquisition date for each major class of assets acquired and liabilities assumed; and the maximum potential amount of future payments.
- 10** Describe at least one of the differences between U.S. GAAP and IFRS related to the accounting for business combinations. When a noncontrolling interest exists, IFRS allows a choice between recognizing goodwill fully or only to the extent of the acquired percentage, while U.S. GAAP requires full (100%) recognition of implied goodwill, even when a noncontrolling interests remains.

Appendix 2A, “Deferred Taxes in Business Combinations,” is available online at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter).

### TEST YOUR KNOWLEDGE SOLUTIONS

**2.1** 1. c. 2. c 3. a **2.2** 1. c. 2. d 3. a

### QUESTIONS

(The letter A after a question, exercise, or problem means that the question, exercise, or problem relates to Chapter Appendix 2A.)

- LO 7** 1. When contingent consideration in an acquisition is based on the acquirer issuing its shares to the seller, how should this contingency be reflected on the acquisition date?
- LO 5** 2. What are pro forma financial statements? What is their purpose?
- LO 3** 3. How would a company determine whether goodwill has been impaired?
- LO 3** 4. AOL announced that because of an accounting change (*FASB Statements Nos. 141R* [ASC 805] and *142* [ASC 350]), earnings would be increasing over the next 25 years by \$5.9 billion a year. What change(s) required by FASB (in *SFAS Nos. 141R and 142*) resulted in an increase in AOL’s income? Would you expect this increase in earnings to have a positive impact on AOL’s stock price? Why or why not?

### Business Ethics

There have been several recent cases of a CEO or CFO resigning or being ousted for misrepresenting academic credentials. For instance, during February 2006, the CEO of RadioShack resigned by “mutual agreement” for inflating his educational background. During 2002, Veritas Software Corporation’s CFO resigned after claiming to have an MBA from Stanford University. On the other hand, Bausch & Lomb Inc.’s board refused the CEO’s offer to resign following a questionable claim to have an MBA.

Suppose you have been retained by the board of a company where the CEO has ‘overstated’ credentials. This company has a code of ethics and conduct which states that the employee should always do “the right thing.”

- (a) What is the board of directors’ responsibility in such matters?
- (b) What arguments would you make to ask the CEO to resign? What damage might be caused if the decision is made to retain the current CEO?

### ANALYZING FINANCIAL STATEMENTS

#### AFS2-1 EBay Acquires Skype **LO 7**

On October 14, 2005, eBay acquired all of the outstanding securities of Skype Technologies S.A. (“Skype”), for a total initial consideration of approximately \$2.593 billion, plus potential performance-based payments of up to approximately \$1.3 billion (based on the euro-dollar exchange rate at the time of the acquisition). Thus the potential purchase price could attain a value of \$3.9 billion. The net tangible and intangible assets acquired were \$262 million.

The initial consideration of approximately \$2.6 billion was comprised of approximately \$1.3 billion in cash and 32.8 million shares of eBay's common stock. For accounting purposes, the stock portion of the initial consideration was valued at approximately \$1.3 billion based on the average closing price of eBay's common stock surrounding the acquisition announcement date of September 12, 2005. The acquisition was treated as a non-taxable purchase transaction, and the purchase price was allocated to the tangible and intangible assets acquired and liabilities assumed based on their respective fair values at the acquisition date.

*Conditions of the earnout:* The maximum amount potentially payable under the performance-based earnout is approximately 1.1 billion euro, or approximately \$1.5 billion (based on a U.S. dollar-to-euro exchange rate of \$1.32), and would be payable in cash or common stock. The earn-out payments are contingent upon Skype achieving certain net revenue, gross profit margin-based, and active user targets. Base earnout payments of up to an aggregate of approximately 877 million euro, or approximately \$1.2 billion, weighted equally among the three targets, would be payable if the targets are achieved over any four-quarter period commencing on January 1, 2006 through June 30, 2009. Additional bonus earnout payments of up to an aggregate of approximately 292 million euro, or approximately \$386 million, weighted equally among the three targets, would be payable if Skype exceeds the targets during calendar year 2008. Any contingent earnout payments made would be accounted for as additional purchase price and would increase goodwill. As of December 31, 2006, the targets had not been met and accordingly, no payments had been made.

*From eBay's 2007 annual report:* In conjunction with the acquisition of Skype in 2005, eBay agreed to certain performance-based earnout payments. During the year ended December 31, 2007, eBay entered into an earnout settlement agreement with each of the former shareholders of Skype who had elected the earnout alternative at the time of the acquisition, under which eBay was relieved of all obligations under the original earnout agreement in exchange for an aggregate cash payment of 375.1 million euro, or approximately \$530.3 million. Goodwill was recorded because the earnout settlement amount was considered additional purchase price. In addition, eBay recorded a charge for impairment of goodwill for \$1.39 billion from the Skype acquisition.

**Required:**

- A. Compute the amount of goodwill acquired when eBay acquired Skype.
- B. Whenever contingent payments are used in an acquisition, it is important to identify the amounts that are part of the business combination or whether the transaction is separate from the business combination. FASB ASC paragraphs 805-10-55-18 through 25 identify factors that help to determine whether a transaction is part of the exchange for the acquiree or not. What are some of these conditions?
- C. Skype's earnings performance in the years following the acquisition never qualified for additional consideration. In 2007, eBay entered into a cash settlement with all former shareholders of Skype with earnout provisions. eBay paid \$530.3 million to be relieved of all obligations under the earnout provisions. Why would they want to do this?

**AFS2-2 eBay Sells Skype LO 5**

On November 19, 2009, eBay sold all the capital shares of Skype to Springboard Group. eBay received cash proceeds of approximately \$1.9 billion, a subordinated note issued by a subsidiary of the Buyer in the principal amount of \$125.0 million and an equity stake of approximately 30 percent in the outstanding capital stock of the Buyer (valued at \$620.0 million).

The sale resulted in the removal of all Skype-related assets and liabilities, which offset the proceeds noted above, resulting in a net gain of \$1.4 billion recorded in interest and other income. In conjunction with the sale of Skype, eBay reached a legal settlement of a lawsuit between Skype, Joltid, and entities controlled by Joltid's founders, resulting in a \$343.2 million charge to general and administrative expense.

In addition, eBay recorded a charge for impairment of goodwill for \$1.39 billion from the Skype acquisition.

*From eBay's 2009 annual report:*

**Required:**

Examine eBay's income statement from 2007 to 2009. Reconstruct eBay's income statement excluding the effects of Skype. Use the following categories in your analysis: Net revenue, Total operating expenses, Operating income, Interest and other income, and Income before taxes.

**eBay Inc.**  
**Consolidated Statement of Income**

|  | <i>Year Ended December 31,</i>           |             |             |
|--|--|-------------|-------------|
|  | <i>2007</i>                              | <i>2008</i> | <i>2009</i> |
|  | (In thousands, except per-share amounts) |             |             |
| Net revenues                               | \$7,672,329                              | \$8,541,261 | \$8,727,362 |
| Cost of net revenues                       | 1,762,972                                | 2,228,069   | 2,479,762   |
| Gross profit                               | 5,909,357                                | 6,313,192   | 6,247,600   |
| Operating expenses:                        |  |             |             |
| Sales and marketing                        | 1,882,810                                | 1,881,551   | 1,885,677   |
| Product development                        | 619,727                                  | 725,600     | 803,070     |
| General and administrative                 | 904,681                                  | 998,871     | 1,418,389   |
| Provision for transaction and loan losses  | 293,917                                  | 347,453     | 382,825     |
| Amortization of acquired intangible assets | 204,104                                  | 234,916     | 262,686     |
| Restructuring                              | —  | 49,119      | 38,187      |
| Impairment of goodwill                     | 1,390,938                                | —           | —           |
| Total operating expenses                   | 5,296,177                                | 4,237,510   | 4,790,834   |
| Income from operations                     | 613,180                                  | 2,075,682   | 1,456,766   |
| Interest and other income, net             | 137,671                                  | 107,882     | 1,422,385   |
| Income before income taxes                 | 750,851                                  | 2,183,564   | 2,879,151   |
| Provision for income taxes                 | (402,600)                                | (404,090)   | (490,054)   |
| Net income                                 | \$ 348,251                               | \$1,779,474 | \$2,389,097 |

*Skype's operating performance (2007 through 2009), dollars in thousands:*

|                 | <i>2007</i> | <i>2008</i> | <i>2009</i> |
|-----------------|-------------|-------------|-------------|
| Revenues        | 364,564     | 550,841     | 620,403     |
| Direct expenses | 337,338     | 434,588     | 462,701     |
| Income          | 44,484      | 116,253     | 157,702     |

**AFS2-3 Measurement Period Adjustments and Contingent Consideration LO 6**

Consider the following footnote from a company's 2012 10K concerning an acquisition occurring during February of 2011 (The Company's year end is January 31). The measurement period adjustment did not occur until January 2012.

Based on our initial internal estimate of contingent shares to be issued as part of this agreement, we had estimated that the total fair value of the common stock shares issued and contingently issuable for this transaction on the acquisition date was \$367,500 (1,750,000 shares).

The Company originally recognized a liability based on the acquisition date fair value of the acquisition-related contingent consideration based on the probability of the achievement of the targets stipulated in the Purchase Agreement. Based on the Company's estimation, an initial liability of \$367,500 was recorded. Subsequently, we have reassessed our estimates and have determined that the initial terms of the agreement have not be met, and as the result, we have determined that there will be no additional shares contingently issuable under the terms of the Purchase Agreement and we have recorded an adjustment to revise our initial estimate of the purchase price in contemplation that no contingent consideration as was previously reported in our interim financial statements.

The following table summarizes the preliminary and final determination of the purchase price and fair value of AHI's assets acquired at the date of acquisition:

|   | <i>Preliminary</i> | <i>Final</i>   |
|---|--------------------|----------------|
| Purchase price calculation:                                 |                    |                |
| Common stock issued (1,000,000 shares)                      | 210,000            | 210,000        |
| Contingent consideration (1,750,000 shares of common stock) | 367,500            | —              |
| Fair value of total consideration                           | <u>577,500</u>     | <u>210,000</u> |
| Allocation of purchase price:                               |                    |                |
| Intellectual property and technical know-how                | 577,500            | —              |
| Goodwill  | —                  | 210,000        |
| Fair value of total consideration                           | <u>577,500</u>     | <u>210,000</u> |

As of January, 31, 2012, based upon the completion of the Company's annual goodwill impairment test, it was determined that the goodwill associated with the AHI acquisition has been impaired, and as the result, the Company has recorded an impairment loss of \$210,000. The cause of the impairment was the result of contracts that were anticipated to result from this acquisition that have not materialized and management has decided to focus its energies on new initiatives.

**Required:**

- A. When did the company record the measurement period adjustment? In your opinion, is this an appropriate use of a measurement period adjustment? Why or why not?
- B. Assuming the company had not made a measurement period adjustment, prepare the journal entries that would have been needed to adjust the contingent consideration to zero and record the impairment of the intangibles. How does this differ from what the company actually reported?
- C. What incentives might management have for presenting their financial statements as they did rather than using the method that you recorded in part B above? Support your answer with numbers and words.

**AFS2-4**

**Emdeon Inc. Acquisition of FVTech (Contingent Consideration) LO 6 LO 7**

**2010 Acquisitions**

On January 26, 2010, the Emdeon acquired all of the voting interest of FutureVision Investment Group, L.L.C. and substantially all of the assets of two related companies, FVTech, Inc. and FVTech Arizona, Inc. (collectively, "FVTech"). FVTech is a provider of outsourced services specializing in electronic data conversion and information management solutions.

The following table summarizes the preliminary fair values on March 31, 2010 and final fair values on December 31, 2010 of the assets acquired and liabilities after the measurement period adjustments.

|   | <i>Measurement</i>               |                               |                             |
|---|----------------------------------|-------------------------------|-----------------------------|
|   | <i>Preliminary<br/>3/31/2010</i> | <i>Period<br/>Adjustments</i> | <i>Final<br/>12/31/2010</i> |
| Cash  | 372                              | —                             | 372                         |
| Accounts receivable                                       | 1,370                            | 6                             | 1,736                       |
| Other current assets                                      | 36                               | (1)                           | 35                          |
| Property and equipment                                    | 18,423                           | —                             | 18,423                      |
| Other assets  | 29                               | —                             | 29                          |
| Identifiable intangible assets:                           |                                  | —                             |                             |
| Customer contracts (16-year weighted average useful life) | 560                              | —                             | 560                         |
| Tradenam (3-year weighted average useful life)            | 160                              | —                             | 160                         |
| Goodwill (Provisional)                                    | 14,878                           | (840)                         | 14,038                      |
| Accounts payable  | (361)                            | 23                            | (338)                       |
| Accrued expenses  | (548)                            | (2)                           | (550)                       |
| Other long-term liabilities                               | (306)                            | (1)                           | (307)                       |
| Total consideration transferred                           | <u>\$34,973</u>                  | <u>(815)</u>                  | <u>\$ 34,158</u>            |

**Consideration**

|                            |        |         |        |
|----------------------------|--------|---------|--------|
| Cash                       | 20,005 | –       | 20,005 |
| Working capital settlement | 58     | 245     | 303    |
| Contingent consideration   | 14,910 | (1,060) | 13,850 |
| Total consideration        | 34,973 | (815)   | 34,158 |

The following four paragraphs track the same acquisition paragraph as reported in the Emdeon's first, second, and third quarterly 10Q and the 2010 10K concerning the acquisition of FVTech during 2010. The measurement period adjustment occurred during the second quarter.

**Emdeon 3/31/2010 10-Q**

Emdeon has preliminarily valued the total consideration transferred at \$34,973, which consisted of \$20,005 cash at closing, estimated contingent consideration of \$14,910, and an estimated working capital settlement of \$58. The contingent consideration arrangement requires Emdeon to pay additional consideration ranging from \$0 to \$40,000 based upon the financial performance of the acquired business for the two- and three-year periods following the acquisition. Emdeon has preliminarily valued the contingent consideration at the acquisition date, using a probability-weighted discounted cash flow model, at \$14,910. This fair value measurement is based on significant inputs not observable in the market and thus represents a Level 3 measurement. The key assumptions in applying the income approach are as follows: 11.6% discount rate and a probability adjusted FVTech performance measure during the earnout period of between approximately \$1,500 and \$27,000. As of March 31, 2010, there were no significant changes in the range of outcomes for the contingent consideration recognized as a result of the acquisition of FVTech, although the recognized amount increased to \$15,200 as a result of the passage of time and the resulting reduced impact of discounting.

**Emdeon 6/30/2010 10-Q**

Emdeon has valued the total consideration transferred at \$34,158, which consisted of \$20,005 cash at closing, estimated contingent consideration of \$13,850, and a working capital settlement of \$303. The contingent consideration arrangement requires Emdeon to pay additional consideration ranging from \$0 to \$40,000 based upon the financial performance of the acquired business for the two- and three-year periods following the acquisition. Emdeon has valued the contingent consideration at the acquisition date, using a probability-weighted discounted cash flow model, at \$13,850. This fair value measurement is based on significant inputs not observable in the market and thus represents a Level 3 measurement. The key assumptions in applying the income approach were as follows: 11.6% discount rate and a FVTech performance measure during the earnout period of between approximately \$1,500 and \$27,000. As of June 30, 2010, Emdeon lowered its range of the FVTech performance measure during the earnout period which, combined with the reduced impact of discounting, resulted in a net increase to pre-tax income of \$930 for the three months ended June 30, 2010.

**Fair Value Measurements Using Significant Unobservable Inputs (Level 3)**

|   | <i>Contingent Consideration</i> |                         |                           | <i>Total</i> |
|---|---------------------------------|-------------------------|---------------------------|--------------|
|   | <i>FVTech Acquisition</i>       | <i>HTMS Acquisition</i> | <i>Chapin Acquisition</i> |              |
| Balance at January 1, 2010                    | \$ —                            | \$ —                    | \$ —                      | \$ —         |
| Issuances                                     | (13,850)                        | (8,230)                 | (1,565)                   | (23,645)     |
| Total changes included in other income (loss) | 640                             | 1,130                   | —                         | 1,770        |
| Balance at June 30, 2010                      | \$ (13,210)                     | \$ (7,100)              | \$ (1,565)                | \$ (21,875)  |

**Emdeon 9/30/2010 10-Q**

Emdeon has valued the total consideration transferred at \$34,158, which consisted of \$20,005 cash at closing, estimated contingent consideration of \$13,850, and a working capital settlement of \$303. The contingent consideration arrangement requires Emdeon to pay additional consideration ranging from \$0 to \$40,000 based upon the financial performance of the acquired business for the two- and three-year periods following the acquisition. Emdeon has valued the contingent consideration at the acquisition date, using a probability-weighted discounted cash flow model, at \$13,850. This fair

value measurement is based on significant inputs not observable in the market and thus represents a Level 3 measurement. The key assumptions in applying the income approach were as follows: 11.6% discount rate and a FVTech performance measure during the earnout period of between approximately \$1,500 and \$27,000. Through September 30, 2010, Emdeon has lowered its range of the FVTech performance measure during the earnout period which, combined with the reduced impact of discounting, resulted in a net increase to pre-tax income of \$2,270 for the nine-month period ended September 30, 2010.

#### **Emdeon 12/31/2010 10-K**

Emdeon has valued the total consideration transferred at \$34,158, which consisted of \$20,005 cash at closing, estimated contingent consideration of \$13,850, and a working capital settlement of \$303. The contingent consideration arrangement requires Emdeon to pay additional consideration ranging from \$0 to \$40,000 based upon the financial performance of the acquired business for the two- and three-year periods following the acquisition. Emdeon valued the contingent consideration at the acquisition date, using a probability-weighted discounted cash flow model, at \$13,850. This fair value measurement is based on significant inputs not observable in the market and thus represents a Level 3 measurement. The key assumptions in applying the income approach were as follows: 11.6% discount rate and a FVTech performance measure during the earnout period of between approximately \$1,500 and \$27,000. Through December 31, 2010, Emdeon has lowered its range of the FVTech performance measure during the earnout period, which, combined with the reduced impact of discounting, resulted in a net increase to pretax income of \$6,680 during 2010.

#### **Required:**

1. Why do you think firms include a working capital settlement in the merger agreement? A working capital settlement dictates that if the actual amount of working capital differs from a specified amount of working capital, either more or less consideration is offered for the acquisition.
2. Why may firms (acquiring and/or the acquired) include contingent consideration in an acquisition? What percentage of the total consideration offered is represented by the estimated liability for contingent consideration?
3. Prepare a schedule showing the quarterly and annual impact on income from contingent consideration (list the amount reported quarterly and for the year, and then indicate whether the amount is a gain or a loss).
4. Is it likely that Emdeon will have to pay any contingent consideration? If they do not pay any contingent consideration, what will be the impact on future income? List the amounts, if any, and specify whether the amount is a gain or loss. Does this imply anything about the likelihood of future goodwill impairment? If so, what?

#### **AFS2-5 Bargain Purchase LO7**

Consider the following information from Alliance Data Systems Corporation 2009 10K.

On October 30, 2009, the Company assumed the operations of the Charming Shoppes' credit card program, including the service center operations associated with Charming Shoppes' branded card programs, portfolio and securitization master trust. The transaction consisted of purchasing existing accounts and the rights to new accounts along with certain other assets that are required to support the securitization program including retained certificates and interests, cash collateral accounts, and an interest-only strip, totaling a combined \$158.9 million. The Company obtained control of the assets and assumed the liabilities on October 30, 2009, the acquisition date. The results of operations for this acquisition have been included since the date of acquisition and are reflected in the Private Label Services and Private Label Credit segments.

The Company engaged a third-party specialist to assist it in the measurement of the fair value of the assets required. The fair value of the assets acquired exceeded the cost of the acquisition. Consequently, the Company reassessed the recognition and measurement of the identifiable assets acquired and liabilities assumed and concluded that the valuation procedures and resulting measures were appropriate. The excess value of the net assets acquired over the purchase price has been recorded as a bargain purchase gain, which is included in gain on acquisition of a business in the Company's consolidated statements of income. The following table summarizes the fair values of the assets acquired and liabilities assumed in the Charming Shoppes' acquisition as of the date of purchase.

*As of October 30, 2009 (in thousands)*

|                                |                  |
|--------------------------------|------------------|
| Current assets                 | \$ 24,910        |
| Property, plant and equipment  | 491              |
| Due from securitization        | 108,554          |
| Identifiable intangible assets | 67,200           |
| Total assets acquired          | <u>201,155</u>   |
| Current Liabilities            | 8,500            |
| Deferred tax liability         | 12,527           |
| Total liabilities assumed      | <u>21,027</u>    |
| Net assets acquired            | \$ 180,128       |
| Total consideration paid       | <u>158,901</u>   |
| Gain on business combination   | <u>\$ 21,227</u> |

**Required:**

1. FASB ASC paragraph 805-30-50-1(f) requires a description of the reasons why the transaction resulted in a gain. In addition, the acquirer is required to reassess the valuations if a bargain purchase is indicated. Did Alliance Data Systems do either (or both) of these? Be specific.
2. Speculate as to some of the reasons that a bargain purchase might occur. Why has FASB struggled to find the appropriate accounting for bargains (changing the rules repeatedly)?
3. Assuming the acquisition is an asset acquisition treated as a business combination, prepare the journal entry on the acquirer's books to record the acquisition.

**EXERCISES****EXERCISE 2-1 Asset Purchase LO 6**

Preston Company acquired the assets (except for cash) and assumed the liabilities of Saville Company. Immediately prior to the acquisition, Saville Company's balance sheet was as follows:

|                              | <i>Book Value</i>  | <i>Fair Value</i>  |
|------------------------------|--------------------|--------------------|
| Cash                         | \$ 120,000         | \$ 120,000         |
| Receivables (net)            | 192,000            | 228,000            |
| Inventory                    | 360,000            | 396,000            |
| Plant and equipment (net)    | 480,000            | 540,000            |
| Land                         | 420,000            | 660,000            |
| Total assets                 | <u>\$1,572,000</u> | <u>\$1,944,000</u> |
| Liabilities                  | \$ 540,000         | \$ 594,000         |
| Common stock (\$5 par value) | 480,000            |                    |
| Other contributed capital    | 132,000            |                    |
| Retained earnings            | 420,000            |                    |
| Total equities               | <u>\$1,572,000</u> |                    |

**Required:**

- A. Prepare the journal entries on the books of Preston Company to record the purchase of the assets and assumption of the liabilities of Saville Company if the amount paid was \$1,560,000 in cash.
- B. Repeat the requirement in (A) assuming that the amount paid was \$990,000.

**EXERCISE 2-2 Acquisition Method LO 6**

The balance sheets of Petrello Company and Sanchez Company as of January 1, 2014, are presented below. On that date, after an extended period of negotiation, the two companies agreed to merge. To effect the merger, Petrello Company is to exchange its unissued common stock for all the outstanding shares of Sanchez Company



in the ratio of  $\frac{1}{2}$  share of Petrello for each share of Sanchez. Market values of the shares were agreed on as Petrello, \$48; Sanchez, \$24. The fair values of Sanchez Company's assets and liabilities are equal to their book values with the exception of plant and equipment, which has an estimated fair value of \$720,000.

|                              | <i>Petrello</i>    | <i>Sanchez</i>     |
|------------------------------|--------------------|--------------------|
| Cash                         | \$ 480,000         | \$ 200,000         |
| Receivables                  | 480,000            | 240,000            |
| Inventories                  | 2,000,000          | 240,000            |
| Plant and equipment (net)    | <u>3,840,000</u>   | <u>800,000</u>     |
| Total assets                 | <u>\$6,800,000</u> | <u>\$1,480,000</u> |
| Liabilities                  | \$1,200,000        | \$ 320,000         |
| Common stock, \$16 par value | 3,440,000          | 800,000            |
| Other contributed capital    | 400,000            | —0—                |
| Retained earnings            | <u>1,760,000</u>   | <u>360,000</u>     |
| Total equities               | <u>\$6,800,000</u> | <u>\$1,480,000</u> |

**Required:**

Prepare a balance sheet for Petrello Company immediately after the merger.

**EXERCISE 2-3 Asset Purchase, Cash and Stock LO 6**

Pretzel Company acquired the assets (except for cash) and assumed the liabilities of Salt Company on January 2, 2015. As compensation, Pretzel Company gave 30,000 shares of its common stock, 15,000 shares of its 10% preferred stock, and cash of \$50,000 to the stockholders of Salt Company. On the acquisition date, Pretzel Company stock had the following characteristics:

| <b>PRETZEL COMPANY</b> |                  |                   |
|------------------------|------------------|-------------------|
| <i>Stock</i>           | <i>Par Value</i> | <i>Fair Value</i> |
| Common                 | \$ 10            | \$ 25             |
| Preferred              | 100              | 100               |

Immediately prior to the acquisition, Salt Company's balance sheet reported the following book values and fair values:

| <b>SALT COMPANY</b>                             |                    |                    |
|---|--------------------|--------------------|
| <b>Balance Sheet</b>                            |                    |                    |
| <b>January 2, 2015</b>                          |                    |                    |
|   | <i>Book value</i>  | <i>Fair value</i>  |
| Cash  | \$ 165,000         | \$ 165,000         |
| Accounts receivable (net of \$11,000 allowance) | 220,000            | 198,000            |
| Inventory—LIFO cost                             | 275,000            | 330,000            |
| Land  | 396,000            | 550,000            |
| Buildings and equipment (net)                   | <u>1,144,000</u>   | <u>1,144,000</u>   |
| Total assets                                    | <u>\$2,200,000</u> | <u>\$2,387,000</u> |
| Current liabilities                             | \$ 275,000         | \$ 275,000         |
| Bonds Payable, 10%                              | 450,000            | 495,000            |
| Common stock, \$5 par value                     | 770,000            |                    |
| Other contributed capital                       | 396,000            |                    |
| Retained earnings                               | <u>309,000</u>     |                    |
| Total liabilities and stockholders' equity      | <u>\$2,200,000</u> |                    |

**Required:**

Prepare the journal entry on the books of Pretzel Company to record the acquisition of the assets and assumption of the liabilities of Salt Company.

**EXERCISE 2-4 Asset Purchase, Cash LO 6**

P Company acquired the assets and assumed the liabilities of S Company on January 1, 2013, for \$510,000 when S Company's balance sheet was as follows:

| <b>S COMPANY</b>                        |                  |
|---|------------------|
| <b>Balance Sheet</b>                    |                  |
| <b>January 1, 2013</b>                  |                  |
| Cash                                    | \$ 96,000        |
| Receivables                             | 55,200           |
| Inventory                               | 110,400          |
| Land                                    | 169,200          |
| Plant and equipment (net)               | 466,800          |
| <b>Total</b>                            | <u>\$897,600</u> |
| Accounts payable                        | \$ 44,400        |
| Bonds payable, 10%, due 12/31/2018, Par | 480,000          |
| Common stock, \$2 par value             | 120,000          |
| Retained earnings                       | 253,200          |
| <b>Total</b>                            | <u>\$897,600</u> |

Fair values of S Company's assets and liabilities were equal to their book values except for the following:

1. Inventory has a fair value of \$126,000.
2. Land has a fair value of \$198,000.
3. The bonds pay interest semiannually on June 30 and December 31. The current yield rate on bonds of similar risk is 8%.

**Required:**

Prepare the journal entry on P Company's books to record the acquisition of the assets and assumption of the liabilities of S Company.

**EXERCISE 2-5 Asset Purchase, Contingent Consideration as a Liability LO 7**

Pritano Company acquired all the net assets of Succo Company on December 31, 2013, for \$2,160,000 cash. The balance sheet of Succo Company immediately prior to the acquisition showed:

|                           | <i>Book value</i>  | <i>Fair value</i>  |
|---------------------------|--------------------|--------------------|
| Current assets            | \$ 960,000         | \$ 960,000         |
| Plant and equipment       | 1,080,000          | 1,440,000          |
| <b>Total</b>              | <u>\$2,040,000</u> | <u>\$2,400,000</u> |
| Liabilities               | \$ 180,000         | \$ 216,000         |
| Common stock              | 480,000            |                    |
| Other contributed capital | 600,000            |                    |
| Retained earnings         | 780,000            |                    |
| <b>Total</b>              | <u>\$2,040,000</u> |                    |

As part of the negotiations, Pritano agreed to pay the stockholders of Succo \$360,000 cash if the post-combination earnings of Pritano averaged \$2,160,000 or more per year over the next two years. The estimated fair value of the contingent consideration was \$144,000 on the date of the acquisition.

**Required:**

- A. Prepare the journal entries on the books of Pritano to record the acquisition on December 31, 2013.
- B. At the end of 2014, the estimated fair value of the contingent consideration increased to \$200,000. Prepare the journal entry to record the change in the fair value of the contingent consideration, if needed.
- C. In 2015, the earnings did not meet the earnout target and the estimated fair value of the contingent consideration was zero. Prepare the journal entry to record the change in the fair value of the contingent consideration.

**EXERCISE 2-6 Asset Purchase, Contingent Consideration as Equity LO7**

Assume the same information as in Exercise 2-5 except that instead of paying a cash earnout, Pritano Company agreed to issue 10,000 additional shares of its \$10 par value common stock to the stockholders of Succo if the average postcombination earnings over the next three years equaled or exceeded \$2,500,000. The fair value of the contingent consideration on the date of acquisition was estimated to be \$200,000. The contingent consideration (earnout) was classified as equity rather than as a liability.

**Required:**

- A. Prepare the journal entries on the books of Pritano to record the acquisition on December 31, 2013.
- B. On January 1, 2017, the additional 10,000 shares of Pritano's stock were issued because the earnout targets were met. On this date, Pritano's stock price was \$50 per share. Prepare the journal entry to record the issuance of the shares of stock.

**EXERCISE 2-7 Multiple Choice LO6**

Price Company issued 8,000 shares of its \$20 par value common stock for the net assets of Sims Company in a business combination under which Sims Company will be merged into Price Company. On the date of the combination, Price Company common stock had a fair value of \$30 per share. Balance sheets for Price Company and Sims Company immediately prior to the combination were:

|                              | <i>Price</i>       | <i>Sims</i>      |
|------------------------------|--------------------|------------------|
| Current assets               | \$ 438,000         | \$ 64,000        |
| Plant and equipment (net)    | 575,000            | 136,000          |
| Total                        | <u>\$1,013,000</u> | <u>\$200,000</u> |
| Liabilities                  | \$ 300,000         | \$ 50,000        |
| Common stock, \$20 par value | 550,000            | 80,000           |
| Other contributed capital    | 72,500             | 20,000           |
| Retained earnings            | 90,500             | 50,000           |
| Total                        | <u>\$1,013,000</u> | <u>\$200,000</u> |

**Required:**

Select the letter of the best answer.

1. If the business combination is treated as a purchase and Sims Company's net assets have a fair value of \$228,800, Price Company's balance sheet immediately after the combination will include goodwill of
  - (a) \$10,200.
  - (b) \$12,800.
  - (c) \$11,200.
  - (d) \$18,800.
2. If the business combination is treated as a purchase and the fair value of Sims Company's current assets is \$90,000, its plant and equipment is \$242,000, and its liabilities are \$56,000, Price Company's balance sheet immediately after the combination will include
  - (a) Negative goodwill of \$36,000.
  - (b) Plant and equipment of \$817,000.
  - (c) Gain of \$36,000.
  - (d) Goodwill of \$36,000.

**EXERCISE 2-8 Purchase LO6**

Effective December 31, 2013, Zintel Corporation proposes to issue additional shares of its common stock in exchange for all the assets and liabilities of Smith Corporation and Platz Corporation, after which Smith and Platz will distribute the Zintel stock to their stockholders in complete liquidation and dissolution. Balance sheets of each of the corporations immediately prior to merger on December 31, 2013, follow. The common stock exchange ratio was negotiated to be 1:1 for both Smith and Platz.

|                        | <i>Zintel</i>      | <i>Smith</i>       | <i>Platz</i>     |
|------------------------|--------------------|--------------------|------------------|
| Current assets         | \$1,600,000        | \$ 350,000         | \$ 12,000        |
| Long-term assets (net) | 5,700,000          | 1,890,000          | 98,000           |
| Total                  | <u>\$7,300,000</u> | <u>\$2,240,000</u> | <u>\$110,000</u> |

|                             | <i>Zintel</i>      | <i>Smith</i>       | <i>Platz</i>     |
|-----------------------------|--------------------|--------------------|------------------|
| Current liabilities         | \$ 700,000         | \$ 110,000         | \$ 9,000         |
| Long-term debt              | 1,100,000          | 430,000            | 61,000           |
| Common stock, \$5 par value | 2,500,000          | 700,000            | 20,000           |
| Retained earnings           | 3,000,000          | 1,000,000          | 20,000           |
| Total                       | <u>\$7,300,000</u> | <u>\$2,240,000</u> | <u>\$110,000</u> |

**Required:**

Prepare journal entries on Zintel's books to record the combination. Assume the following:

The identifiable assets and liabilities of Smith and Platz are all reflected in the balance sheets (above), and their recorded amounts are equal to their current fair values except for long-term assets. The fair value of Smith's long-term assets exceed their book value by \$20,000, and the fair value of Platz's long-term assets exceed their book values by \$5,000. Zintel's common stock is traded actively and has a current market price of \$15 per share. Prepare journal entries on Zintel's books to record the combination. (*AICPA adapted*)

**EXERCISE 2-9 Allocation of Purchase Price to Various Assets and Liabilities LO 6**

Company S has no long-term marketable securities. Assume the following scenarios:

**Case A**

Assume that P Company paid \$130,000 cash for 100% of the net assets of S Company.

| <b>S COMPANY</b> |                       |                          |                    |                   |
|------------------|-----------------------|--------------------------|--------------------|-------------------|
| <i>Assets</i>    |                       |                          |                    |                   |
|                  | <i>Current Assets</i> | <i>Long-lived Assets</i> | <i>Liabilities</i> | <i>Net Assets</i> |
| Book Value       | \$15,000              | \$85,000                 | \$20,000           | \$80,000          |
| Fair Value       | 20,000                | 130,000                  | 30,000             | 120,000           |

**Case B**

Assume that P Company paid \$110,000 cash for 100% of the net assets of S Company.

| <b>S COMPANY</b> |                       |                          |                    |                   |
|------------------|-----------------------|--------------------------|--------------------|-------------------|
| <i>Assets</i>    |                       |                          |                    |                   |
|                  | <i>Current Assets</i> | <i>Long-lived Assets</i> | <i>Liabilities</i> | <i>Net Assets</i> |
| Book Value       | \$15,000              | \$85,000                 | \$20,000           | \$80,000          |
| Fair Value       | 30,000                | 80,000                   | 20,000             | 90,000            |

**Case C**

Assume that P Company paid \$15,000 cash for 100% of the net assets of S Company.

| <b>S COMPANY</b> |                       |                          |                    |                   |
|------------------|-----------------------|--------------------------|--------------------|-------------------|
| <i>Assets</i>    |                       |                          |                    |                   |
|                  | <i>Current Assets</i> | <i>Long-lived Assets</i> | <i>Liabilities</i> | <i>Net Assets</i> |
| Book Value       | \$15,000              | \$85,000                 | \$20,000           | \$80,000          |
| Fair Value       | 20,000                | 40,000                   | 40,000             | 20,000            |

**Required:**

Complete the following schedule by listing the amount that would be recorded on P's books.

|        | <i>Assets</i>   |                       |                          | <i>Liabilities</i> | <i>Retained Earnings</i>          |
|--------|-----------------|-----------------------|--------------------------|--------------------|-----------------------------------|
|        | <i>Goodwill</i> | <i>Current Assets</i> | <i>Long-lived Assets</i> |                    | <i>(Gain in Income Statement)</i> |
| Case A |                 |                       |                          |                    |                                   |
| Case B |                 |                       |                          |                    |                                   |
| Case C |                 |                       |                          |                    |                                   |

**EXERCISE 2-10 Goodwill Impairment Test LO 3**

On January 1, 2013, Porsche Company acquired the net assets of Saab Company for \$450,000 cash. The fair value of Saab's identifiable net assets was \$375,000 on this date. Porsche Company decided to measure goodwill impairment using the present value of future cash flows to estimate the fair value of the reporting unit (Saab). The information for these subsequent years is as follows:

| Year | <i>Present Value<br/>of Future Cash Flows</i> | <i>Carrying Value of<br/>Saab's Identifiable<br/>Net Assets*</i> | <i>Fair Value<br/>Saab's Identifiable<br/>Net Assets</i> |
|------|---|--|--|
| 2014 | \$400,000                                     | \$330,000  | \$340,000  |
| 2015 | \$400,000                                     | \$320,000  | 345,000  |
| 2016 | \$350,000                                     | \$300,000  | 325,000  |

\* Identifiable net assets do not include goodwill.

**Required:**

*Part A:* For each year determine the amount of goodwill impairment, if any.

*Part B:* Prepare the journal entries needed each year to record the goodwill impairment (if any) on Porsche's books from 2014 to 2016.

*Part C:* How should goodwill (and its impairment) be presented on the balance sheet and the income statement in each year?

*Part D:* If goodwill is impaired, what additional information needs to be disclosed?

**EXERCISE 2-11 Relation between Purchase Price, Goodwill, and Negative Goodwill LO 6**

The following balance sheets were reported on January 1, 2014, for Peach Company and Stream Company:

|                              | <i>Peach</i>       | <i>Stream</i>    |
|------------------------------|--------------------|------------------|
| Cash                         | \$ 100,000         | \$ 20,000        |
| Inventory                    | 300,000            | 100,000          |
| Equipment (net)              | 880,000            | 380,000          |
| Total                        | <u>\$1,280,000</u> | <u>\$500,000</u> |
| Total Liabilities            | \$ 300,000         | \$100,000        |
| Common stock, \$20 par value | 400,000            | 200,000          |
| Other contributed capital    | 250,000            | 70,000           |
| Retained earnings            | 330,000            | 130,000          |
| Total                        | <u>\$1,280,000</u> | <u>\$500,000</u> |

**Required:**

Appraisals reveal that the inventory has a fair value of \$120,000, and the equipment has a current value of \$410,000. The book value and fair value of liabilities are the same. Assuming that Peach Company wishes to acquire Stream for cash in an asset acquisition, determine the following cutoff amounts:

- A. The purchase price above which Peach would record goodwill.
- B. The purchase price below which the equipment would be recorded at less than its fair market value.
- C. The purchase price below which Peach would record a gain.
- D. The purchase price below which Peach would obtain a "bargain."
- E. The purchase price at which Peach would record \$50,000 of goodwill.

**EXERCISE 2-12A Acquisition Entry, Deferred Taxes (see Appendix 2A online at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter).) LO6**

Patel Company issued 100,000 shares of \$1 par value common stock (market value of \$6/share) for the net assets of Seely Company on January 1, 2014, in a statutory merger. Seely Company had the following assets, liabilities, and owners' equity at that time:

|                                      | <i>Book Value</i> |                   |                   |
|--------------------------------------|-------------------|-------------------|-------------------|
|                                      | <i>Tax Basis</i>  | <i>Fair Value</i> | <i>Difference</i> |
| Cash                                 | \$ 20,000         | \$ 20,000         | \$—0—             |
| Accounts receivable                  | 112,000           | 112,000           | —0—               |
| Inventory (LIFO)                     | 82,000            | 134,000           | 52,000            |
| Land                                 | 30,000            | 55,000            | 25,000            |
| Plant assets (net)                   | 392,000           | 463,000           | 71,000            |
| Total assets                         | <u>\$636,000</u>  | <u>\$784,000</u>  |                   |
| Allowance for uncollectible accounts | \$ 10,000         | \$ 10,000         | \$—0—             |
| Accounts payable                     | 54,000            | 54,000            | —0—               |
| Bonds payable                        | 200,000           | 180,000           | 20,000            |
| Common stock, \$1 par value          | 80,000            |                   |                   |
| Other contributed capital            | 132,000           |                   |                   |
| Retained earnings                    | 160,000           |                   |                   |
| Total equities                       | <u>\$636,000</u>  |                   |                   |

**Required:**

Prepare the journal entry to record the assets acquired and liabilities assumed. Assume an income tax rate of 40%.

**ASC Exercises:** For all ASC exercises indicate as part of your answer: the Codification topic, subtopic, section, and paragraph upon which your answer is based (unless otherwise specified). All ASC questions require access to the FASB Codification.

- ASC2-1** **Presentation** Does current GAAP require that the information on the income statement be reported in chronological order with the most recent year listed first, or is the reverse order acceptable as well?
- ASC2-2** **General Principles** In the 1990s, the pooling of interest method was a preferred method of accounting for consolidations by many managers because of the creation of instant earnings if the acquisition occurred late in the year. Can the firms that used pooling of interest in the 1990s continue to use the method for those earlier consolidations, or were they required to adopt the new standards for previous business combinations retroactively?
- ASC2-3** **Glossary** What instruments qualify as cash equivalents?
- ASC2-4** **Overview** If guidance for a transaction is not specifically addressed in the Codification, what is the appropriate procedure to follow in identifying the proper accounting?
- ASC2-5** **General** List all the topics found under General Topic 200—Presentation (*Hint*: There are 15 topics).
- ASC2-6** **Cross-Reference** The rules providing accounting guidance on subsequent events were originally listed in *FASB Statement No. 165*. Where is this information located in the Codification? List all the topics and subtopics in the Codification where this information can be found (i.e., ASC XXX-XX).
- ASC2-7** **Overview** Distinguish between an asset acquisition and the acquisition of a business.
- ASC2-8** **Measurement** GAAP requires that firms test for goodwill impairment on an annual basis. One reporting unit performs the impairment test during January while a second reporting unit performs the impairment test during July. If the firm reports annual results on a calendar basis, is this acceptable under GAAP?

## PROBLEMS

**PROBLEM 2-1 Consolidation LO 6**

Condensed balance sheets for Phillips Company and Solina Company on January 1, 2013, are as follows:

|                                | <i>Phillips</i>  | <i>Solina</i>    |
|--------------------------------|------------------|------------------|
| Current assets                 | \$180,000        | \$ 85,000        |
| Plant and equipment (net)      | 450,000          | 140,000          |
| Total assets                   | <u>\$630,000</u> | <u>\$225,000</u> |
| Total liabilities              | \$ 95,000        | \$ 35,000        |
| Common stock, \$10 par value   | 350,000          | 160,000          |
| Other contributed capital      | 125,000          | 53,000           |
| Retained earnings (deficit)    | 60,000           | (23,000)         |
| Total liabilities and equities | <u>\$630,000</u> | <u>\$225,000</u> |

On January 1, 2013, the stockholders of Phillips and Solina agreed to a consolidation. Because FASB requires that one party be recognized as the acquirer and the other as the acquiree, it was agreed that Phillips was acquiring Solina. Phillips agreed to issue 20,000 shares of its \$10 par stock to acquire all the net assets of Solina at a time when the fair value of Phillips' common stock was \$15 per share.

On the date of consolidation, the fair values of Solina's current assets and liabilities were equal to their book values. The fair value of plant and equipment was, however, \$150,000. Phillips will incur \$20,000 of direct acquisition costs and \$6,000 in stock issue costs.

**Required:**

Prepare the journal entries on the books of Phillips to record the acquisition of Solina Company's net assets.

**PROBLEM 2-2 Merger and Consolidation, Goodwill Impairment LO 3 LO 6**

Stockholders of Acme Company, Baltic Company, and Colt Company are considering alternative arrangements for a business combination. Balance sheets and the fair values of each company's assets on October 1, 2014, were as follows:

|                              | <i>Acme</i>        | <i>Baltic</i>      | <i>Colt</i>        |
|------------------------------|--------------------|--------------------|--------------------|
| Assets                       | <u>\$3,900,000</u> | <u>\$7,500,000</u> | <u>\$ 950,000</u>  |
| Liabilities                  | \$2,030,000        | \$2,200,000        | \$ 260,000         |
| Common stock, \$20 par value | 2,000,000          | 1,800,000          | 540,000            |
| Other contributed capital    | —0—                | 600,000            | 190,000            |
| Retained earnings (deficit)  | (130,000)          | 2,900,000          | (40,000)           |
| Total equities               | <u>\$3,900,000</u> | <u>\$7,500,000</u> | <u>\$ 950,000</u>  |
| Fair values of assets        | <u>\$4,200,000</u> | <u>\$9,000,000</u> | <u>\$1,300,000</u> |

Acme Company shares have a fair value of \$50. A fair (market) price is not available for shares of the other companies because they are closely held. Fair values of liabilities equal book values.

**Required:**

- A. Prepare a balance sheet for the business combination. Assume the following: Acme Company acquires all the assets and assumes all the liabilities of Baltic and Colt Companies by issuing in exchange 140,000 shares of its common stock to Baltic Company and 40,000 shares of its common stock to Colt Company.
- B. Assume, further, that the acquisition was consummated on October 1, 2014, as described above. However, by the end of 2015, Acme was concerned that the fair values of one or both of the acquired units had deteriorated. To test for impairment, Acme decided to measure goodwill impairment using the present value of future cash flows to estimate the fair value of the reporting units (Baltic and Colt). Acme accumulated the following data:

| <i>Year</i> | <i>Present Value<br/>of Future Cash Flows</i> | <i>Carrying Value of<br/>Identifiable<br/>Net Assets*</i> | <i>Fair Value<br/>Identifiable<br/>Net Assets</i> |
|-------------|---|---|---|
| 2015        |   |   |   |
| Baltic      | \$6,500,000                                   | \$6,340,000   | \$6,350,000                                       |
| Colt        | \$1,900,000                                   | 1,200,000   | 1,000,000   |

\* Identifiable Net Assets do not include goodwill.

Prepare the journal entry, if needed, to record goodwill impairment at December 31, 2015.

**PROBLEM 2-3 Purchase of Net Assets Using Bonds LO 6**

On January 1, 2014, Perez Company acquired all the assets and assumed all the liabilities of Stalton Company and merged Stalton into Perez. In exchange for the net assets of Stalton, Perez gave its bonds payable with a maturity value of \$600,000, a stated interest rate of 10%, interest payable semiannually on June 30 and December 31, a maturity date of January 1, 2024, and a yield rate of 12%. Balance sheets for Perez and Stalton (as well as fair value data) on January 1, 2014, were as follows:

|   | <i>Perez</i>       |                   | <i>Stalton</i>    |  |
|---|--------------------|-------------------|-------------------|--|
|   | <i>Book Value</i>  | <i>Book Value</i> | <i>Fair Value</i> |  |
| Cash  | \$ 250,000         | \$114,000         | \$114,000         |  |
| Receivables   | 352,700            | 150,000           | 135,000           |  |
| Inventories   | 848,300            | 232,000           | 310,000           |  |
| Land  | 700,000            | 100,000           | 315,000           |  |
| Buildings   | 950,000            | 410,000           | 54,900            |  |
| Accumulated depreciation—buildings                              | (325,000)          | (170,500)         |                   |  |
| Equipment   | 262,750            | 136,450           | 39,450            |  |
| Accumulated depreciation—equipment                              | (70,050)           | (90,450)          |                   |  |
| Total assets  | <u>\$2,968,700</u> | <u>\$881,500</u>  | <u>\$968,350</u>  |  |
| Current liabilities   | \$ 292,700         | \$ 95,300         | \$ 95,300         |  |
| Bonds payable, 8% due 1/1/2019, Interest payable 6/30 and 12/31 |                    | 300,000           | 260,000           |  |
| Common stock, \$15 par value                                    | 1,200,000          |                   |                   |  |
| Common stock, \$5 par value                                     |                    | 236,500           |                   |  |
| Other contributed capital                                       | 950,000            | 170,000           |                   |  |
| Retained earnings   | 526,000            | 79,700            |                   |  |
| Total equities  | <u>\$2,968,700</u> | <u>\$881,500</u>  |                   |  |

**Required:**

Prepare the journal entry on the books of Perez Company to record the acquisition of Stalton Company's assets and liabilities in exchange for the bonds.

**PROBLEM 2-4 Cash Acquisition, Contingent Consideration LO 6 LO 7**

Pham Company acquired the assets (except for cash) and assumed the liabilities of Senn Company on January 1, 2014, paying \$720,000 cash. Senn Company's December 31, 2013, balance sheet, reflecting both book values and fair values, showed:

|                             | <i>Book Value</i> | <i>Fair Value</i>  |
|-----------------------------|-------------------|--------------------|
| Accounts receivable (net)   | \$ 72,000         | \$ 65,000          |
| Inventory                   | 86,000            | 99,000             |
| Land                        | 110,000           | 162,000            |
| Buildings (net)             | 369,000           | 450,000            |
| Equipment (net)             | 237,000           | 288,000            |
| Total                       | <u>\$874,000</u>  | <u>\$1,064,000</u> |
| Accounts payable            | \$ 83,000         | \$ 83,000          |
| Note payable                | 180,000           | 180,000            |
| Common stock, \$2 par value | 153,000           |                    |
| Other contributed capital   | 229,000           |                    |
| Retained earnings           | 229,000           |                    |
| Total                       | <u>\$874,000</u>  |                    |

As part of the negotiations, Pham Company agreed to pay the former stockholders of Senn Company \$200,000 cash if the postcombination earnings of the combined company (Pham) reached certain levels during 2014 and 2015. The fair value of contingent consideration was estimated to be \$100,000 on the date of acquisition.



**Required:**

- A. Record the journal entry on the books of Pham Company to record the acquisition on January 1, 2014.
- B. During 2014, the likelihood of meeting the post combination earnings goal increased. As a result, at the end of 2014, the estimated fair value of the contingent consideration increased to \$120,000. Prepare any journal entry needed to account for the change in the fair value of contingent consideration.
- C. During 2015, the likelihood of meeting the post combination earnings goal significantly decreased and the contingent consideration target was not met. Prepare any journal entry needed to account for the change in the fair value of contingent consideration.

**PROBLEM 2-5****Asset Acquisition, Pro forma LO 5**

Balance sheets for Salt Company and Pepper Company on December 31, 2013, follow:

|                              | <i>Salt</i>        | <i>Pepper</i>      |
|------------------------------|--------------------|--------------------|
| <b>ASSETS</b>                |                    |                    |
| Cash                         | \$ 95,000          | \$ 180,000         |
| Receivables                  | 117,000            | 230,000            |
| Inventories                  | 134,000            | 231,400            |
| Plant assets                 | <u>690,000</u>     | <u>1,236,500</u>   |
| Total assets                 | <u>\$1,036,000</u> | <u>\$1,877,900</u> |
| <b>EQUITIES</b>              |                    |                    |
| Accounts payable             | \$ 180,000         | \$ 255,900         |
| Mortgage payable             | 152,500            | 180,000            |
| Common stock, \$20 par value | 340,000            | 900,000            |
| Other contributed capital    | 179,500            | 270,000            |
| Retained earnings            | <u>184,000</u>     | <u>272,000</u>     |
| Total equities               | <u>\$1,036,000</u> | <u>\$1,877,900</u> |

Pepper Company tentatively plans to issue 30,000 shares of its \$20 par value stock, which has a current market value of \$37 per share net of commissions and other issue costs. Pepper Company then plans to acquire the assets and assume the liabilities of Salt Company for a cash payment of \$800,000 and \$300,000 in long-term 8% notes payable. Pepper Company's receivables include \$60,000 owed by Salt Company. Pepper Company is willing to pay more than the book value of Salt Company assets because plant assets are undervalued by \$215,000 and Salt Company has historically earned above-normal profits.

**Required:**

Prepare a pro forma balance sheet showing the effects of these planned transactions.

**PROBLEM 2-6****Purchase, Decision to Accept LO 5**

Spalding Company has offered to sell to Ping Company its assets at their book values plus \$1,800,000 representing payment for goodwill. Operating data for 2013 for the two companies are as follows:

|                    | <i>Ping Company</i> | <i>Spalding Company</i> |
|--------------------|---------------------|-------------------------|
| Sales              | \$3,510,100         | \$2,365,800             |
| Cost of goods sold | <u>1,752,360</u>    | <u>1,423,800</u>        |
| Gross profit       | 1,757,740           | 942,000                 |
| Selling expenses   | \$ 632,500          | \$ 292,100              |
| Other expenses     | <u>172,600</u>      | <u>150,000</u>          |
| Total expenses     | <u>805,100</u>      | <u>442,100</u>          |
| Net income         | <u>\$ 952,640</u>   | <u>\$ 499,900</u>       |

Ping Company's management estimates the following operating changes if Spalding Company is merged with Ping Company through a purchase:

- A. After the merger, the sales volume of Ping Company will be 20% in excess of the present combined sales volume, and the sale price per unit will be decreased by 10%.

- B. Fixed manufacturing expenses have been 35% of cost of goods sold for each company. After the merger the fixed manufacturing expenses of Ping Company will be increased by 70% of the current fixed manufacturing expenses of Spalding Company. The current variable manufacturing expenses of Ping Company, which is 70% of cost of goods sold, is expected to increase in proportion to the increase in sales volume.
- C. Selling expenses of Ping Company are expected to be 85% of the present combined selling expenses of the two companies.
- D. Other expenses of Ping Company are expected to increase by 85% as a result of the merger.

Any excess of the estimated net income of the merged company over the combined present net income of the two companies is to be capitalized at 20%. If this amount exceeds the price set by Spalding Company for goodwill, Ping Company will accept the offer.

**Required:**

Prepare a pro forma (or projected) income statement for Ping Company for 2014 assuming the merger takes place, and indicate whether Ping Company should accept the offer.

**PROBLEM 2-7A Acquisition Entry and Deferred Taxes (see Appendix 2A online at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter).)**

On January 1, 2015, Pruitt Company issued 30,000 shares of its \$2 par value common stock for the net assets of Shah Company in a statutory merger accounted for as a purchase. Pruitt's common stock had a fair value of \$28 per share at that time. A schedule of the Shah Company assets acquired and liabilities assumed at book values (which are equal to their tax bases) and fair values follows:

| <i>Item</i>               | <i>Book Value/Tax Basis</i> | <i>Fair Value</i>  | <i>Excess</i>    |
|---------------------------|-----------------------------|--------------------|------------------|
| Receivables (net)         | \$125,000                   | \$ 125,000         | \$ —0—           |
| Inventory                 | 167,000                     | 195,000            | 28,000           |
| Land                      | 86,500                      | 120,000            | 33,500           |
| Plant assets (net)        | 467,000                     | 567,000            | 100,000          |
| Patents                   | 95,000                      | 200,000            | 105,000          |
| <b>Total</b>              | <b>\$940,500</b>            | <b>\$1,207,000</b> | <b>\$266,500</b> |
| Current liabilities       | \$ 89,500                   | \$ 89,500          | \$—0—            |
| Bonds payable             | 300,000                     | 360,000            | 60,000           |
| Common stock              | 120,000                     |                    |                  |
| Other contributed capital | 164,000                     |                    |                  |
| Retained earnings         | 267,000                     |                    |                  |
| <b>Total</b>              | <b>\$940,500</b>            |                    |                  |

**Additional Information:**

1. Pruitt's income tax rate is 35%.
2. Shah's beginning inventory was all sold during 2015.
3. Useful lives for depreciation and amortization purposes are:
 

|              |          |
|--------------|----------|
| Plant assets | 10 years |
| Patents      | 8 years  |
| Bond premium | 10 years |
4. Pruitt uses the straight-line method for all depreciation and amortization purposes.

**Required:**

- A. Prepare the entry on Pruitt Company's books to record the acquisition of the assets and assumption of the liabilities of Shah Company.
- B. Assuming Pruitt Company had taxable income of \$468,000 in 2015, prepare the income tax entry for 2015.

# Chapter 2

## APPENDIX 2A – DEFERRED TAXES IN BUSINESS COMBINATIONS (ONLINE)

A common motivation for the selling firm in a business combination is to structure the deal so that any gain is tax-free at the time of the combination. To the extent that the seller accepts common stock rather than cash or debt in exchange for the assets, the sellers may not have to pay taxes until a later date when the shares accepted are sold. In this situation, the acquiring firm inherits the book values of the assets acquired for *tax* purposes. When the acquirer has inherited the book values of the assets for tax purposes but has recorded market values for reporting purposes, a deferred tax liability needs to be recognized.

For example, suppose that Taxaware Company has net assets totaling \$700,000 (market value), including fixed assets with a market value of \$200,000 and a book value of \$140,000. The book values of all other assets approximate market values. Taxaware Company is acquired by Blinko in a combination that qualifies as a *nontaxable exchange* for Taxaware shareholders. Blinko issues common stock valued at \$800,000 (par value \$150,000). First, if we disregard tax effects, the entry to record the acquisition would be:

|                                |           |           |
|--------------------------------|-----------|-----------|
| Assets                         | \$700,000 |           |
| Goodwill                       | 100,000   |           |
| Common Stock                   |           | \$150,000 |
| Additional Contributed Capital |           | 650,000   |

Now consider tax effects, assuming a 30% tax rate. First, the excess of market value over book value of the fixed assets creates a deferred tax liability because the excess depreciation is not tax deductible. Thus, the deferred tax liability associated with the fixed assets equals  $30\% \times \$60,000$  (the difference between market and book values), or \$18,000. The inclusion of deferred taxes would increase goodwill by \$18,000 to a total of \$118,000. The entry to include goodwill is as follows:

|   |         |         |
|---|---------|---------|
| Assets  | 700,000 |         |
| Goodwill  | 118,000 |         |
| Deferred Tax Liability (.3 × [200,000 – 140,000]) |         | 18,000  |
| Common Stock                                      |         | 150,000 |
| Additional Contributed Capital                    |         | 650,000 |

The reader may be aware that in recent years in the United States, *the amortization of goodwill is often deductible on the tax return of the acquirer over a period of 15 years*. This, however, is **not the case in a nontaxable exchange, where the goodwill is not subject to amortization on either the tax return or the books under current GAAP**. Thus, in a nontaxable exchange, there is no obvious temporary difference related to the goodwill. In *FASB Statement No. 141R* [ASC 805–740] the FASB addressed the issue of deferred taxes in business combinations, stating its decision not to require deferred taxes be measured at fair value. The statement amends *FASB Statement No. 109*, and states that a deferred tax liability or asset should be recognized for differences between the recognized values of assets acquired and liabilities assumed in a business combination (except the

portion of goodwill for which amortization is not deductible for tax purposes). Thus, we do not record a deferred tax liability on goodwill in this illustration.

Note, however, that in a *taxable exchange*, the excess amount of tax-deductible goodwill over the goodwill recorded in the books *does* meet the definition of a temporary difference. Further, *FASB Statement No. 141R* [ASC 805–740] addresses this issue explicitly, stating that the tax benefit in such a case should be recognized at the date of the business combination.

In FASB ASC 805-740-45-20, FASB also addressed changes in the valuation allowance on deferred tax assets. FASB requires that such an allowance be recognized when it is deemed more likely than not that some or all of the deferred tax asset will not be realized. Also, a change in the valuation allowance resulting from changed circumstances due to a business combination should be accounted for separately from the business combination. In other words, the change in the valuation allowance would be shown as income or expense in the period of the combination. FASB stated that this position was in line with the goal of convergence toward international standards. See Illustration 2-8 for a summary of the changes in deferred taxes.



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“Together, these statements [ASC 805] and [ASC 740] can affect acquisitions past, present, and future—dramatically changing the way companies account for future business combinations and minority interests (now noncontrolling interests). In some cases, they can affect the tax accounting for transactions completed prior to the effective date.” Examples of potential changes from the prior standard include: the handling of tax uncertainties and their effect on the valuation allowance; the recording of a deferred tax asset when goodwill for tax is greater than book goodwill; the effect of contingent consideration on the purchase price, deferred tax assets, and the tax provision; and transaction costs that are now expensed for book as well as tax purposes (thus no deferred taxes).<sup>17</sup>

#### ILLUSTRATION 2-8

##### Summary of Selected Income Tax Changes: Old vs. New Application

|  | <i>Old</i>  | <i>New</i>   |
|--|---|--|
| Changes in the valuation allowance resulting from the business combination.  | Decreases in the acquirer’s valuation allowance are included in the business combination accounting.  | Changes would be reflected in the income statement or in some cases, equity.   |
| Subsequent changes in the valuation allowance related to the target’s recorded tax attributes or the tax positions acquired. | All changes would first reduce goodwill to zero, then reduce other noncurrent intangibles to zero and lastly reduce income tax expense.   | Changes would be reflected in the income statement or, in some cases, equity (not for measurement period adjustments). Accounting depends on whether the new information relates to conditions that existed at the acquisition date. |
| Excess of the tax-deductible amount over accounting goodwill.  | No deferred tax asset recognized in the business combination; when the tax deduction is realized on the tax return, reduce goodwill to zero, then reduce other non-current intangibles to zero and finally reduce income tax expense. | Recognize a deferred tax asset.  |

<sup>17</sup> Deloitte Tax Services, “Mergers and Acquisitions: Why Tax Accounting Will Never Be the Same Again,” 2008 Deloitte Development LLC.

## Chapter 2 – Review Questions

The review questions accompanying this course are designed to assist you in achieving the course learning objectives. The review section is not graded; do not submit it in place of your qualified assessment. While completing the review questions, it may be helpful to study any unfamiliar terms in the glossary in addition to course content. After completing the review questions, proceed to the review question answers and rationales.

8. Which of the following statements is accurate regarding the comparison of SFAS No. 141R and FASB Statement No. 141?
  - a. Most of the primary conclusions reached in the original SFAS No. 141 were revised in SFAS No. 141R.
  - b. The essence of the change is that the acquired company should be recognized at its fair value on the acquisition date.
  - c. The driving force was the complete convergence of U.S. GAAP and IFRS for business combinations.
  - d. The outcome was the pooling of interest method was eliminated.
  
9. Goodwill:
  - a. Must be amortized over its useful life, not to exceed 40 years, for all public companies.
  - b. Must be amortized over 10 years for all public companies.
  - c. Must be assigned to a reporting unit for all public companies.
  - d. May be evaluated under an alternative method if certain public companies meet the criteria.
  
10. Which of the following is accurate regarding acquisition costs under FASB ASC 805-10-25-23?
  - a. Expected restructuring costs resulting from the business combination must be accounted for separately from the business combination accounting.
  - b. Only direct expenses can be capitalized as part of the purchase price.
  - c. Only security issuance costs, if any, can be capitalized as part of the purchase price.
  - d. Direct costs may be capitalized as part of the purchase but indirect costs must be expensed.

11. Earnouts:
  - a. Measured and recognized when they are earned.
  - b. Measured at the acquisition date and reflected as equity.
  - c. Measured at the acquisition date and reflected as a liability.
  - d. Must be measured at fair value as of the acquisition date and recognized as part of the transaction.
  
12. Which of the following is accurate regarding GAAP versus IFRS standards in the area of business combinations?
  - a. IFRS offers acquiring companies a choice in the valuation of goodwill whereas U.S. GAAP does not.
  - b. IFRS does not allow for the recognition of goodwill whereas U.S. GAAP requires it if there is goodwill.
  - c. IFRS requires that companies write all assets, including goodwill, up fully even if there is a minority interest.
  - d. IFRS does not require the recognition of contingent consideration at the acquisition.

## Chapter 3 – Consolidated Financial Statements – Date of Acquisition

### Learning Objectives

After completing this section of the course, you will be able to:

- Identify “control” as it relates to business consolidations and cite the impact of controlling and non-controlling interests on the consolidation.
- Cite the rationales for acquiring a subsidiary versus acquiring its net assets and identify the resulting impact.
- Identify the valuation and classification of accounts in consolidated financial statements.
- Cite requirements for inclusion of a subsidiary in consolidated financial statements.
- Identify limitations in consolidated financial statements.
- Identify the journal entries and calculations for recording a subsidiary at the date of acquisition.
- Identify the need for eliminating entries at the date of acquisition.
- Recognize differences between implied value and book value of the acquired firm’s equity.
- Recognize differences between GAAP and IFRS with respect to preparation of consolidated financial statements.

## CONSOLIDATED FINANCIAL STATEMENTS—DATE OF ACQUISITION

### CHAPTER CONTENTS

- 3.1 DEFINITIONS OF SUBSIDIARY AND CONTROL
- 3.2 REQUIREMENTS FOR THE INCLUSION OF SUBSIDIARIES IN THE CONSOLIDATED FINANCIAL STATEMENTS
- 3.3 REASONS FOR SUBSIDIARY COMPANIES
- 3.4 CONSOLIDATED FINANCIAL STATEMENTS
- 3.5 INVESTMENTS AT THE DATE OF ACQUISITION
- 3.6 CONSOLIDATED BALANCE SHEETS: THE USE OF WORKPAPERS
- 3.7 A COMPREHENSIVE ILLUSTRATION—MORE THAN ONE SUBSIDIARY COMPANY
- 3.8 LIMITATIONS OF CONSOLIDATED STATEMENTS

### LEARNING OBJECTIVES

- 1 Understand the concept of control as used in reference to consolidations.
- 2 Explain the role of a noncontrolling interest in business combinations.
- 3 Describe the reasons why a company acquires a subsidiary rather than its net assets.
- 4 Describe the valuation and classification of accounts in consolidated financial statements.
- 5 List the requirements for inclusion of a subsidiary in consolidated financial statements.
- 6 Discuss the limitations of consolidated financial statements.
- 7 Record the investment in the subsidiary on the parent's books at the date of acquisition.
- 8 Prepare the consolidated workpapers and eliminating entries at the date of acquisition.
- 9 Compute and allocate the difference between implied value and book value of the acquired firm's equity.
- 10 Discuss some of the similarities and differences between U.S. GAAP and IFRS with respect to the preparation of consolidated financial statements at the date of acquisition.

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Microsoft purchased Internet phone service provider Skype for \$8.5 billion in cash. The deal gave Microsoft access to Skype's real-time video and voice communications services. The companies said the software maker planned to use Skype to support such products as the Xbox gaming system and Windows Phone.<sup>1</sup>

In acquiring another company, the acquirer must allocate its purchase price to the fair value of the underlying assets and liabilities acquired. Because determination of fair values often involves some degree of subjectivity, acquiring firms sometimes use their discretion to allocate the values in such a way as to pave the way for future growth in earnings and reported profitability.

<sup>1</sup> Money.cnn.com, May 10, 2011.



For example, higher values for property, plant, and equipment will lead to regular increases in depreciation charges for the remaining life of the assets, while higher values for inventories will flow through to the income statement as soon as the inventory is sold. These topics are developed and illustrated fully in Chapter 5. Among the assets that have drawn the attention of regulators in recent years are technology-related intangibles and in-process research and development costs. For a time, it seemed that any target with products in the pipeline provided an opportunity for R&D allocations. Sphinx Pharmaceuticals, for instance, ascribed the entire purchase cost of Genesis Pharmaceuticals to R&D.

How could this happen? To answer this question keep in mind that the acquirer evaluates estimated liabilities as well as assets of the target. When Disney acquired ABC, it determined that significant programming commitments led to probable and estimable liabilities that, though previously unrecorded by ABC, needed to be recorded in the acquisition. The result of this, and several other adjustments, was the recording of goodwill in an amount slightly larger than the purchase price.



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“Few things in banking are as ho-hum as the back-office operations that handle billions of deposits, withdrawals, and other transactions every day. But with acquisition activity intensifying such systems are about to face a huge test.” J.P. Morgan Chase & Co., Wells Fargo & Co. and PNC Financial Services Group Inc. will need to spend hundreds of millions of dollars over the next several years to integrate recent acquisitions of Washington Mutual’s banking operations, Wachovia Corp. and National City Corp. respectively. Combining two banks is notoriously expensive, risky, and complicated. It took J.P. Morgan about seventeen years after its 1988 acquisition to completely/fully merge the operations of Texas Commerce Banc-shares Inc.<sup>2</sup>

Recall that business combinations may be negotiated either as **asset acquisitions** or as **stock acquisitions**. In Chapter 2 the procedural focus was on business combinations arising from **asset acquisitions**. In those situations the acquiring company survived, and the acquired company or companies ceased to exist as separate legal entities. The focus in this chapter is on accounting practices followed in **stock acquisitions**, that is, when one company **controls** the activities of another company through the direct or indirect ownership of some or all of its voting stock.

**LO 2** Noncontrolling interest (NCI).

When this occurs, the acquiring company is generally referred to as the **parent** and the acquired company as a **subsidiary**. Those holding any remaining stock in a subsidiary are referred to as the **noncontrolling (minority) interest**. Any joint relationship is termed an **affiliation**, and the related companies are called **affiliated companies**. Each of the affiliated companies continues its separate legal existence, and the investing company carries its interest as an investment. The affiliated companies continue to account individually for their own assets and liabilities, with the parent company reflecting the investment on its books in a single account, Investment in Subsidiary. This account will ultimately be eliminated in the consolidation process to produce a set of consolidated financial statements. However, the investment account will be maintained in the “parent” records. Thus, an important distinction is noted between the **consolidated** statements and the **parent only** records or statements in the case of stock acquisitions.

A corporate affiliation may, of course, consist of more than two companies. A parent may obtain a controlling interest in the voting stock of several subsidiaries. If one or more of the subsidiaries owns a controlling interest in one or more other companies, a chain of ownership is forged by which the parent company controls, either directly or indirectly, the activities of the other companies. Many large American conglomerates have been formed by a variety of indirect ownerships.

<sup>2</sup> *Wall Street Journal*, “Next Crisis for U.S. Banks? Integration,” by Robin Sidel, p. C1, January 9, 2009.


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In a stock-for-stock deal valued at \$1.46 billion, Houston-based Plains Exploration & Production Co. acquired Stone Energy Corp. of Lafayette, Louisiana. The purchase price was based on Plains' closing stock price on April 21, 2006 and the assumption of \$483 million of Stone's debt. Shareholders of Stone received 1.25 shares of Plains per share of Stone common. Upon the deal's closing, Plains shareholders owned 70% of the combined company while Stone shareholders owned 30%.<sup>3</sup>

1. What risks did the shareholders of Stone take on by accepting only stock in this transaction?
2. Discuss reasons why Plains' shareholders would rather use its stock than cash to purchase Stone.

### 3.1 DEFINITIONS OF SUBSIDIARY AND CONTROL

#### LO 1 Meaning of control.

Although the term **subsidiary** takes on varied meanings in practice, in this text it refers to *the situation wherein a parent company (and/or the parent's other subsidiaries) owns a controlling financial interest in another company, whether that company is incorporated or not (such as a trust or partnership).*<sup>4</sup> Both the IASB and the FASB have indicated their opinion that the definition of control should not be limited to the common presumption in practice of a 50% cutoff but should instead include an indirect ability to control another entity's assets. **Controlling interest is defined as the portion of the equity of the consolidated group attributable to the parent and the parent's owners.**

#### IFRS

Consolidated financial statements are usually necessary for a fair presentation if one of the entities in the consolidated group directly or indirectly has a controlling financial interest in the other entities. FASB ASC paragraph 810-10-15-8 states that the usual condition for a controlling financial interest is ownership of a *majority voting interest*. However, application of the majority voting interest requirement may not identify the party with a controlling financial interest because the controlling financial interest may be achieved through arrangements that do not involve voting interests. The first step in determining whether the financial statements should be consolidated is to determine if the reporting entity has a variable interest in another entity, referred to as a potential variable interest entity (VIE).<sup>5</sup>

The Variable Interest Entities subsection of the Codification provides guidance for identifying such entities. The language is technical, but bear in mind that these rules originated largely to close loopholes that had previously allowed such companies as Enron to keep partnerships or other entities under the company's control off its consolidated financial statements. Transactions involving VIEs have become increasingly common. Some reporting entities have entered into arrangements using VIEs that appear to be designed to avoid reporting assets and liabilities for which they are responsible, to delay reporting losses that have already been incurred, or to report gains that are illusory. At the same time, many reporting entities have used VIEs for valid business purposes and have properly accounted for those VIEs based on guidance and accepted practice (FASB ASC paragraph 810-10-05-9).

The crux of the issue is that sometimes the party that owns the majority of the equity of a variable interest entity does not actually control the entity because it is thinly capitalized; in other words, the majority of the financing is through debt rather than equity. When

<sup>3</sup> *Houston Business Journal*, "Plains E&P to Acquire Stone Energy," 4/24/06.

<sup>4</sup> The SEC distinguishes majority-owned, totally held, and wholly owned subsidiaries. The term **majority-owned** means a subsidiary more than 50% of whose outstanding voting shares are owned by its parent and/or the parent's other majority-owned subsidiaries. The term **totally held** means a subsidiary (1) substantially all of whose outstanding equity securities are owned by its parent and/or the parent's other totally held subsidiaries, and (2) which is not indebted to any person other than its parent and/or the parent's other totally held subsidiaries, in an amount that is material in relation to the particular subsidiary. The term **wholly owned** means a subsidiary all of whose outstanding voting shares are owned by its parent and/or the parent's other wholly owned subsidiaries.

<sup>5</sup> Prior to the first step, the entity must determine if it qualifies for the deferral conditions in FASB ASC paragraph 810-10-65-2(aa). If so, the entity would follow previous GAAP for VIEs.

a company like Enron creates a partnership but does not own any stock in that partnership, it may nonetheless effectively control the activities of the partnership, while the outside shareholders do not. FASB developed a risk and reward model to determine who should consolidate such a partnership or other variable interest entity. The investments or other interests that absorb portions of a variable interest entity's expected losses or receive portions of the entity's expected residual returns are called variable interests. The identification of variable interests requires an economic analysis of the rights and obligations of a legal entity's assets, liabilities, equity, and other contracts. Variable interests are contractual, ownership, or other pecuniary interests in a legal entity that change with changes in the fair value of the legal entity's net assets exclusive of variable interests (FASB ASC paragraph 810-10-55-17). Operations of an entity and its assets tend to create variability (and are generally not variable interests) while liabilities and equity tend to absorb that variability. FASB ASC paragraphs 810-10-55-16 through 41 describe examples of variable interest in VIEs. For instance, equity investments or investments in subordinated debt in a VIE are variable interests to the extent that they are at risk. Guarantees of the value of the assets or liabilities of a VIE are variable interests.

Once the variable interests are identified, it must be determined whether the entity is a VIE (FASB ASC paragraph 810-10-15-14). If so, then the final step is to determine the VIE's primary beneficiary, or the party that would be required to consolidate the VIE into its own books. An entity is subject to consolidation if *any* of the following conditions exist:

- a. The total equity at risk is not sufficient to permit the legal entity to finance its activities without additional subordinated financial support provided by any parties, including equity holders. See FASB ASC 810-10-25-45 through 47 for a determination of equity at risk.
- b. The holders of the equity investment at risk *lack* any one of the following three items:
  1. The power to direct the activities of the legal entity that impact the entity's economic performance
  2. The obligation to absorb the expected losses of the legal entity
  3. The right to receive the expected residual returns of the legal entity
- c. The equity investors as a group lack the power to direct the activities if both
  1. The voting rights are not proportional to their obligations to absorb the expected losses or their rights to receive the expected residual returns, and
  2. Substantially all of the legal entity's activities, such as borrowing, either involve or are conducted on behalf of an investor who has disproportionately few voting rights.

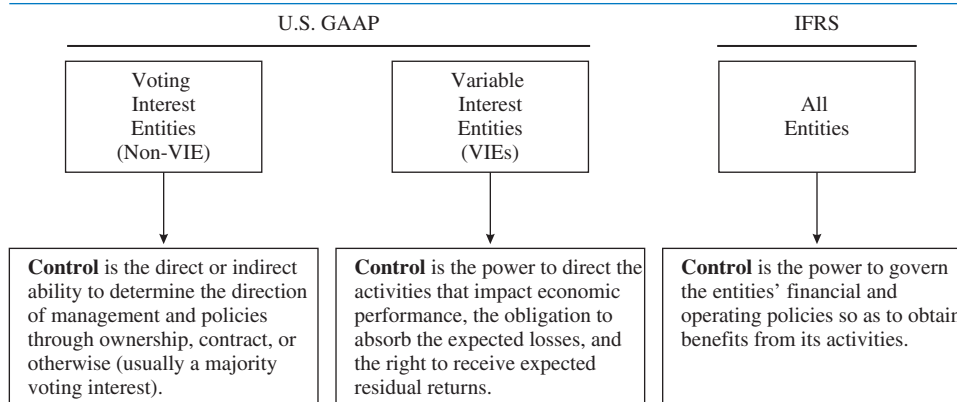
These conditions determine whether a controlling financial interest is achieved through arrangements that do not involve voting interests. If the entity is a VIE in which any of the above conditions exist, then an evaluation is necessary of factors indicating which party holds the power to direct the activities of the VIE and the obligation to absorb losses or right to reap benefits from the VIE. This party is the primary beneficiary, and must consolidate the VIE. See Appendix 3B online at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter).

On the other hand, if the entity is not considered a VIE, the determination of consolidation is based on whether one of the entities in the consolidated group directly or indirectly has a controlling financial interest in the other entities (usually ownership of a majority voting interest). Control, according to U.S. GAAP, is defined as the direct or indirect ability to determine the direction of management and policies through ownership, contract, or otherwise. IFRS defines control to be the power to govern the entities' financial and operating policies so as to obtain benefits from its activities. See Illustration 3-1 for a summary.

In this chapter we focus on situations where the control is evidenced by a majority ownership. The same procedures would apply, however, in the case where a smaller percentage ownership exists concurrently with evidence of effective control (for example, the

## ILLUSTRATION 3-1

## Definitions of Control

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Profits rose 20% in Walt Disney Co.'s fiscal third quarter of 2004 as revenue at its parks and resorts and studio-entertainment businesses doubled. Revenue at parks and resorts climbed 32% to \$2.29 billion as the financial statements of Euro Disney and Hong Kong Disneyland were consolidated, contributing \$332 million to the revenue increase. Disney adopted an accounting rule pertaining to the consolidation of variable interest entities or VIEs. In implementing this rule, Disney consolidated the balance sheets of Euro Disney and Hong Kong Disneyland as of March 31, and the income and cash flow statements beginning April 1 of that year.<sup>6</sup>

1. Prior to the adoption of the accounting rule, where in Disney's financial statements would the financial results from the VIEs appear?
2. Why might Disney choose separate dates to consolidate the balance sheets and income and cash flow statements?

IN  
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Consolidation of entities that are not majority-owned is opposed by some companies, particularly biotechnology and pharmaceutical concerns, whose financial strength could be hurt by reporting consolidated financials. Accounting professionals have argued that some firms deliberately avoid consolidating results by owning less than 50% of the voting stock in an entity, even though they effectively control it by hiring and firing management.<sup>7</sup>

1. In what instances would a company *want* to consolidate an entity of which the company owns less than 50%?
2. Discuss ways that a company can control another with less than majority ownership.

parent owns 40% of the voting stock, and no other party has a significant interest, or the parent controls the board).

For companies reporting periods beginning after November 15, 2009, the accounting for transfers of financial assets and consolidation of variable interest entities (VIEs) will change. The changes, which are expected to reduce the amount of "off-balance-sheet" reporting include eliminating the current QSPE concept. A QSPE was a separate structure that held passive financial assets for the benefit of the investors and was so passive, and its actions and decisions so limited, that control (and thus consolidation) was not an issue. A qualifying special-purpose entity is a trust or other legal vehicle that meets all the conditions listed in FASB ASC paragraph 860-40-15-3. International accounting standards (IFRS), in contrast, did not contain provisions that allow for the idea of a QSPE, and they require all "controlled" SPEs to be consolidated.

<sup>6</sup> *Dow Jones Business News*, "Disney's 3Q Net Rose 20% on Parks, Studio Revenue Growth," by Rose K. Manzo, 8/10/04.

<sup>7</sup> *WSJ*, "FASB Seeks More Disclosure in Minor Stakes," by Elizabeth MacDonald, 3/3/99, p. C12.

The Securities and Exchange Commission defines a subsidiary as an affiliate controlled by another entity, directly or indirectly, through one or more intermediaries. Control means the possession, direct or indirect, of the power to direct or cause the direction of the management and policies of another entity, whether through the ownership of voting shares, by contract, or otherwise. The debate arises because such a definition is less clear cut than majority ownership. It is, however, consistent with the stated objective of the IASB and the FASB to move away from rules-based accounting in favor of principles-based accounting.

On July 30, 2002, President Bush signed into law an Accounting Industry Reform Act, requiring chief executive officers to certify the validity of their firms' financial statements beginning August 14, 2002. Other aspects of the act included the following: the establishment of an oversight board for the accounting industry and the auditing sector in particular (the PCAOB or The Public Company Accounting Oversight Board); restrictions on the types of consulting services allowed to be performed by auditors, such as bookkeeping, financial systems design, and personnel and legal services; bans on personal loans from companies to their top officials and directors; and the creation of new penalties for corporate fraud.

## 3.2 REQUIREMENTS FOR THE INCLUSION OF SUBSIDIARIES IN THE CONSOLIDATED FINANCIAL STATEMENTS

**LO 5** Requirements regarding consolidation of subsidiaries.

The purpose of consolidated statements is to present the operating results and the financial position of a parent and all its subsidiaries as if they are one economic entity. Given this purpose and problems related to off-balance-sheet financing, the FASB has taken the position that essentially all controlled corporations should be consolidated. In general, the objective of consolidation is to provide the most meaningful financial presentation possible in the circumstances. The FASB has reemphasized the basic position that parent-company -only financial statements are unacceptable for general purpose distribution; that is, the consolidated financial statements are the primary statements of the economic entity. It notes that parent-company-only statements may be needed in addition to consolidated financial statements for the interests of such parties as bondholders, other creditors, and preferred shareholders of the parent. Consolidating statements, with columns for different subsidiaries or groups of subsidiaries and one column for the parent, are one effective way to present such information.

Under some circumstances, majority-owned subsidiaries should be excluded from the consolidated statements. Those circumstances include those where:<sup>8</sup>

1. Control does not rest with the majority owner. For example, a subsidiary in legal reorganization or bankruptcy should not be consolidated.
2. The subsidiary operates under governmentally imposed uncertainty so severe as to raise significant doubt about the parent's control. For example, a foreign subsidiary is domiciled in a country with foreign exchange restrictions, controls, or other governmentally imposed uncertainties so severe that they cast significant doubt on the parent's ability to control the subsidiary.

A difference in fiscal year-ends between the parent and a subsidiary does not justify the exclusion of the subsidiary from the consolidation financial statements. It is generally viewed as feasible for the subsidiary to prepare financial statements to coincide, or nearly coincide, with the parent's fiscal period. When the difference between year-ends is greater than three months, it is usually acceptable to use the subsidiary's statements for its fiscal period, giving recognition by disclosure notes or other means of intervening events that materially affect the results of operations or financial position.

<sup>8</sup> FASB ASC paragraph 810-10-15-10(a).

### 3.3 REASONS FOR SUBSIDIARY COMPANIES

**LO 3** Acquiring assets or stock.

There are several advantages to acquiring a controlling interest in the voting stock of another company rather than its assets or all its voting stock. For example:

1. Stock acquisition is relatively simple. Stock can be acquired by open market purchases or by cash tender offers to the subsidiary’s stockholders. Such acquisitions avoid the often lengthy and difficult negotiations that are required in an exchange of stock for stock during a complete takeover.
2. Control of the subsidiary’s operations can be accomplished with a much smaller investment, since not all of the stock need be acquired.
3. The separate legal existence of the individual affiliates provides an element of protection of the parent’s assets from attachment by creditors of the subsidiary. A parent may sometimes establish a subsidiary by forming a new corporation rather than simply adding a division to the existing company. The limited liability characteristic of the corporate form of business organization is often the primary reason for doing so.

### 3.4 CONSOLIDATED FINANCIAL STATEMENTS

**RELATED CONCEPTS**  
 The *economic entity* assumption suggests that a parent and its subsidiaries be viewed as one economic entity, even if several separate legal entities exist.

The statements prepared for a parent company and its subsidiaries are called **consolidated financial statements**. They include the full complement of statements normally prepared for a separate entity and represent essentially the sum of the assets, liabilities, revenues, and expenses of the affiliates after eliminating the effect of any transactions among the affiliated companies. Accountants recognize that the unconsolidated financial statements of the parent company, the **legal entity**, are *insufficient to present the financial position and results of operations of the economic entity controlled by the parent company*.

Consider for a moment the unconsolidated financial statements of the parent company. When the parent acquires a controlling interest in the subsidiary, the parent makes an entry debiting **Investment in Subsidiary** and crediting either cash, debt, or stock (or some combination), depending on the medium of exchange. Assume that the acquisition relies on a cash purchase price of \$5 million. The entry on the parent’s books would be:<sup>9</sup>

|                          |             |             |
|--------------------------|-------------|-------------|
| Investment in Subsidiary | \$5,000,000 |             |
| Cash                     |             | \$5,000,000 |

The parent’s investment account represents the parent’s investment in the different asset and liability accounts of the subsidiary and often includes a significant amount of goodwill. However, it is recorded in a single account entitled Investment. The subsidiary, in contrast, continues to keep its detailed books based on historical book values. These values are not as current as the market values assessed by the parent at the date of acquisition, but they are detailed as to classification. One way of looking at the process of consolidating is to consider the following table.

**LO 4** Valuation and classification of subsidiary assets and liabilities.

|                | <i>Investment Account on the Parent’s Books</i> | <i>Asset and Liability Accounts on the Subsidiary’s Books</i> |
|----------------|---|---|
| Valuation      | Market Value                                    | Historical Value  |
| Classification | One Account                                     | Multiple Accounts   |

From the table above, we see that neither the parent’s Investment account nor the subsidiary’s detailed asset and liability accounts serves to provide **both** the valuation and classification desired in the consolidated financial statements. The process of preparing

<sup>9</sup>All parent company journal entries will be shaded gray.

consolidated financial statements aims to achieve the desirable characteristics in the diagonal by showing the detailed asset and liability accounts on the consolidated balance sheet, but using the valuation established by the acquisition price. Further, this valuation provides the basis needed to measure earnings, reflecting all necessary charges.<sup>10</sup>

*The purpose of consolidated statements is to present, primarily for the benefit of the owners and creditors of the parent, the results of operations and the financial position of a parent company and all its subsidiaries as if the consolidated group were a single economic entity.*<sup>11</sup> Consolidated statements ignore the legal aspects of the separate entities but focus instead on the economic entity under the “control” of management. The presumption is that most users of financial statements prefer to evaluate the economic entity rather than the legal entity. Thus, the preparation of consolidated statements is an example of focusing on substance rather than form.

Although consolidated statements for the economic entity are considered to be more appropriate for use by the stockholders and creditors of the parent company (and are the only general-purpose financial statement acceptable under GAAP for companies with one or more subsidiaries), they are not substitutes for the statements prepared by the separate subsidiaries. Creditors of the subsidiaries must look to the statements of the individual legal entities in assessing the degree of protection related to their claims. Likewise, noncontrolling stockholders need the statements of the individual companies to determine the degree of investment risk involved and the amounts available for dividends. Also, regulatory agencies are often concerned with the net resources and results of operations of the individual subsidiaries.

### 3.5 INVESTMENTS AT THE DATE OF ACQUISITION

**LO 7** Recording of investment at acquisition.

The general principles used to record business combinations effected as asset acquisitions were discussed in Chapter 2. *In this chapter and throughout Chapters 4 through 9, we will concentrate on accounting for the acquisition of another company’s voting stock.* See Appendix 3A online at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter) for issues related to deferred taxes.

#### Recording Investments at Cost (Parent’s Books)

The basic guidelines for valuation discussed in Chapter 2 pertaining to business combinations apply equally to the acquisition of voting stock in another company. Under the purchase or acquisition method, the stock investment is recorded at its cost as measured by the fair value of the consideration given or the consideration received, whichever is more clearly evident. Recall that the consideration given may consist of cash, other assets, debt securities, stock of the acquiring company, or a combination of these items. Both the direct costs of acquiring the stock and the indirect costs relating to acquisitions (such as the costs of maintaining an acquisitions department) should be expensed as incurred.

If cash is used for the acquisition, the investment is recorded at its cash cost, excluding broker’s fees and other direct costs of the investment. For example, assume that P Company acquires all 10,000 shares of the common stock of S Company for \$25 per share and pays acquisition fees of \$10,000. The entry to record the investment on P Company’s books is:

|                         |         |         |
|-------------------------|---------|---------|
| Investment in S Company | 250,000 |         |
| Cash (10,000)(\$25)     |         | 250,000 |
| Acquisition Expense     | 10,000  |         |
| Cash                    |         | 10,000  |

<sup>10</sup> FASB ASC topic 810 [Consolidation].

<sup>11</sup> FASB ASC paragraph 810-10-10-1.

The acquisition fee would be recorded in a separate entry as an expense. If P Company acquired only 50% of the 10,000 shares at \$25 per share and paid an acquisition fee of \$8,000, the acquisition entry would be:

|                         |         |         |
|-------------------------|---------|---------|
| Investment in S Company | 125,000 |         |
| Cash (5,000)(\$25)      |         | 125,000 |

If P Company issues stock in the acquisition, the investment is recorded at the fair value of the stock issued, giving effect to any costs of registering the stock issue. Assume, for example, that P Company issues 20,000 of its \$10 par value common shares with a fair value of \$13 per share for the 10,000 shares of S Company, and that registration costs amount to \$5,000, paid in cash. The entries to record the investment on P Company's books are:

|   |         |         |
|---|---------|---------|
| Investment in S Company (20,000)(\$13)  | 260,000 |         |
| Common Stock (20,000)(\$10)             |         | 200,000 |
| Other Contributed Capital (20,000)(\$3) |         | 60,000  |
| Other Contributed Capital               | 5,000   |         |
| Cash (registration costs)               |         | 5,000   |

If P Company paid an additional \$10,000 as a finder's fee, the entry would be:

|                           |        |        |
|---------------------------|--------|--------|
| Professional Fees Expense | 10,000 |        |
| Cash                      |        | 10,000 |

### TEST YOUR KNOWLEDGE 3.1

**NOTE:** Solutions to *Test Your Knowledge* questions are found at the end of each chapter before the end-of-chapter questions.

#### Multiple Choice

- Stock given as consideration is valued at:
  - Fair market value
  - Par value
  - Historical cost
  - None of the above
- Which of the following advantages and/or disadvantages of stock acquisitions relative to asset acquisitions (and subsequent consolidated financial statements) is *misstated*?
  - Consolidated statements need not be produced as long as a parent company owns less than 50% of the voting shares of the subsidiary.
  - Stock can be acquired by open-market purchases or by cash tender offers to the subsidiary's stockholders.
  - Control of the subsidiary's operation can be accomplished with a much smaller investment, since not all of the stock need be acquired.
  - The separate legal existence of the individual affiliates provides an element of protection of the parent's assets from attachment by creditors of the subsidiary.
- Which of the following is not (generally) an advantage of stock acquisitions over asset acquisitions?
  - Speed
  - Majority of ownership not required
  - Liability protection
  - Anonymity
- In its conceptual framework, the FASB set out a number of principles to be adhered to in standard setting and in interpreting financial statements. The decision to require a consolidated statement, rather than separate financial statements, for a parent firm and its subsidiary best illustrates which of the following principles or concepts?
  - Periodicity
  - Going concern
  - Materiality
  - Economic entity

## 3.6 CONSOLIDATED BALANCE SHEETS: THE USE OF WORKPAPERS

**Lo 8** Preparing consolidated statements using a workpaper.

Affiliated companies should prepare a full set of financial statements (balance sheet, or statement of position; statement of income and comprehensive income; statement of cash flows; statement of stockholders' equity (or retained earnings); and notes to the financial statements). As of the **date of acquisition** of one company by another, however, the most relevant statement is the consolidated balance sheet. Preparation of the other consolidated financial statements becomes important with the passage of time and is discussed in later chapters.



The consolidated balance sheet reports *the sum* of the assets and liabilities of a parent and its subsidiaries as if they constituted a single company. Assets and liabilities are summed in their entirety, regardless of whether the parent owns 100% or a smaller controlling interest. In the latter case, the noncontrolling interests are reflected as a component of owners' equity. This interest may be referred to as either the noncontrolling interest in net assets or as the noncontrolling interest in equity (these terms are identical), and is sometimes abbreviated as NCI.

Since the parent and its subsidiaries are being treated as a single entity, eliminations must be made to cancel the effects of transactions among them. Intercompany receivables and payables, for example, must be eliminated to avoid double counting and to avoid giving the impression that the consolidated entity owes money to itself. Likewise, any intercompany profits in assets arising from subsequent transactions must be eliminated, since an entity cannot profit on transactions with itself. A **workpaper** is frequently used to summarize the effects of the various additions, eliminations, and so forth. Among the types of transactions that necessitate eliminating entries are the following:<sup>12</sup>

#### Intercompany Accounts to Be Eliminated

| <i>Parent's Accounts</i>                                     |         | <i>Subsidiary's Accounts</i>                         |
|--|---------|--|
| Investment in subsidiary                                     | Against | Equity accounts                                      |
| Intercompany receivable (payable)                            | Against | Intercompany payable (receivable)                    |
| Advances to subsidiary (from subsidiary)                     | Against | Advances from parent (to parent)                     |
| Interest revenue (interest expense)                          | Against | Interest expense (interest revenue)                  |
| Dividend revenue (dividends declared)                        | Against | Dividends declared (dividend revenue)                |
| Management fee received from subsidiary                      | Against | Management fee paid to parent                        |
| Sales to subsidiary (purchases of inventory from subsidiary) | Against | Purchases of inventory from parent (sales to parent) |

#### RELATED CONCEPTS

The *revenue recognition* principle indicates that revenue should be recognized only when transactions with entities *outside* the consolidated economic unit are completed.

The process of eliminating these and other types of items (such as the profit or loss on intercompany sales of assets not realized in transactions with outsiders) will be discussed in detail in this and later chapters. This chapter will focus on balance sheet accounts, while later chapters will focus on both balance sheet and income statement accounts.

### Investment Elimination

**LO 8** Investment is eliminated for consolidated statements.

An important basic elimination in the preparation of consolidated statements is the elimination of the investment account and the related subsidiary's stockholders' equity. The investment account represents the investment by the parent company in the net assets of the subsidiary and is, therefore, reciprocal to the subsidiary company's stockholders' equity. Since the subsidiary company's assets and liabilities are combined with those of the parent company in the consolidated balance sheet, it is necessary to eliminate the investment account of the parent company against the related stockholders' equity of the subsidiary to avoid double counting of these net assets. In effect, when the parent company's share of the subsidiary company's equity is eliminated against the investment account, the subsidiary company's net assets are substituted for the investment account in the consolidated balance sheet.

The process of combining the individual assets and liabilities of a parent company and its subsidiary at the date of acquisition is discussed next. If the acquisition is for less than 100% of the subsidiary, the fair value of both the controlling interest and the noncontrolling interest must be determined. The fair value of the controlling interest is generally assumed to equal the amount paid by the acquirer. However, determination of the fair value of the

<sup>12</sup> The account used by the parent to record dividends received from the subsidiary will differ if the parent uses the equity method, described in Chapter 4, to account for its investment.

noncontrolling interest is less straightforward. For instance, as noted in FASB ASC paragraphs 805-20-30-7 and 8, the per share amount paid by the acquirer could include a ‘control premium.’ If the acquirer is able to measure the fair value of the noncontrolling interest on the basis of active market prices for the shares not obtained by the acquirer at the acquisition date, this will provide the basis for valuing the noncontrolling interest. If not, other valuation techniques must be applied.

To illustrate, suppose Company P acquires 80% of Company S for \$70 per share and the remaining shares actively trade at \$65 per share immediately following the acquisition. This would imply a control premium of \$5 per share, and it would be appropriate to value the noncontrolling shares at \$65 rather than \$70 per share.

However, throughout this textbook, we assume the value of the controlling and noncontrolling shares to be equal unless explicitly stated otherwise. Thus, the fair value of the noncontrolling interest can be inferred from the value implied by the acquisition price. This approach is illustrated next.

To start the consolidating process, a useful first step is to prepare a “*Computation and Allocation of Difference between Implied Value and Book Value*” schedule (CAD). Preparation of this schedule requires us to address three basic issues.

1. Determine the percentage of stock acquired in the subsidiary. (Is it a 100% acquisition, or a smaller percentage?)
2. Use the purchase price (cost) to compute the *implied value* of the subsidiary. Simply divide the purchase price by the percentage acquired to calculate this value. If the percentage is 100%, the implied value will equal the purchase price.
3. Compare the implied value from step (2) to the book value of the subsidiary’s equity. If a difference exists, we must then allocate that difference to adjust the underlying assets and/or liabilities of the acquired company.

**LO 9** Computing and allocating the difference between implied and book value (CAD).

The book value of the equity is the sum of all equity accounts (common stock, additional contributed capital, retained earnings, etc.), which equals the book value of the acquired firm’s assets minus liabilities at the date of acquisition.

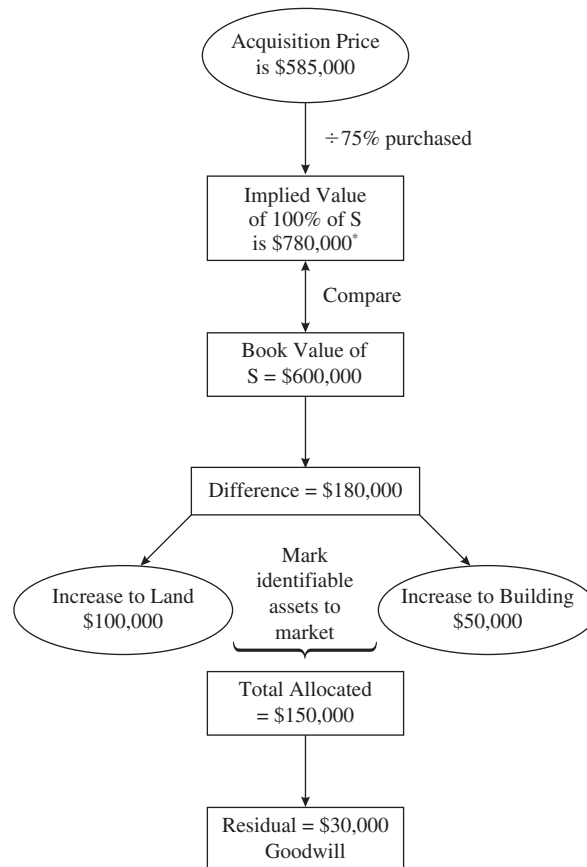
$$\text{Implied Value of Subsidiary Equity} = (\text{Acquisition Price})/(\text{Percentage Acquired})$$

Note that the comparison is between implied value and **book** value. This comparison is appropriate because the subsidiary company’s accounts are recorded at book value amounts, and the trial balance of the subsidiary company (along with the trial balance of the parent company) provides the starting point for the consolidation process. Thus, although market values are crucial in determining the numbers that are eventually reported in the consolidated financial statements, we use book values to establish a starting point. When the implied value exceeds the book value, the difference will be distributed to adjust net assets upward. See Illustration 3-2 for a graphic illustration of this principle. When the implied value is less than the book value, the difference may be distributed to adjust net assets downward, or a gain may be recognized for a “bargain,” as dictated by the facts of the acquisition.

The steps above lead to the following possible cases:

- Case 1.** The implied value (IV) of the subsidiary (purchase price divided by percentage acquired) is **equal** to the book value of the subsidiary company’s equity ( $IV = BV$ ), and
- a. The parent company acquires 100% of the subsidiary company’s stock; or
  - b. The parent company acquires less than 100% of the subsidiary company’s stock.
- Case 2.** The implied value of the subsidiary **exceeds** the book value of the subsidiary company’s equity ( $IV > BV$ ), and
- a. The parent company acquires 100% of the subsidiary company’s stock; or
  - b. The parent company acquires less than 100% of the subsidiary company’s stock.
- Case 3.** The implied value of the subsidiary is **less** than the book value of the subsidiary company’s equity ( $IV < BV$ ), and
- a. The parent company acquires 100% of the subsidiary company’s stock; or
  - b. The parent company acquires less than 100% of the subsidiary company’s stock.

ILLUSTRATION 3-2



\*This assumes no control premium is attached to the acquisition price.

We next illustrate the alternatives above in the order listed, with the exception that we omit illustrations of Cases 2(a) and 3(a), which should be readily apparent after reading the others. Examples are based on the balance sheets as of January 1, 2015, for P Company and S Company as shown in Illustration 3-3.

It is important to distinguish between **actual entries** that are recorded in the books of one of the two companies and **workpaper-only entries**. The entries presented in the preceding section to record the investment in S Company were actual entries, which would be recorded in the accounts of P Company. These types of entries would already be reflected in the trial balance, which constitutes the first column of the workpapers presented throughout this chapter (see, for example, Illustration 3-4 or Illustration 3-5).

The entries that we develop next, and which appear in the middle “elimination” columns of the workpapers, are **workpaper-only entries**. As such, they are never posted to the books or accounts of either company’s general ledger. Consequently, the entries will need to be repeated each year in the consolidating process. In some cases a number of entries from prior years may be combined to simplify the process; but, in essence, the entries are being repeated each year. Throughout this book, workpaper-only entries will be presented **shaded in blue**. Parent company and subsidiary entries are shaded in **gray**.

### Case 1 (a): Implied Value of Subsidiary Is Equal to Book Value of Subsidiary Company’s Equity (IV = BV)—Total Ownership (100% of Subsidiary Stock Acquired)

If the purchase price happens to be exactly equal to the book value of the equity acquired, the investment account (from the parent’s trial balance) will eliminate cleanly against the

**ILLUSTRATION 3-3****Balance Sheets for P Company and S Company—January 1, 2015**

|                              | <i>P Company</i> | <i>S Company</i> |
|------------------------------|------------------|------------------|
| Cash                         | \$100,000        | \$ 20,000        |
| Other current assets         | 140,000          | 50,000           |
| Plant and equipment (net)    | 120,000          | 40,000           |
| Land                         | 40,000           | 20,000           |
| Total assets                 | <u>\$400,000</u> | <u>\$130,000</u> |
| Liabilities                  | \$ 60,000        | \$ 50,000        |
| Common stock, \$10 par value | 200,000          | 50,000           |
| Other contributed capital    | 40,000           | 10,000           |
| Retained earnings            | 100,000          | 20,000           |
| Total Liabilities and Equity | <u>\$400,000</u> | <u>\$130,000</u> |

equity accounts of the subsidiary. If we assume further that the market values of the assets acquired approximate their book values, then there is no need to adjust assets or liabilities from their recorded values. The end result of the eliminating process is that the investment account is completely eliminated, as are the equity accounts of the subsidiary (since it is a 100% acquisition). In essence the investment account is replaced with the underlying assets and liabilities of the subsidiary.

To illustrate, assume that on January 1, 2015, P Company acquired all the outstanding stock (5,000 shares) of S Company for a cash payment of \$80,000. P Company would record an actual journal entry as follows:

|                         |          |          |
|-------------------------|----------|----------|
| Investment in S Company | \$80,000 |          |
| Cash                    |          | \$80,000 |

Immediately after the acquisition, P Company has \$20,000 in cash (\$100,000 shown in Illustration 3-3, immediately prior to acquisition, minus \$80,000 spent to acquire Company S) and \$80,000 in an Investment in S Company account. These amounts appear in the first column of the workpaper presented in Illustration 3-4. In the case of a 100% acquisition, the implied value of the subsidiary equals the purchase price. The majority of acquisitions between 2010 and 2014 were for 100% of the outstanding stock (or total net assets) of the target; thus, noncontrolling interest in equity was recognized in a relatively small percentage. When the target was a private, rather than publicly traded, company, the percentage was even smaller, with only 3.5% of acquisitions by a public acquirer targeting a private company resulting in a noncontrolling interest. When a public acquirer targeted a publicly traded firm, 7.1% of acquisitions resulted in a noncontrolling interest in equity being reported.

The Computation and Allocation of Difference between Implied and Book Values Schedule reveals no difference, as shown below.

**Computation and Allocation of Difference  
(between Implied and Book Values) Schedule**

|  | <i>Parent Share</i> | <i>NonControlling Share</i> | <i>Total Value</i> |
|--|---------------------|-----------------------------|--------------------|
| Purchase price and implied value           | \$80,000            | —0—                         | \$80,000           |
| Less: Book value of equity acquired        | 80,000              | —0—                         | 80,000             |
| Difference between implied and book values | <u>\$ —0—</u>       | <u>\$ —0—</u>               | <u>\$ —0—</u>      |

Note that the \$80,000 paid equals the recorded value of S Company's stockholders' equity. Data for the preparation of formal consolidated statements are normally accumulated on a workpaper, on which any required adjusting and eliminating entries are made prior to combining remaining balances. **Adjusting entries** are those needed to correct any

accounts of the affiliates that may be incorrect or to recognize the unrecorded effect of transactions that have been recorded by one party, but not by the other. Adjusting entries must be made ultimately on the books of one or more of the affiliates. **Eliminating entries** are made to cancel the effects of intercompany transactions and are made on the workpaper only. In all illustrations throughout this book, **letter notation** is used to identify related parts of adjusting entries, and **number notation** to identify related parts of eliminating entries. Note, however, that some of the eliminating entries will involve “adjustments” to accounts, particularly when there is a difference between implied and book values. Thus, it is technically more accurate to think of eliminating entries as eliminating/adjusting entries or as workpaper entries. These entries will be our focus throughout the next several chapters, and adjusting entries are used only rarely.

The workpaper entry to eliminate S Company’s stockholders’ equity against the investment account, in general journal form, is:

|     |                                     |        |        |
|-----|-------------------------------------|--------|--------|
| (1) | Common Stock—S Company              | 50,000 |        |
|     | Other Contributed Capital—S Company | 10,000 |        |
|     | Retained Earnings—S Company         | 20,000 |        |
|     | Investment in S Company             |        | 80,000 |

Remember, although it is expressed in general journal form, this is a **workpaper-only entry**. No entry is made on the books of either company. As mentioned previously, *all workpaper entries are shaded in blue* to distinguish them clearly from book entries.

A workpaper for the preparation of a consolidated balance sheet for P and S Companies on January 1, 2015, the date of acquisition, is presented in Illustration 3-4.

Note the following on the workpaper:

1. The investment account and related subsidiary’s stockholders’ equity have been eliminated, and the subsidiary company’s net assets substituted for the investment account.
2. Consolidated assets and liabilities consist of the sum of the parent and subsidiary assets and liabilities in each classification.

## Acquisition Accounting

## ILLUSTRATION 3-4

| Implied Value Equals Book Value | Consolidated Balance Sheet Workpaper |                  |                 |                 |                       |
|---------------------------------|--------------------------------------|------------------|-----------------|-----------------|-----------------------|
| Wholly Owned Subsidiary         | P Company and Subsidiary             |                  |                 |                 |                       |
| Date of Acquisition             | January 1, 2015                      |                  |                 |                 |                       |
|                                 | P Company                            | S Company        | Eliminations    |                 | Consolidated Balances |
|                                 |                                      |                  | Dr.             | Cr.             |                       |
| Cash                            | 20,000                               | 20,000           |                 |                 | 40,000                |
| Other Current Assets            | 140,000                              | 50,000           |                 |                 | 190,000               |
| Plant and Equipment             | 120,000                              | 40,000           |                 |                 | 160,000               |
| Land                            | 40,000                               | 20,000           |                 |                 | 60,000                |
| Investment in S Company         | 80,000                               |                  |                 | (1) 80,000      |                       |
| Total Assets                    | <u>\$400,000</u>                     | <u>\$130,000</u> |                 |                 | <u>\$450,000</u>      |
| Liabilities                     | 60,000                               | 50,000           |                 |                 | 110,000               |
| Common Stock                    |                                      |                  |                 |                 |                       |
| P Company                       | 200,000                              |                  |                 |                 | 200,000               |
| S Company                       |                                      | 50,000           | (1) 50,000      |                 |                       |
| Other Contributed Capital       |                                      |                  |                 |                 |                       |
| P Company                       | 40,000                               |                  |                 |                 | 40,000                |
| S Company                       |                                      | 10,000           | (1) 10,000      |                 |                       |
| Retained Earnings               |                                      |                  |                 |                 |                       |
| P Company                       | 100,000                              |                  |                 |                 | 100,000               |
| S Company                       |                                      | 20,000           | (1) 20,000      |                 |                       |
| Total Liabilities and Equity    | <u>\$400,000</u>                     | <u>\$130,000</u> | <u>\$80,000</u> | <u>\$80,000</u> | <u>\$450,000</u>      |

(1) To eliminate investment in S Company.

3. Consolidated stockholders' equity is the same as the parent company's equity. This is as it should be, since the subsidiary company's stockholders' equity has been eliminated against the parent company's investment account. The consolidated balance sheet is that of the *economic* entity, and the only ownership interest is that represented by P Company's stockholders; that is, P Company owns all of S Company's stock.

### Case 1 (b): Implied Value of Subsidiary Is Equal to Book Value of Subsidiary Company's Stock (IV = BV)—Partial Ownership (Less Than 100% of Subsidiary Stock Acquired)

Next we introduce a noncontrolling interest. In this situation, the consolidated balance sheet will nonetheless reflect the combined assets and liabilities of parent and subsidiary *in their entirety*. To balance, the equity interests will then be separated into the noncontrolling interest's equity in net assets and the usual controlling interest equity accounts.

Assume that on January 1, 2015, P Company acquired 90% (4,500 shares) of the stock of S Company for \$72,000. Since P Company owns less than 100% of S Company's stock, consideration must be given to the existence of a noncontrolling interest (minority interest) in the net assets of S Company. The purchase price of \$72,000 for 90% of S Company implies a total valuation for S Company of \$72,000/90%, or \$80,000. The noncontrolling interest is, thus, implied to be valued at 10% × \$80,000 or \$8,000. In this illustration the implied and book values are equal, both for the controlling and noncontrolling interests. A Computation and Allocation of Difference (CAD) Schedule would appear as follows:

#### Computation and Allocation of Difference (between Implied and Book Values) Schedule

|   | <i>Parent Share</i> | <i>Noncontrolling Share</i> | <i>Total Value</i> |
|---|---------------------|-----------------------------|--------------------|
| Purchase price and implied value          | <b>\$72,000</b>     | <b>8,000</b>                | 80,000             |
| Less: Book value of subsidiary equity:    |                     |                             |                    |
| Common stock                              | 45,000              | 5,000                       | <b>50,000</b>      |
| Other contributed capital                 | 9,000               | 1,000                       | <b>10,000</b>      |
| Retained earnings                         | 18,000              | 2,000                       | <b>20,000</b>      |
| Total book value                          | <u>72,000</u>       | <u>8,000</u>                | <u>80,000</u>      |
| Difference between implied and book value | <u>—0—</u>          | <u>—0—</u>                  | <u>—0—</u>         |

Note that the amounts in bold in the CAD Schedule provide the entries in the following workpaper investment elimination entry:

|     |                                     |        |        |
|-----|-------------------------------------|--------|--------|
| (1) | Common Stock—S Company              | 50,000 |        |
|     | Other Contributed Capital—S Company | 10,000 |        |
|     | Retained Earnings—S Company         | 20,000 |        |
|     | Investment in S Company             |        | 72,000 |
|     | Noncontrolling Interest in Equity   |        | 8,000  |

The entire 100% of S Company's equity is eliminated, 90% against the investment account with the remaining 10% of S Company's equity constituting the noncontrolling interest. The purpose of the consolidated balance sheet is to report the net resources under the control of a single management, and the management of P Company effectively controls all S Company's resources. Thus, all S Company's assets and liabilities are combined with those of P Company on the consolidated balance sheet, and the noncontrolling interest representing the noncontrolling shareholders' interest in the net assets is a separate component of stockholders' equity.

A workpaper for the preparation of a consolidated balance sheet at the date of acquisition in this situation is presented in Illustration 3-5. A separate column is added to the

workpaper in this illustration between the eliminations columns and the consolidated balances to compute the noncontrolling interest in equity. The total in this column represents the percentage of equity of S Company *not* acquired by P Company and recorded at the fair value implied by P Company's acquisition price. The total noncontrolling interest is transferred to the consolidated balance sheet column. Although it is listed last on the workpaper, the noncontrolling interest on the actual consolidated balance sheet should appear as the **first component of stockholders' equity** (because it is the nearest, from the perspective of the controlling interest, to a liability).

In comparing Illustration 3-4 and Illustration 3-5, it might be noted that: (1) consolidated assets are \$8,000 greater in Illustration 3-5 since it took \$8,000 less cash to acquire a 90% investment, and (2) an \$8,000 noncontrolling interest exists (the remaining 10%). Noncontrolling interest is accumulated on the consolidated workpaper in a separate column.

The proper classification of the noncontrolling interest has been a subject of debate. From the perspective of the controlling interest, it is similar to a liability. It is not, however, a liability because it does not require a future payment by the parent company or the consolidated entity. The shareholders who represent the noncontrolling interest are indeed stockholders, but only of the subsidiary company and not the parent. Some companies, in the past, presented this interest after liabilities and before stockholders' equity on the balance sheet to convey the "hybrid" nature of the noncontrolling interest. According to FASB ASC paragraph 810-10-45-16, the noncontrolling interest should be presented as a part of stockholders' equity of the consolidated entity, but clearly labeled to distinguish it from the other equity accounts.<sup>13</sup>

## Acquisition Accounting

## ILLUSTRATION 3-5

| Implied Value Equals Book Value | Consolidated Balance Sheet Workpaper |                  |                     |                 |                                |                              |
|---------------------------------|--------------------------------------|------------------|---------------------|-----------------|--------------------------------|------------------------------|
| 90% Owned Subsidiary            | P Company and Subsidiary             |                  |                     |                 |                                |                              |
| Date of Acquisition             | January 1, 2015                      |                  |                     |                 |                                |                              |
|                                 | <i>P Company</i>                     | <i>S Company</i> | <i>Eliminations</i> |                 | <i>Noncontrolling Interest</i> | <i>Consolidated Balances</i> |
|                                 |                                      |                  | <i>Dr.</i>          | <i>Cr.</i>      |                                |                              |
| Cash                            | \$ 28,000                            | \$ 20,000        |                     |                 |                                | \$ 48,000                    |
| Other Current Assets            | 140,000                              | 50,000           |                     |                 |                                | 190,000                      |
| Plant and Equipment             | 120,000                              | 40,000           |                     |                 |                                | 160,000                      |
| Land                            | 40,000                               | 20,000           |                     |                 |                                | 60,000                       |
| Investment in S Company         | 72,000                               |                  |                     | (1) 72,000      |                                |                              |
| Total Assets                    | <u>\$400,000</u>                     | <u>\$130,000</u> |                     |                 |                                | <u>\$458,000</u>             |
| Liabilities                     | 60,000                               | 50,000           |                     |                 |                                | 110,000                      |
| Common stock                    |                                      |                  |                     |                 |                                |                              |
| P Company                       | 200,000                              |                  |                     |                 |                                | 200,000                      |
| S Company                       |                                      | 50,000           | (1) 50,000          |                 |                                |                              |
| Other Contributed Capital       |                                      |                  |                     |                 |                                |                              |
| P Company                       | 40,000                               |                  |                     |                 |                                | 40,000                       |
| S Company                       |                                      | 10,000           | (1) 10,000          |                 |                                |                              |
| Retained Earnings               |                                      |                  |                     |                 |                                |                              |
| P Company                       | 100,000                              |                  |                     |                 |                                | 100,000                      |
| S Company                       |                                      | 20,000           | (1) 20,000          |                 |                                |                              |
| Noncontrolling Interest         |                                      |                  |                     | (1) 8,000       | \$8,000                        | 8,000                        |
| Total Liabilities and Equity    | <u>\$400,000</u>                     | <u>\$130,000</u> | <u>\$80,000</u>     | <u>\$80,000</u> |                                | <u>\$458,000</u>             |

(1) To eliminate investment in S Company and create noncontrolling interest account.

<sup>13</sup> The term **minority interest** may not reflect clearly the actual nature of some items. For example, a parent company may own 25% of its subsidiary's outstanding preferred stock. In this case, the use of the term "minority interest" to represent the 75% interest held by noncontrolling shareholders is not representative of the circumstances. Also, a parent may have control of a subsidiary with less than 50% of its common stock. The term "noncontrolling interest" is recommended by FASB and is used throughout this text.

## Case 2 (b): Implied Value Exceeds Book Value of Subsidiary Company's Equity (IV > BV)—Partial Ownership (Less Than 100% of Subsidiary Stock Acquired)

Next, we continue to allow for a noncontrolling interest, and we introduce a difference between the cost and the book value acquired, and thus between the implied value and the book value of the subsidiary. In Case 2, we illustrate the common situation where the purchase price is higher than the book value of equity acquired.

Assume that on January 1, 2015, P Company acquired 4,000 shares (80%) of the outstanding common stock of S Company for \$74,000 cash, after which P Company has \$26,000 in cash and \$74,000 in an Investment in S Company. The purchase price of \$74,000 for 80% of S Company implies a total value of \$74,000/80% or \$92,500. The implied value of the noncontrolling interest is \$92,500 × 20% or \$18,500. The total implied value of \$92,500 exceeds the book value of equity of \$80,000 by \$12,500. A Computation and Allocation of Difference (CAD) Schedule for this situation *begins* as follows:

### Computation and Allocation of Difference (between Implied and Book Values) Schedule

|   | Parent Share    | Noncontrolling<br>Share | Total Value   |
|---|-----------------|-------------------------|---------------|
| Purchase price and implied value          | <u>\$74,000</u> | <u>18,500</u>           | <u>92,500</u> |
| Less: Book value of equity acquired:      |                 |                         |               |
| Common stock                              | 40,000          | 10,000                  | <b>50,000</b> |
| Other contributed capital                 | 8,000           | 2,000                   | <b>10,000</b> |
| Retained earnings                         | <u>16,000</u>   | <u>4,000</u>            | <u>20,000</u> |
| Total book value                          | <u>64,000</u>   | <u>16,000</u>           | <u>80,000</u> |
| Difference between implied and book value | <u>10,000</u>   | <u>2,500</u>            | <u>12,500</u> |

In this case, because there is a difference between implied and book values, we must not only *compute* the difference but also *allocate* that difference to the appropriate accounts. If we assume that the entire difference is attributable to land with a current market value higher than its historical recorded cost, we would complete the CAD schedule as follows:

### Computation and Allocation of Difference (between Implied and Book Values) Schedule

|   | Parent Share    | Noncontrolling<br>Share | Total Value     |
|---|-----------------|-------------------------|-----------------|
| Purchase price and implied value          | <u>\$74,000</u> | <u>18,500</u>           | <u>92,500</u>   |
| Less: Book value of equity acquired:      |                 |                         |                 |
| Common stock                              | 40,000          | 10,000                  | <b>50,000</b>   |
| Other contributed capital                 | 8,000           | 2,000                   | <b>10,000</b>   |
| Retained earnings                         | <u>16,000</u>   | <u>4,000</u>            | <u>20,000</u>   |
| Total book value                          | <u>64,000</u>   | <u>16,000</u>           | <u>80,000</u>   |
| Difference between implied and book value | 10,000          | 2,500                   | <b>12,500</b>   |
| Adjust land upward (mark to market)       | <u>(10,000)</u> | <u>(2,500)</u>          | <u>(12,500)</u> |
| Balance                                   | <u>—0—</u>      | <u>—0—</u>              | <u>—0—</u>      |

The difference must be allocated to specific accounts. In this example, the adjustment to increase land to its market value is a debit, and is shown in parentheses. The popular phrase “mark to market” may be used here. In no case would the asset be marked higher than its market value. The amounts are then summed (treating debit adjustments as negative amounts) to yield a balance. The correct distribution of the difference between implied and book values depends on the market values of the underlying assets and liabilities. If the difference is *larger than the amount* needed to adjust all net assets, then, *the excess is goodwill*.

In the past, firms looking for creative ways to avoid recording goodwill sometimes wrote off a portion of the purchase price as an immediate expense under the guise of in-process



R&D. This issue has been a controversial one, and current GAAP requires that in-process R&D be capitalized *if it is acquired in a business combination*.

By adjusting all net assets to their market value, a negative balance could result. This situation, referred to as a *bargain acquisition*, occurs when the *acquisition price is less than the market value of identifiable net assets acquired*. After eliminating any previously recorded goodwill on the books of the acquiree, *this negative balance is recognized in its entirety as an ordinary gain in the income statement in the period of the acquisition*. We will illustrate bargain acquisitions, which were initially introduced in Chapter 2, again in Chapter 5. The treatment of bargain purchase reflects a significant change from prior GAAP, which required that negative goodwill be allocated as a reduction of acquired assets below their fair value. Such a reduction is no longer allowed.

Textbook problems (including those at the end of this chapter) will often make simplifying assumptions, such as “Assume that any difference between implied and book values is attributable solely to land,” or “Assume that any difference between implied and book values is attributable to goodwill.” This latter assumption is equivalent to stating that book values approximate fair market values. It is important, however, to be aware that more complex adjustments are often needed, and may include a variety of asset and liability accounts (as illustrated in detail in Chapter 5).

Returning to the example above, in which a difference of \$12,500 is attributed to land, a workpaper for a consolidated balance sheet at the date of acquisition in this situation is presented in Illustration 3-6.

The first workpaper investment elimination entry is:

|     |  |        |        |
|-----|--|--------|--------|
| (1) | Common Stock—S Company                     | 50,000 |        |
|     | Other Contributed Capital—S Company        | 10,000 |        |
|     | Retained Earnings—S Company                | 20,000 |        |
|     | Difference between Implied and Book Values | 12,500 |        |
|     | Investment in S Company                    |        | 74,000 |
|     | Noncontrolling Interest in Equity          |        | 18,500 |

Elimination entry (1) serves to eliminate the investment account against the equity accounts of the subsidiary and to recognize the difference between implied and book values. A new account entitled “Difference between Implied and Book Values” is created in this entry. This account is a temporary account, which will be immediately eliminated in the very next entry.

Elimination entry (2) (below) serves to allocate the Difference between Implied and Book Values to the appropriate accounts, in this case land:

|     |  |        |        |
|-----|--|--------|--------|
| (2) | Land                                       | 12,500 |        |
|     | Difference between Implied and Book Values |        | 12,500 |

Clearly entries (1) and (2) could be collapsed into one entry, and the account Difference between Implied and Book Values avoided. It becomes useful, however, to separate the two entries in situations involving a number of accounts with more complex adjustments. As this account will be used in future chapters, it is helpful to become acquainted with it at this point.

**Reasons an Acquiring Company May Pay More Than Book Value** The parent company often pays an amount in excess of the book value of the subsidiary company’s stock acquired. Although we have assumed here that it relates to the undervaluation of the subsidiary company’s land, any one, or a combination, of the following conditions might exist:

1. The fair, or current, value of one or more specific tangible or intangible assets of the subsidiary company may exceed its recorded value because of appreciation. Sometimes the application of conservative accounting procedures under generally accepted accounting principles results in book values that are lower than fair values for assets. Examples are:
  - a. The current expensing of some costs that may contain future benefits (for example, research and development expenditures),
  - b. The use of accelerated depreciation methods,

## Acquisition Accounting

## ILLUSTRATION 3-6

Implied Value exceeds Book Value

## Consolidated Balance Sheet Workpaper

80% Owned Subsidiary

## P Company and Subsidiary

Date of Acquisition

January 1, 2015

|   | P Company        | S Company        | Eliminations     |                  | Noncontrolling Interest | Consolidated Balances |
|---|------------------|------------------|------------------|------------------|-------------------------|-----------------------|
|   |                  |                  | Dr.              | Cr.              |                         |                       |
| Cash                                      | 26,000           | 20,000           |                  |                  |                         | 46,000                |
| Other Current Assets                      | 140,000          | 50,000           |                  |                  |                         | 190,000               |
| Plant and Equipment                       | 120,000          | 40,000           |                  |                  |                         | 160,000               |
| Land                                      | 40,000           | 20,000           | (2) 12,500       |                  |                         | 72,500                |
| Investment in S Company                   | 74,000           |                  |                  | (1) 74,000       |                         |                       |
| Difference between implied and book value |                  |                  | (1) 12,500       | (2) 12,500       |                         |                       |
| <b>Total Assets</b>                       | <b>\$400,000</b> | <b>\$130,000</b> |                  |                  |                         | <b>\$468,500</b>      |
| Liabilities                               | 60,000           | 50,000           |                  |                  |                         | 110,000               |
| Common Stock                              |                  |                  |                  |                  |                         |                       |
| P Company                                 | 200,000          |                  |                  |                  |                         | 200,000               |
| S Company                                 |                  | 50,000           | (1) 50,000       |                  |                         |                       |
| Other Contributed Capital                 |                  |                  |                  |                  |                         |                       |
| P Company                                 | 40,000           |                  |                  |                  |                         | 40,000                |
| S Company                                 |                  | 10,000           | (1) 10,000       |                  |                         |                       |
| Retained Earnings                         |                  |                  |                  |                  |                         |                       |
| P Company                                 | 100,000          |                  |                  |                  |                         | 100,000               |
| S Company                                 |                  | 20,000           | (1) 20,000       |                  |                         |                       |
| Noncontrolling Interest                   |                  |                  |                  | (1) 18,500       | 18,500                  | 18,500                |
| <b>Total Liabilities and Equity</b>       | <b>\$400,000</b> | <b>\$130,000</b> | <b>\$105,000</b> | <b>\$105,000</b> |                         | <b>\$468,500</b>      |

(1) To eliminate investment in S Company and create noncontrolling interest account.

(2) To distribute the difference between implied and book value.

- c. The use of the LIFO inventory method, and
  - d. The general prohibition against recognizing unrealized gains.
2. The excess payment may indicate the existence of unrecorded goodwill of the subsidiary company as reflected by its above-normal earning capacity.
  3. Liabilities, generally long-term ones, may be overvalued. For example, the subsidiary company may have 8% bonds payable outstanding when acquired by the parent company even though the market rate of interest is 12% at that time.
  4. A variety of market factors may affect the price paid for the stock. The mere entry of another large buyer of stock into the market would generally have the effect of increasing the stock's market price. In essence, the parent company is willing to pay a premium for the right to acquire control and the related economic advantages it expects to obtain from integrated operations.

IN  
THE  
NEWS

The agreement to a \$13.6 billion cash purchase of Jim Beam by Japanese beverage giant Suntory Holdings Limited represents the first big corporate acquisition of 2014 and is also a sign of the growing popularity of whiskey, particularly Kentucky Bourbon's whiskey, both overseas and domestically. The Japanese firm will pay \$83.50 per share, a 25percent premium to Beam's closing price of \$66.97 on the Friday previous to the announcement. The merger represents the largest deal that the Japanese firm has ever closed, which will elevate it to the third largest maker of distilled drinks worldwide. The merged company is expected to have annual sales of more than \$4.3 billion. According to analysts, this would give Suntory 11 percent of the spirits market share in the United States, up from less than 1 percent.<sup>14</sup>

<sup>14</sup> "Japan's Suntory Limited purchases Jim Beam for \$16 billion," by Laura Gomez, Jan 21, 2014, *Industry Leaders Magazine* (www.industryleadersmagazine.com).

### Case 3 (b): Implied Value of Subsidiary Is Less Than Book Value (IV < BV)—Partial Ownership (Less Than 100% of Subsidiary Stock Acquired)

Finally, we illustrate the less common situation where the purchase price is below the book value of the acquired equity, still assuming the existence of a noncontrolling interest. In this case, the implied value of the subsidiary is below its book value as well.

Assume that on January 1, 2015, P Company acquired 4,000 shares (80%) of the outstanding common stock of S Company for \$60,000, after which P Company has \$40,000 in cash and \$60,000 in an Investment in S Company. The implied value of the subsidiary is thus \$60,000/80% or \$75,000. The noncontrolling interest is \$75,000 × 20% or \$15,000. The book value of S Company equity of \$80,000 exceeds its implied value of \$75,000 by \$5,000. We assume that the difference between implied and book values is attributable to plant and equipment, in this case an overvaluation of \$5,000. The Computation and Allocation of Difference (CAD) Schedule would appear as follows:

#### Computation and Allocation of Difference (between Implied and Book Values) Schedule

|   | <i>Parent Share</i> | <i>Noncontrolling Share</i> | <i>Total Value</i>   |
|---|---------------------|-----------------------------|----------------------|
| Purchase price and implied value          | <u>\$60,000</u>     | <u>\$15,000</u>             | <u>\$75,000</u>      |
| Less: Book value of equity acquired:      |                     |                             |                      |
| Common stock                              | 40,000              | 10,000                      | <b>50,000</b>        |
| Other contributed capital                 | 8,000               | 2,000                       | <b>10,000</b>        |
| Retained earnings                         | <u>16,000</u>       | <u>4,000</u>                | <u><b>20,000</b></u> |
| Total book value                          | <u>\$64,000</u>     | <u>\$16,000</u>             | <u>\$80,000</u>      |
| Difference between implied and book value | (4,000)             | (1,000)                     | <b>(5,000)</b>       |
| Adjust Plant & Equipment downward         | <u>4,000</u>        | <u>1,000</u>                | <u><b>5,000</b></u>  |
| Balance                                   | <u>—0—</u>          | <u>—0—</u>                  | <u>—0—</u>           |

In this instance the difference is negative and is shown in parentheses, and the adjustment is a credit to plant & equipment. When the difference between cost and book value is negative (i.e., purchase price is below book values), it generally reflects one or a combination of the following:<sup>15</sup>

1. One or more of the subsidiary company's assets is overvalued,
2. One or more of the subsidiary company's liabilities is undervalued or unrecognized, or
3. The parent company simply made a bargain purchase.

As usual, the Computation and Allocation Schedule yields two eliminating/adjusting entries. The investment elimination entry is:

|     |  |        |        |
|-----|--|--------|--------|
| (1) | Common Stock—S Company                     | 50,000 |        |
|     | Other Contributed Capital—S Company        | 10,000 |        |
|     | Retained Earnings—S Company                | 20,000 |        |
|     | Difference between Implied and Book Values |        | 5,000  |
|     | Investment in S Company                    |        | 60,000 |
|     | Noncontrolling Interest in Equity          |        | 15,000 |

Note that when the difference is negative, it appears in the journal entry as a credit in order to balance the entry. In the second workpaper entry, this account will be debited to eliminate it, and the appropriate underlying asset and/or liability accounts will be adjusted

<sup>15</sup> Chapter 5 elaborates on these alternatives, with illustrations.

to reflect a net downward adjustment of net assets, in this case plant & equipment. The second elimination entry is:

|     |   |       |       |
|-----|---|-------|-------|
| (2) | Difference between Implied and Book Values<br>Plant and Equipment | 5,000 | 5,000 |
|-----|---|-------|-------|

A workpaper for a consolidated balance sheet at date of acquisition in this situation is presented in Illustration 3-7.

## Subsidiary Treasury Stock Holdings

A subsidiary may hold some of its own shares as treasury stock at the time the parent company acquires its interest. Recall that treasury stock is a contra-equity account, which has a debit balance on the books of the subsidiary. The computation of the percentage interest acquired, as well as the total equity acquired, is based on shares outstanding and should, therefore, exclude treasury shares.

For example, assume that P Company acquired 18,000 shares of S Company common stock on January 1, 2015, for a payment of \$320,000 when S Company's stockholders' equity section appeared as follows:

|  |                  |
|--|------------------|
| Common Stock, \$10 par, 25,000 shares issued | \$250,000        |
| Other Contributed Capital                    | 50,000           |
| Retained Earnings                            | 125,000          |
|  | <u>425,000</u>   |
| Less: Treasury Stock at Cost, 1,000 Shares   | <u>20,000</u>    |
| Total Stockholders' Equity                   | <u>\$405,000</u> |

| Acquisition Accounting                    |                  | ILLUSTRATION 3-7                     |                 |                 |                         |                       |
|---|------------------|--------------------------------------|-----------------|-----------------|-------------------------|-----------------------|
| Book Value Exceeds Implied Value          |                  | Consolidated Balance Sheet Workpaper |                 |                 |                         |                       |
| 80% Owned Subsidiary                      |                  | P Company and Subsidiary             |                 |                 |                         |                       |
| Date of Acquisition                       |                  | January 1, 2015                      |                 |                 |                         |                       |
|   | P Company        | S Company                            | Eliminations    |                 | Noncontrolling Interest | Consolidated Balances |
|   |                  |                                      | Dr.             | Cr.             |                         |                       |
| Cash                                      | 40,000           | 20,000                               |                 |                 |                         | 60,000                |
| Other Current Assets                      | 140,000          | 50,000                               |                 |                 |                         | 190,000               |
| Plant and Equipment                       | 120,000          | 40,000                               |                 | (2) 5,000       |                         | 155,000               |
| Land                                      | 40,000           | 20,000                               |                 |                 |                         | 60,000                |
| Investment in S Company                   | 60,000           |                                      |                 | (1) 60,000      |                         |                       |
| Difference between implied and book value |                  |                                      | (2) 5,000       | (1) 5,000       |                         |                       |
| Total Assets                              | <u>\$400,000</u> | <u>\$130,000</u>                     |                 |                 |                         | <u>\$465,000</u>      |
| Liabilities                               | 60,000           | 50,000                               |                 |                 |                         | 110,000               |
| Common Stock                              |                  |                                      |                 |                 |                         |                       |
| P Company                                 | 200,000          |                                      |                 |                 |                         | 200,000               |
| S Company                                 |                  | 50,000                               | (1) 50,000      |                 |                         |                       |
| Other Contributed Capital                 |                  |                                      |                 |                 |                         |                       |
| P Company                                 | 40,000           |                                      |                 |                 |                         | 40,000                |
| S Company                                 |                  | 10,000                               | (1) 10,000      |                 |                         |                       |
| Retained Earnings                         |                  |                                      |                 |                 |                         |                       |
| P Company                                 | 100,000          |                                      |                 |                 |                         | 100,000               |
| S Company                                 |                  | 20,000                               | (1) 20,000      |                 |                         |                       |
| Noncontrolling Interest                   |                  |                                      |                 | (1) 15,000      | 15,000                  | 15,000                |
| Total Liabilities and Equity              | <u>\$400,000</u> | <u>\$130,000</u>                     | <u>\$85,000</u> | <u>\$85,000</u> |                         | <u>\$465,000</u>      |

(1) To eliminate investment in S Company and create noncontrolling interest account.

(2) To distribute the difference between implied and book value.

P Company's interest in S Company is 75% (18,000 shares/24,000 shares), and the total implied value of S Company is \$320,000/75% or \$426,667. The implied value of the noncontrolling interest is  $\$426,667 \times 25\%$  or \$106,667. This results in a difference between implied and book values of  $\$426,667 - \$405,000$  or \$21,667.

Because the treasury stock account represents a contra stockholders' equity account, it must be eliminated by a credit when the investment account and subsidiary company's equity accounts are eliminated on the workpaper. Thus, the workpaper eliminating entry is:

|  |         |         |
|--|---------|---------|
| Common Stock—S Company                     | 250,000 |         |
| Other Contributed Capital—S Company        | 50,000  |         |
| Retained Earnings—S Company                | 125,000 |         |
| Difference between Implied and Book Values | 21,667  |         |
| Investment in S Company                    |         | 320,000 |
| Noncontrolling Interest in Equity          |         | 106,667 |
| Treasury Stock—S Company                   |         | 20,000  |

## Other Intercompany Balance Sheet Eliminations

Up to this point we have discussed the elimination of the subsidiary equity against the related investment account, with recognition in the consolidated accounts of the noncontrolling interest in equity. Balance sheet eliminations of a variety of intercompany receivables and payables are also often required. Intercompany accounts receivable, notes receivable, and interest receivable, for example, must be eliminated against the reciprocal accounts payable, notes payable, and interest payable. Cash advances among affiliated companies constitute receivables and payables and must be eliminated. Eliminations must also be made for all types of intercompany accruals for such items as rent and other services. The full amount of all intercompany receivables and payables is eliminated without regard to the percentage of control held by the parent company.

For example, to eliminate a \$25,000 cash advance made by P Company and received by S Company, the following entry would be made:

|                        |          |          |
|------------------------|----------|----------|
| Advance from P Company | \$25,000 |          |
| Advance to S Company   |          | \$25,000 |

Similarly, to eliminate a \$100,000 intercompany account receivable/payable, this entry would be made:

|                              |           |           |
|------------------------------|-----------|-----------|
| Accounts Payable (to S)      | \$100,000 |           |
| Accounts Receivable (from P) |           | \$100,000 |

## Adjusting Entries Prior to Eliminating Entries

At times, workpaper adjustments to accounting data may be needed before appropriate eliminating entries can be accomplished. The need for adjustments generally arises because of in-transit items where only one of the affiliates has recorded the effect of an intercompany transaction. For example, the parent company may have recorded a cash advance to one of its subsidiaries near year-end but the subsidiary has not yet recorded the receipt of the advance. Thus, the Advances to Subsidiary account on the parent company's books has no reciprocal account on the subsidiary company's books. An adjusting workpaper entry debiting Cash and crediting Advances from Parent is required so that the asset (cash) can be appropriately included in consolidated assets and a reciprocal account established that permits the elimination of intercompany advances. The workpaper eliminations columns may be used to enter these adjusting entries. Alternatively, it is possible simply to adjust the subsidiary company's statements prior to their entry on the workpaper.

**TEST YOUR KNOWLEDGE****3.2**

**NOTE:** Solutions to *Test Your Knowledge* questions are found at the end of each chapter before the end-of-chapter questions.

**Multiple Choice**

- Which of the following adjustments do not occur in the consolidating process?
  - Elimination of parent's retained earnings
  - Elimination of intra-company balances
  - Allocations of difference between implied and book values
  - Elimination of the investment account
- The noncontrolling interest in the subsidiary is reported as:
  - Asset
  - Liability
  - Equity
  - Expense

**True or False**

- \_\_\_\_\_ a. In computing the difference between the implied and book values, the implied value of the acquired entity will always equal the purchase price to the parent.
 

\_\_\_\_\_ b. In the Computation and Allocation of Difference (between Implied Value and Book Value) schedule for a stock acquisition, the implied value of subsidiary equity is computed as: (purchase price) divided by (percentage acquired by parent).

\_\_\_\_\_ c. Once the eliminating/adjusting entry columns of the worksheet are completed, the entries are posted to the books of the company's general ledger and therefore need not be repeated in the following year in the consolidating process.

\_\_\_\_\_ d. In allocating the difference between implied and book values, if the difference is more than needed to adjust all net assets to market values, then the excess is goodwill.

### 3.7 A COMPREHENSIVE ILLUSTRATION—MORE THAN ONE SUBSIDIARY COMPANY

No particular problem exists where the parent company owns a direct controlling interest in more than one subsidiary company. The balance sheet of each affiliate is entered on the workpaper, any adjustments needed are prepared, and all related intercompany accounts, including those between subsidiary companies, are eliminated. The remaining balances are combined, and they constitute the consolidated balance sheet.

It is useful at this point to look at an illustrative workpaper and consolidated balance sheet for a parent company, P Company, and its two subsidiaries, S Company and T Company. Assume that on January 1, 2015, P Company acquired 90% and 80% of the outstanding common stock of S Company and T Company for \$250,200 and \$115,000, respectively. Immediately after the stock acquisition, balance sheets of the affiliates were:

**January 1, 2015**

|                                     | <i>P Company</i> | <i>S Company</i> | <i>T Company</i> |
|-------------------------------------|------------------|------------------|------------------|
| Cash                                | \$ 81,800        | \$ 36,000        | \$ 4,000         |
| Accounts receivable (net)           | 68,000           | 59,000           | 10,000           |
| Inventories                         | 76,000           | 64,000           | 15,000           |
| Advances to T Company               | 20,000           |                  |                  |
| Investment in S Company             | 250,200          |                  |                  |
| Investment in T Company             | 115,000          |                  |                  |
| Plant and equipment (net)           | 200,000          | 241,000          | 130,000          |
| Land                                | 24,000           | 10,000           | 6,000            |
| <b>Total assets</b>                 | <b>\$835,000</b> | <b>\$410,000</b> | <b>\$165,000</b> |
| Accounts payable                    | \$ 85,000        | \$ 40,000        | \$ 25,000        |
| Notes payable                       | —0—              | 100,000          | —0—              |
| Common stock, \$10 par value        | 500,000          | 200,000          | 100,000          |
| Retained earnings                   | 250,000          | 70,000           | 40,000           |
| <b>Total liabilities and equity</b> | <b>\$835,000</b> | <b>\$410,000</b> | <b>\$165,000</b> |

*Other information*

1. On the date of acquisition, P Company mailed a cash advance of \$20,000 to T Company to improve T Company's working capital position. T Company had not yet received and, therefore, had not yet recorded the advance.
2. On the date of acquisition, P Company owed S Company \$6,000 for purchases on open account, and S Company owed T Company \$5,000 for such purchases. All these items had been sold by the purchasing companies prior to the date of acquisition.
3. The difference between implied and the book values of equity relates to the undervaluation of subsidiary plant and equipment.

Since the Investments are carried in two separate accounts, it is best to prepare two separate CAD Schedules, one for each investment, as follows:

**Computation and Allocation of Difference (between Implied and Book Values)  
Schedule (Investment in S Company)**

|   | <i>Parent Share</i> | <i>Noncontrolling Share</i> | <i>Total Value</i> |
|---|---------------------|-----------------------------|--------------------|
| Purchase price and implied value          | <u>\$250,200</u>    | <u>27,800</u>               | <u>278,000</u>     |
| Less: Book value of subsidiary equity:    |                     |                             |                    |
| Common stock                              | 180,000             | 20,000                      | <b>200,000</b>     |
| Retained earnings                         | <u>63,000</u>       | <u>7,000</u>                | <u>70,000</u>      |
| Total book value                          | <u>243,000</u>      | <u>27,000</u>               | <u>270,000</u>     |
| Difference between implied and book value | 7,200               | 800                         | <b>8,000</b>       |
| Adjust plant assets upward                | <u>(7,200)</u>      | <u>(800)</u>                | <u>(8,000)</u>     |
| Balance                                   | <u>—0—</u>          | <u>—0—</u>                  | <u>—0—</u>         |

**Computation and Allocation of Difference (between Implied and Book Values)  
Schedule (Investment in T Company)**

|   | <i>Parent Share</i> | <i>Noncontrolling Share</i> | <i>Total Value</i> |
|---|---------------------|-----------------------------|--------------------|
| Purchase price and implied value          | <u>\$115,000</u>    | <u>28,750</u>               | <u>143,750</u>     |
| Less: Book value of subsidiary equity:    |                     |                             |                    |
| Common stock                              | 80,000              | 20,000                      | <b>100,000</b>     |
| Retained earnings                         | <u>32,000</u>       | <u>8,000</u>                | <u>40,000</u>      |
| Total book value                          | <u>112,000</u>      | <u>28,000</u>               | <u>140,000</u>     |
| Difference between implied and book value | 3,000               | 750                         | <b>3,750</b>       |
| Adjust Plant Assets upward                | <u>(3,000)</u>      | <u>(750)</u>                | <u>(3,750)</u>     |
| Balance                                   | <u>—0—</u>          | <u>—0—</u>                  | <u>—0—</u>         |

A workpaper for the preparation of a consolidated balance sheet on January 1, 2015, for P, S, and T companies is presented in Illustration 3-8. Several items on the workpaper should be noted. The cash in transit from P Company to T Company was picked up through an adjusting entry; if not, \$20,000 cash would have been excluded from the consolidated balance sheet. The adjustment also provided a reciprocal account, Advance from P Company, that permitted the elimination of the intercompany transaction for advances. (The perceptive reader will have already noticed that the same net effect could have been accomplished by a combined adjusting and eliminating entry with a debit to Cash and a credit to Advance to T.)

The elimination of all intercompany accounts receivable and accounts payable, including those between subsidiary companies, was accomplished through one entry. There is no need to eliminate them individually. Notice also that the equity in each subsidiary company was eliminated against each individual investment account, with a corresponding amount recorded for the noncontrolling interest in each.

The formal consolidated balance sheet is prepared from the detail in the consolidated balance sheet columns of the workpaper and is presented in Illustration 3-9. Note the agreement between the common stock and retained earnings balances in the consolidated balance sheet and those in the final column of the workpaper (Illustration 3-8) for P Company. The balance sheet data are classified according to normal balance sheet arrangements. As discussed earlier, noncontrolling interest in consolidated net assets or equity should be shown as a component of stockholders' equity (preferably the first component of equity listed in the balance sheet).

## Acquisition Accounting

## ILLUSTRATION 3-8

| Implied Value exceeds Book Value             |                | Consolidated Balance Sheet Workpaper |                |                |                |  |  |                            |                          |
|--|----------------|--------------------------------------|----------------|----------------|----------------|--|--|----------------------------|--------------------------|
| Two Partially Owned Subsidiaries             |                | P Company and Subsidiaries           |                |                |                |  |  |                            |                          |
| Date of Acquisition                          |                | January 1, 2015                      |                |                |                |  |  |                            |                          |
|  | P<br>Company   | S<br>Company                         | T<br>Company   | Eliminations   |                |  |  | Noncontrolling<br>Interest | Consolidated<br>Balances |
|  |                |                                      |                | Dr.            | Cr.            |  |  |                            |                          |
| Cash   | 81,800         | 36,000                               | 4,000          | (a) 20,000     |                |  |  |                            | 141,800                  |
| Accounts Receivable (net)                    | 68,000         | 59,000                               | 10,000         |                | (2) 11,000     |  |  |                            | 126,000                  |
| Inventories                                  | 76,000         | 64,000                               | 15,000         |                |                |  |  |                            | 155,000                  |
| Advance to T Company                         | 20,000         |                                      |                |                | (1) 20,000     |  |  |                            |                          |
| Investment in S Company                      | 250,200        |                                      |                |                | (3) 250,200    |  |  |                            |                          |
| Investment in T Company                      | 115,000        |                                      |                |                | (4) 115,000    |  |  |                            |                          |
| Plant and Equipment (net)                    | 200,000        | 241,000                              | 130,000        | (5) 8,000      |                |  |  |                            |                          |
|  |                |                                      |                | (6) 3,750      |                |  |  |                            | 582,750                  |
| Land   | 24,000         | 10,000                               | 6,000          |                |                |  |  |                            | 40,000                   |
| Difference between<br>implied and book value |                |                                      |                | (3) 8,000      | (5) 8,000      |  |  |                            |                          |
|  |                |                                      |                | (4) 3,750      | (6) 3,750      |  |  |                            |                          |
| <b>Total Assets</b>                          | <b>835,000</b> | <b>410,000</b>                       | <b>165,000</b> |                |                |  |  |                            | <b>1,045,550</b>         |
| Accounts Payable                             | 85,000         | 40,000                               | 25,000         | (2) 11,000     |                |  |  |                            | 139,000                  |
| Notes Payable                                |                | 100,000                              |                |                |                |  |  |                            | 100,000                  |
| Common Stock                                 |                |                                      |                |                |                |  |  |                            |                          |
| P Company                                    | 500,000        |                                      |                |                |                |  |  |                            | 500,000                  |
| S Company                                    |                | 200,000                              |                | (3) 200,000    |                |  |  |                            |                          |
| T Company                                    |                |                                      | 100,000        | (4) 100,000    |                |  |  |                            |                          |
| Retained Earnings                            |                |                                      |                |                |                |  |  |                            |                          |
| P Company                                    | 250,000        |                                      |                |                |                |  |  |                            | 250,000                  |
| S Company                                    |                | 70,000                               |                | (3) 70,000     |                |  |  |                            |                          |
| T Company                                    |                |                                      | 40,000         | (4) 40,000     |                |  |  |                            |                          |
| Advance from P Company                       |                |                                      |                | (1) 20,000     | (a) 20,000     |  |  |                            |                          |
| Noncontrolling Interest                      |                |                                      |                |                | (3) 27,800     |  |  |                            |                          |
|  |                |                                      |                |                | (4) 28,750     |  |  | 56,550                     | 56,550                   |
| <b>Total Liabilities and Equity</b>          | <b>835,000</b> | <b>410,000</b>                       | <b>165,000</b> | <b>484,500</b> | <b>484,500</b> |  |  |                            | <b>1,045,550</b>         |

(a) To adjust for cash advance in transit from P Company to T Company.

(1) To eliminate intercompany advances.

(2) To eliminate intercompany accounts payable and receivable.

(3) To eliminate investment in S Company and create noncontrolling interest account.

(4) To eliminate investment in T Company and create noncontrolling interest account.

(5) To allocate the implied over book value for S Company to plant and equipment.

(6) To allocate the implied over book value for T Company to plant and equipment.



**ILLUSTRATION 3-9****Consolidated Balance Sheet P Company and Subsidiaries January 1, 2015**

| <i>Assets</i>                                      |                    |
|--|--------------------|
| Current assets:                                    |                    |
| Cash   | \$ 141,800         |
| Accounts receivable (net)                          | 126,000            |
| Inventories  | 155,000            |
| Total current assets                               | 422,800            |
| Plant and equipment (net)                          | 582,750            |
| Land   | 40,000             |
| Total assets                                       | <u>\$1,045,550</u> |
| <i>Liabilities and Stockholders' Equity</i>        |                    |
| Current liabilities:                               |                    |
| Accounts payable                                   | \$ 139,000         |
| Notes payable                                      | 100,000            |
| Total liabilities                                  | 239,000            |
| Stockholders' equity:                              |                    |
| Noncontrolling interest in consolidated net assets | \$ 56,550          |
| Common stock, \$10 par value                       | 500,000            |
| Retained earnings                                  | 806,550            |
| Total liabilities and stockholders' equity         | <u>\$1,045,550</u> |

**3.8 LIMITATIONS OF CONSOLIDATED STATEMENTS****Lo 6** Limitations of consolidated statements.

As noted earlier, consolidated statements may have limited usefulness for noncontrolling stockholders, subsidiary creditors, and some regulatory agencies. These groups may find little information of value to them in the consolidated statements because they contain insufficient detail about the individual subsidiaries. For example, creditors of a specific company have claims only against the resources of that company unless the parent guarantees the claims.

In addition, financial analysts have criticized consolidated statements on several counts. For example, highly diversified companies operating across several industries, often the result of mergers and acquisitions, are difficult to analyze or compare. For instance, *General Electric (GE)* reports consolidated financial statements that include its credit corporation. The combining of a financial company with a manufacturing company makes interpreting the statements more difficult. In an attempt to make the statements more readable, GE reports three columns with each statement: one showing the total consolidated statements, a column for GE, and a column for the credit corporation. Consolidated operating results for such companies cannot be compared with industry standards, nor can one conglomerate be compared with another. Both the SEC and the FASB have developed requirements for segmental reporting in an effort to address these concerns. Determining what constitutes a segment is not easy, however, and the standards have met criticism and subsequent revision. Segmental reporting is discussed in Chapter 14.

**Lo 10** Comparison of Business Combinations and Consolidations under U.S. GAAP and IFRS.

Regardless of these limitations, however, consolidated statements continue to grow in importance. The vast majority of publicly held companies own one or more subsidiaries and report on a consolidated basis. Thus, consolidated statements have assumed the position of primary statements, and the separate statements of individual subsidiaries are considered supplementary. The recent attention by both the FASB and the International Standards Board reaffirm this role. Illustration 3-10 provides a comparison of business combinations between U.S. GAAP and IFRS.

**ILLUSTRATION 3-10**

**Comparison of Business Combinations and Consolidations under U.S. GAAP and IFRS\***

| U.S. GAAP  | IFRS   |
|--|--|
| 1. Fair value of <b>contingent consideration</b> recorded at acquisition date, with subsequent adjustments recognized through earnings if contingent liability (no adjustment for equity).   | 1. IFRS 3R uses the same approach.   |
| 2. <b>Contractual contingent liabilities</b> assumed (such as warranties) are measured at fair value on the acquisition date. <b>Non-contractual contingent liabilities</b> (such as patent infringement) are measured at fair value only if it is more likely than not that a liability exists. | 2. Under IFRS 3R a contingent liability is recognized at the acquisition date if its fair value can be reliably measured.  |
| 3. <b>Noncontrolling interest</b> is recorded at fair value and is presented in equity.  | 3. Noncontrolling interest can be recorded either at fair value or at the proportionate share of the net assets acquired. Also presented in equity.  |
| 4. <b>Special purpose entities</b> (SPEs) are consolidated if the most significant activities of the SPE are controlled. Qualified SPEs (QSPEs) are no longer exempted from consolidation rules.   | 4. Special purpose entities (SPEs) are consolidated if controlled. QSPEs are not addressed.  |
| 5. <b>Direct acquisition costs</b> (excluding the costs of issuing debt or equity securities) are expensed.  | 5. IFRS 3R uses the same approach.   |
| 6. <b>Goodwill</b> is not amortized, but is tested for impairment using a two-step process.  | 6. Goodwill is not amortized, but is tested for impairment using a one-step process.   |
| 7. <b>Negative goodwill</b> in an acquisition is recorded as an ordinary gain in income (not extraordinary).   | 7. IAS 36 uses the same approach.  |
| 8. <b>Fair value</b> is based on exit prices, i.e. the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.  | 8. Fair value is the amount for which an asset could be exchanged or a liability settled between knowledgeable, willing parties in an arm's length transaction.                              |
| 9. <b>Purchased in-process R&amp;D</b> is capitalized with subsequent expenditures expensed. The capitalized portion is then amortized.  | 9. Purchased in-process R&D is capitalized with the potential for subsequent expenditures to be capitalized. The capitalized portion is then amortized. <b>IFRS</b>                          |
| 10. Parent and subsidiary <b>accounting policies do not need</b> to conform.   | 10. Parent and subsidiary accounting policies <b>do need</b> to conform.   |
| 11. <b>Restructuring plans</b> are accounted for separately from the business combination and generally expensed.  | 11. Similar accounting under IFRS 3 and amended IAS 27.  |
| 12. <b>Measurement period</b> ends at the earlier of a) one year from the acquisition date, or b) the date when the acquirer receives needed information to consummate the acquisition.  | 12. Similar to U.S. GAAP.  |
| 13. For <b>step acquisitions</b> , all previous ownership interests are adjusted to fair value, with any gain or loss recorded in earnings.  | 13. Similar to U.S. GAAP.  |
| 14. <b>Reporting dates</b> for the parent and subsidiary can be different up to three months. Significant events in that time must be <i>disclosed</i> .   | 14. Permits a three-month difference if impractical to prepare the subsidiary's statements on the same date; however, <i>adjustments are required</i> for significant events in that period. |
| 15. Potential voting rights are generally not considered in determining <b>control</b> .   | 15. Potential voting rights are considered if currently exercisable.   |

\*For complete coverage of the differences between IFRS and U.S. GAAP, see *IFRS 2009, Interpretation and Application of International Financial Reporting Standards*, by Epstein and Jermakowicz, 2009 (John Wiley & Sons, Inc.).


**SUMMARY**

- 1 *Understand the concept of control as used in reference to consolidations.* When one firm (referred to as the parent) effectively controls the activities of another firm (the subsidiary) through the direct or indirect ownership of some or all of its voting stock or by some other means, consolidated financial statements are required.
- 2 *Explain the role of a noncontrolling interest in business combinations.* The noncontrolling interest in a consolidated entity refers to the stock of the subsidiary firm, if any, which is not controlled by the parent. This interest appears as a component of equity in the consolidated balance sheet.
- 3 *Describe the reasons why a company acquires a subsidiary rather than its net assets.* A firm may acquire stock by open market purchases or by cash tender offers to the subsidiary's stockholders, thus avoiding the often lengthy and difficult negotiations that are required in a complete takeover. Control of the subsidiary's operations can be accomplished with a much smaller investment, since not all of the stock need be acquired. Also, the separate legal existence of the individual affiliates provides an element of protection of the parent's assets from attachment by creditors of the subsidiary.
- 4 *Describe the valuation and classification of accounts in consolidated financial statements.* In the consolidated balance sheet, the assets and liabilities of the subsidiary are combined with those of the parent on an item-by-item basis. Assets and liabilities are reflected at their fair market values, as determined at the date of acquisition, including goodwill, if any (and as subsequently depreciated, amortized, or adjusted for impairment).
- 5 *List the requirements for inclusion of a subsidiary in consolidated financial statements.* Essentially all controlled corporations should be consolidated with the controlling entity. Exceptions include those situations where: the subsidiary is in legal reorganization or bankruptcy, or a foreign subsidiary operates in an environment that casts significant doubt about the parent's effective control.
- 6 *Discuss the limitations of consolidated financial statements.* Consolidated financial statements are of limited use to noncontrolling stockholders, to subsidiary creditors, and possibly to regulatory agencies (e.g., if only the subsidiary is regulated). Also, when highly diversified companies operate across several industries, the aggregation of dissimilar data makes analysis difficult.
- 7 *Record the investment in the subsidiary on the parent's books at the date of acquisition.* On the books of the parent company, the investment is recorded as a debit to Investment in Subsidiary and a credit to the appropriate account(s) based on the consideration used in the exchange (cash, debt, stock, or a combination). Any stock issued is recorded at its fair market value, and the investment is thus also recorded at the fair value of consideration paid. Direct and indirect acquisition costs, if any, are recorded (expensed) separately from the acquisition.
- 8 *Prepare the consolidated workpapers and eliminating entries at the date of acquisition.* The consolidated workpapers serve to sum the assets and liabilities of the parent and subsidiary, with adjustments made to assets and liabilities of the subsidiary to "mark" their values to market values, based on the acquisition price implied for the entire subsidiary. These adjustments are accomplished via "eliminating and adjusting" entries, which also serve to eliminate the investment account against the subsidiary's equity accounts, and to recognize the noncontrolling interest in equity.
- 9 *Compute and allocate the difference between implied value and book value of the acquired firm's equity.* The difference between implied and book values of the acquired firm's equity is the amount by which the subsidiary's assets and liabilities must be adjusted in total (including the recognition of goodwill, if any). The use of an account by this name (difference between implied and book values) facilitates this process in the eliminating entries, and the differential account itself is eliminated.
- 10 *Discuss some of the similarities and differences between U.S. GAAP and IFRS with respect to the preparation of consolidated financial statements at the date of acquisition.* Both U.S. GAAP and IFRS now require that all controlled SPEs (special purpose entities) be consolidated, but U.S. GAAP still recognize variable interest entities (VIEs), while IFRS do not. IFRS allow a choice in the valuation of the noncontrolling interest in equity and related goodwill, while FASB requires the implied fair valuation (as evidenced by the acquisition price) for both. IFRS require that parent and subsidiary accounting policies conform; U.S. GAAP do not. Both now require the capitalization of purchased in-process R&D.

Appendix 3A, "Deferred Taxes on the Date of Acquisition," and Appendix 3B, "Consolidation of Variable Interest Entities," are available online at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter).

**TEST YOUR KNOWLEDGE****3.3**

**NOTE:** Solutions to *Test Your Knowledge* questions are found at the end of each chapter before the end-of-chapter questions.

## Multiple Choice

- Parent Company P purchased 90% of Subsidiary Company S for stock worth \$100,000. Subsidiary Company S had a net book value of \$50,000 including: “bonds payable” at a book value of \$10,000 and a fair value of \$15,000; “inventory” with a book value of \$5,000 and a fair value of \$7,000; and “PP&E” with a book value of \$10,000 and a fair value of \$20,000. Assuming the tax rate is 40% (and ignoring any deferred taxes on goodwill), net deferred taxes are:
  - \$2,520
  - \$2,800
  - \$6,120
  - \$6,800
- Assuming an acquisition is not a bargain, the impact of reflecting a net deferred tax liability account is that the firm will also reflect an increased amount of:
  - Land
  - Difference between Implied and Book Value
  - Common Stock
  - Goodwill

**TEST YOUR KNOWLEDGE SOLUTIONS****3.1**

1. a 2. a 3. d 4. d

**3.2**

1. a 2. c 3. a F 3. b T 3. c F 3. d T 2. d 3. d

**3.3**

1. b 2. d

**QUESTIONS**

(The letter A or B indicated for a question, exercise, or problem refers to a related appendix.)

- LO 3** 1. What are the advantages of acquiring the *majority* of the voting stock of another company rather than acquiring *all* its voting stock?
- LO 1** 2. What is the justification for preparing consolidated financial statements when, in fact, it is apparent that the consolidated group is not a legal entity?
- LO 6** 3. Why is it often necessary to prepare separate financial statements for each legal entity in a consolidated group even though consolidated statements provide a better economic picture of the combined activities?
- LO 5** 4. What aspects of control must exist before a subsidiary is consolidated?
- LO 8** 5. Why are consolidated workpapers used in preparing consolidated financial statements?
- LO 2** 6. Define noncontrolling (minority) interest. List three methods that might be used for reporting the noncontrolling interest in a consolidated balance sheet, and state which is preferred under current GAAP.
- LO 8** 7. Give several reasons why a parent company would be willing to pay more than book value for subsidiary stock acquired.
- LO 8** 8. What effect do subsidiary treasury stock holdings have at the time the subsidiary is acquired? How should the treasury stock be treated on consolidated workpapers?
- LO 8** 9. What effect does a noncontrolling interest have on the amount of intercompany receivables and payables eliminated on a consolidated balance sheet?
- 10A.** Current rules require that a deferred tax asset or liability be recognized for likely differences between the reported values and tax bases of assets and liabilities recognized in business combinations (for example, in exchanges that are nontaxable to the selling shareholders). Does this decision change the amount of consolidated net income reported in years subsequent to the business combination? Explain. (see Appendix 3A online at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter))

**Business Ethics**

**Part I.** You are working on the valuation of accounts receivable, and bad debt reserves for the current year's annual report. The CFO stops by and asks you to reduce the reserve by enough to increase the current year's EPS by 2 cents a share. The company's policy has always been to use the previous year's actual bad debt percentage adjusted for a specific economic index. The CFO's suggested change would still be within acceptable GAAP. However, later, you learn that with the increased EPS, the CFO would qualify for a significant bonus. What do you do and why?

**Part II.** Consider the following:

Accounting firm KPMG created tax shelters called BLIPS, FLIP, OPIS, and SOS that were based largely in the Cayman Islands and allowed wealthy clients (there were 186) to create \$5 billion in losses, which were then deducted from their income for IRS tax purposes. BLIPS (Bond Linked Issue Premium Structures) had clients borrow from an offshore bank for purposes of purchasing currency. The client would then sell the currency back to the

lender for a loss. However, the IRS contends the losses were phony and that there was never any risk to the client in the deals. The IRS has indicted eight former KPMG partners and an outside lawyer alleging that the transactions were shams, illegal methods for avoiding taxes. KPMG has agreed to pay a \$456 million fine, no longer to do tax shelters, and to cooperate with the government in its prosecution of the nine individuals involved in the tax shelter scheme.

Many argue that the courts have not always held that such tax avoidance schemes show criminal intent because the tax laws

permit individuals to minimize taxes. However, the IRS argues that these shelters evidence intent because of the lack of risk.

### Question

In this case, the IRS contends that the losses generated by the tax shelters were phony and that the clients never incurred any risk. Do tax avoidance schemes indicate criminal intent if the tax laws permit individuals to minimize taxes? Justify your answer.

## ANALYZING FINANCIAL STATEMENTS

### AFS3-1 eBay's Acquisitions

During 2005, eBay acquired four different companies. In the schedule below, the acquired companies are listed with the aggregate purchase price and with the estimated acquisition-related costs (dollars in thousands).

| <i>Acquired Company</i>           | <i>Aggregate Purchase Price</i> | <i>Acquisition-related costs</i> |
|-----------------------------------|---------------------------------|----------------------------------|
| Rent.com                          | \$435,365                       | \$2,000                          |
| International classified websites | 81,584                          | 1,300                            |
| Shopping.com                      | 685,285                         | 7,600                            |
| Skype                             | 2,593,426                       | not reported                     |

#### Required:

1. What are acquisition-related costs and how should eBay account for these costs?
2. Compute the ratio of acquisition-related cost to the purchase price of the acquisition for each acquired company with available information.
3. Record the journal entries made on eBay's books on February 23, 2005 when they acquired Rent.com (include entries for the acquisition and acquisition-related costs).
4. eBay acquired Skype on October 14, 2005. eBay's year-end is December 31, 2005, how many months of Skype's revenues and expenses can eBay include in its income statement for 2005?
5. eBay acquired various websites when it acquired International classified websites. The excess of the purchase price over the fair value of net tangible assets and identifiable intangible assets was \$71,771 thousand (or approximately 88% of the purchase price). What does this amount represent and why is this not unusual for an acquisition of this type?

### AFS3-2 eBay's Acquisition of Skype

On October 14, 2005, eBay acquired Skype, paying \$1.3 billion in cash plus \$1.3 billion in stock. However, approximately 60% of the Skype shareholders opted for a lower cash amount and stock up front for the possibility of receiving a potential performance-based payment of up to another \$1.3 billion in 2008 through 2009. In the following schedule, summary pro forma income statement data are prepared showing the performance of eBay as if the Skype acquisition were completed prior to the beginning of 2004. Summary data from the actual reported income statements for the two years are also presented in the following schedule.

#### Income Statement

| <i>Pro Forma (assumed combined)</i> | <i>2004</i> | <i>2005</i> |
|-------------------------------------|-------------|-------------|
| Net Revenue—pro forma               | \$3,277,534 | \$4,594,954 |
| Net Income—pro forma                | 684,905     | 944,057     |
| <i>As Reported by eBay</i>          | <i>2004</i> | <i>2005</i> |
| Net Revenue—actual                  | 3,271,309   | 4,552,401   |
| Net Income—actual                   | 778,223     | 1,082,043   |

**Required:**

1. Using these numbers, evaluate the wisdom of the acquisition of Skype by eBay. Discuss some of the reasons that ratio analyses alone may not tell the entire story.
2. Did the shareholders of Skype who opted for the lower cash amount and contingency payment make a wiser or poorer choice relative to the 40% who made the alternative choice? Why? What other factors might affect your answer?

**EXERCISES****EXERCISE 3-1 Workpaper Elimination Entries: 3 Cases LO 8**

Prepare in general journal form the workpaper entries to eliminate Prancer Company's investment in Saltez Company in the preparation of a consolidated balance sheet at the date of acquisition for each of the following independent cases:

| Cash | Percent of<br>Stock Owned | Investment<br>Cost | Saltez Company Equity Balances |                              |                      |
|------|---------------------------|--------------------|--------------------------------|------------------------------|----------------------|
|      |                           |                    | Common<br>Stock                | Other Contributed<br>Capital | Retained<br>Earnings |
| a.   | 100%                      | \$351,000          | \$160,000                      | \$92,000                     | \$43,000             |
| b.   | 90                        | 232,000            | 190,000                        | 75,000                       | (29,000)             |
| c.   | 80                        | 159,000            | 180,000                        | 40,000                       | (4,000)              |

Any difference between book value of net assets and the value implied by the purchase price relates to subsidiary property plant and equipment except for case (c). In case (c) assume that all book values and fair values are the same.

**EXERCISE 3-2 Stock Purchase Entries LO 7 LO 8**

On January 1, 2014, Polo Company purchased 100% of the common stock of Save Company by issuing 40,000 shares of its (Polo's) \$10 par value common stock with a market price of \$17.50 per share. Polo incurred cash expenses of \$20,000 for registering and issuing the common stock. The stockholders' equity section of the two companies' balance sheets on December 31, 2013, were:

|                              | Polo      | Save      |
|------------------------------|-----------|-----------|
| Common stock, \$10 par value | \$350,000 | \$320,000 |
| Other contributed capital    | 590,000   | 175,000   |
| Retained earnings            | 380,000   | 205,000   |

**Required:**

- A. Prepare the journal entry on the books of Polo Company to record the purchase of the common stock of Save Company and related expenses.
- B. Prepare the elimination entry required for the preparation of a consolidated balance sheet workpaper on the date of acquisition.

**EXERCISE 3-3 Consolidated Balance Sheet, Stock Purchase LO 7 LO 8**

On January 2, 2014, Prunce Company acquired 90% of the outstanding common stock of Sun Company for \$192,000 cash. Just before the acquisition, the balance sheets of the two companies were as follows:

|                             | Prunce           | Sun              |
|-----------------------------|------------------|------------------|
| Cash                        | \$260,000        | \$ 64,000        |
| Accounts receivable (net)   | 142,000          | 23,000           |
| Inventory                   | 117,000          | 54,000           |
| Plant and equipment (net)   | 386,000          | 98,000           |
| Land                        | 63,000           | 32,000           |
| Total asset                 | <u>\$968,000</u> | <u>\$271,000</u> |
| Accounts payable            | \$104,000        | \$ 47,000        |
| Mortgage payable            | 72,000           | 39,000           |
| Common stock, \$2 par value | 400,000          | 70,000           |
| Other contributed capital   | 208,000          | 20,000           |
| Retained earnings           | 184,000          | 95,000           |
| Total equities              | <u>\$968,000</u> | <u>\$271,000</u> |

The fair values of Sun Company's assets and liabilities are equal to their book values with the exception of land.

**Required:**

- A. Prepare a journal entry to record the purchase of Sun Company's common stock.
- B. Prepare a consolidated balance sheet at the date of acquisition.

**EXERCISE 3-4 Purchase, Date of Acquisition LO7 LO8 LO9**

On January 1, 2013, Peach Company issued 1,500 of its \$20 par value common shares with a fair value of \$60 per share in exchange for the 2,000 outstanding common shares of Swartz Company in a purchase transaction. Registration costs amounted to \$1,700, paid in cash. Just prior to the acquisition, the balance sheets of the two companies were as follows:

|                              | <i>Peach Company</i> | <i>Swartz Company</i> |
|------------------------------|----------------------|-----------------------|
| Cash                         | \$ 73,000            | \$ 13,000             |
| Accounts receivable (net)    | 95,000               | 19,000                |
| Inventory                    | 58,000               | 25,000                |
| Plant and equipment (net)    | 95,000               | 43,000                |
| Land                         | 26,000               | 22,000                |
| Total assets                 | <u>\$347,000</u>     | <u>\$122,000</u>      |
| Accounts payable             | \$ 66,000            | \$ 18,000             |
| Notes payable                | 82,000               | 21,000                |
| Common stock, \$20 par value | 100,000              | 40,000                |
| Other contributed capital    | 60,000               | 24,000                |
| Retained earnings            | 39,000               | 19,000                |
| Total equities               | <u>\$347,000</u>     | <u>\$122,000</u>      |

Any difference between the book value of equity and the value implied by the purchase price relates to goodwill.

**Required:**

- A. Prepare the journal entry on Peach Company's books to record the exchange of stock.
- B. Prepare a Computation and Allocation Schedule for the difference between book value and value implied by the purchase price.
- C. Prepare a consolidated balance sheet at the date of acquisition.

**EXERCISE 3-5 Treasury Stock Held by Subsidiary LO8**

Pool Company purchased 90% of the outstanding common stock of Spruce Company on December 31, 2014, for cash. At that time the balance sheet of Spruce Company was as follows:

|   |                    |
|---|--------------------|
| Current assets                            | \$1,050,000        |
| Plant and equipment                       | 990,000            |
| Land                                      | 170,000            |
| Total assets                              | <u>\$2,210,000</u> |
| Liabilities                               | \$ 820,000         |
| Common stock, \$20 par value              | 900,000            |
| Other contributed capital                 | 440,000            |
| Retained earnings                         | 150,000            |
| Total                                     | <u>2,310,000</u>   |
| Less treasury stock at cost, 5,000 shares | <u>100,000</u>     |
| Total equities                            | <u>\$2,210,000</u> |

**Required:**

Prepare the elimination entry required for the preparation of a consolidated balance sheet workpaper on December 31, 2014, assuming:

- (1) The purchase price of the stock was \$1,400,000. Assume that any difference between the book value of net assets and the value implied by the purchase price relates to subsidiary land.
- (2) The purchase price of the stock was \$1,160,000. Assume that the subsidiary land has a fair value of \$180,000, and the other assets and liabilities are fairly valued.

**EXERCISE 3-6 Elimination Entry, Consolidated Balance Sheet LO 8**

On December 31, 2013, Price Company purchased a controlling interest in Shipley Company. The balance sheet of Price Company and the consolidated balance sheet on December 31, 2013, were as follows:

|  | <i>Price Company</i> | <i>Consolidated</i> |
|--|----------------------|---------------------|
| Cash                                       | \$ 22,000            | \$ 37,900           |
| Accounts receivable                        | 35,000               | 57,000              |
| Inventory                                  | 127,000              | 161,600             |
| Investment in Shipley Company              | 212,000              | —0—                 |
| Plant and equipment (net)                  | 190,000              | 337,000             |
| Land                                       | <u>120,000</u>       | <u>220,412</u>      |
| Total                                      | <u>\$706,000</u>     | <u>\$813,912</u>    |
| Accounts payable                           | \$ 42,000            | \$112,500           |
| Note payable                               | 100,000              | 100,000             |
| Noncontrolling interest in Shipley Company | —0—                  | 37,412              |
| Common stock                               | 300,000              | 300,000             |
| Other contributed capital                  | 164,000              | 164,000             |
| Retained earnings                          | <u>100,000</u>       | <u>100,000</u>      |
| Total                                      | <u>\$706,000</u>     | <u>\$813,912</u>    |

On the date of acquisition, the stockholders' equity section of Shipley Company's balance sheet was as follows:

|                           |                  |
|---------------------------|------------------|
| Common stock              | \$ 90,000        |
| Other contributed capital | 90,000           |
| Retained earnings         | <u>56,000</u>    |
| Total                     | <u>\$236,000</u> |

**Required:**

- A. Prepare the investment elimination entry made to complete a consolidated balance sheet workpaper. Any difference between book value and the value implied by the purchase price relates to subsidiary land.
- B. Prepare Shipley Company's balance sheet as it appeared on December 31, 2013.

**EXERCISE 3-7 Intercompany Receivables and Payables LO 8**

Polychromasia, Inc. had a number of receivables from subsidiaries at the balance sheet date, as well as several payables to subsidiaries. Of its five subsidiaries, four are consolidated in the financial statements (Green Company, Black Inc., White & Sons, and Silver Co.). Only the Brown Company is not consolidated with Polychromasia and the other affiliates. The following list of receivables and payables shows balances at 12/31/13.

|  |           |
|--|-----------|
| Interest receivable from the Brown Company | \$ 50,000 |
| Interest payable to Black Inc.             | 75,000    |
| Intercompany payable to Silver Co.         | 105,000   |
| Long-term advance to Green Company         | 150,000   |
| Long-term payable to Silver Co.            | 450,000   |
| Long-term receivable from Brown Company    | 500,000   |

**Required:**

- A. Show the classification and amount(s) that should be reported in the consolidated balance sheet of Polychromasia, Inc. and Subsidiaries at 12/31/13 as receivable from subsidiaries.
- B. Show the classification and amount(s) that should be reported in the consolidated balance sheet of Polychromasia, Inc. and Subsidiaries at 12/31/13 as payable to subsidiaries.



**EXERCISE 3-8 Stock Acquisition, Journal Entry by Parent LO7**

Peep Inc. acquired 100% of the outstanding common stock of Shy Inc. for \$2,500,000 cash and 15,000 shares of its common stock (\$2 par value). The stock's market value was \$40 on the acquisition date.

**Required:**

Prepare the journal entry to record the acquisition.

**EXERCISE 3-9 Acquisition Costs LO7**

Assume the same information from Exercise 3–8. In addition, Peep Inc. incurred the following direct costs:

|   |                 |
|---|-----------------|
| Accounting fees for the purchase            | \$15,000        |
| Legal fees for registering the common stock | 30,000          |
| Other legal fees for the acquisition        | 45,000          |
| Travel expenses to meet with Shy managers   | 5,000           |
| SEC filing fees                             | 2,000           |
|   | <u>\$97,000</u> |

Before the acquisition consummation date, \$90,000 of the direct costs was charged to a deferred charges account pending the completion of the acquisition. The remaining \$7,000 has not been accrued or paid.

**Required:**

Prepare the journal entry to record both the acquisition and the direct costs.

**EXERCISE 3-10A Deferred Tax Effects, Acquisition Entry and Eliminating Entries (See Appendix 3A online at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter))**

Patel Company issued 95,000 shares of \$1 par value common stock (market value of \$6/share) for 95% of the common stock of Seely Company on January 1, 2014. Seely Company had the following assets, liabilities, and owners' equity at that time:

|                                      | <i>Book Value/Tax Basis</i> | <i>Fair Value</i> | <i>Difference</i> |
|--------------------------------------|-----------------------------|-------------------|-------------------|
| Cash                                 | \$ 20,000                   | \$ 20,000         | \$—0—             |
| Accounts receivable                  | 112,000                     | 112,000           | —0—               |
| Inventory (LIFO)                     | 82,000                      | 134,000           | 52,000            |
| Land                                 | 30,000                      | 55,000            | 25,000            |
| Plant assets (net)                   | 392,000                     | 463,000           | 71,000            |
| Total assets                         | <u>\$636,000</u>            | <u>\$784,000</u>  | <u>\$148,000</u>  |
| Allowance for uncollectible accounts | \$ 10,000                   | \$ 10,000         | \$—0—             |
| Accounts payable                     | 54,000                      | 54,000            | —0—               |
| Bonds payable                        | 200,000                     | 180,000           | 20,000            |
| Common stock, \$1 par value          | 80,000                      |                   |                   |
| Other contributed capital            | 132,000                     |                   |                   |
| Retained earnings                    | 160,000                     |                   |                   |
| Total equities                       | <u>\$636,000</u>            |                   |                   |

**Required:**

- A. Prepare the stock acquisition entry on the books of Patel Company, taking into account tax effects. Assume an income tax rate of 40%.
- B. Prepare eliminating entries for the preparation of a consolidated balance sheet workpaper on January 1, 2014.

**EXERCISE 3-11A Deferred Tax Effects at Date of Acquisition (See Appendix 3A online at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter))**

Profect Company purchased the Starless Company in a nontaxable combination consummated as a stock acquisition. Profect issued 10,000 shares of \$5 par value common stock, with a market value of \$70, in exchange for all the stock of Starless. The following information about Starless Company is available on the combination date.

**Starless Company**

|  |           |
|--|-----------|
| Book value of net assets   | \$600,000 |
| Deferred tax liability from using<br>Modified Accelerated Cost Recover System<br>(MACRS) depreciation for tax purposes | 24,000    |

| <i>Other Items</i>                                     | <i>Book Value</i> | <i>Fair Value</i> |
|--|-------------------|-------------------|
| Fixed assets   | \$410,000         | \$490,000         |
| Long-term debt   | 450,000           | 500,000           |
| The current and future tax rate is expected to be 40%. |                   |                   |

**Required:**

Prepare the journal entry to record the acquisition, taking into account tax effects.

**ASC Exercises:** For all ASC exercises indicate as part of your answer: the Codification topic, subtopic, section, and paragraph upon which your answer is based (unless otherwise specified). All ASC questions require access to the FASB Codification.

- ASC3-1** **Presentation** A company considered displaying negative amounts using red print in a manner that clearly distinguishes the negative attribute. When determining methods of display, does the company need to give consideration to the limitations of reproduction and microfilming processes?
- ASC3-2** **Cross-Reference** Accounting for contingencies was originally addressed in *SFAS No. 5*. Where is this information included in the Codification? Is all the guidance listed within one topic?
- ASC3-3** **Disclosure** There are two specific operating cash payments that are required to be disclosed as supplemental information to the statement of cash flows (if not presented as line items under the direct method). What are they and where is this located in the Codification?
- ASC3-4** **Measurement** Can treasury stock be listed as an asset on the balance sheet?
- ASC3-5** **Measurement** Suppose a firm purchases treasury stock but pays an amount significantly larger than the market value of the stock. Describe the appropriate accounting for the treasury stock.
- ASC3-6** **Cross-Reference** Variable interest entities (VIEs) are discussed in *FASB Interpretation No. 46R*. List all the topics in the Codification where this information can be found (i.e., ASC XXX). (*Hint: There are three main topics.*)

**PROBLEMS****PROBLEM 3-1 Consolidated Workpaper: Two Cases LO 8 LO 9**

The two following separate cases show the financial position of a parent company and its subsidiary company on November 30, 2014, just after the parent had purchased 90% of the subsidiary's stock:

|                         | <i>Case I</i>      |                  | <i>Case II</i>     |                  |
|-------------------------|--------------------|------------------|--------------------|------------------|
|                         | <i>P Company</i>   | <i>S Company</i> | <i>P Company</i>   | <i>S Company</i> |
| Current assets          | \$ 880,000         | \$260,000        | \$ 780,000         | \$280,000        |
| Investment in S Company | 190,000            |                  | 190,000            |                  |
| Long-term assets        | 1,400,000          | 400,000          | 1,200,000          | 400,000          |
| Other assets 90,000     | 40,000             | 70,000           | 70,000             |                  |
| Total                   | <u>\$2,560,000</u> | <u>\$700,000</u> | <u>\$2,240,000</u> | <u>\$750,000</u> |
| Current liabilities     | \$ 640,000         | \$270,000        | \$ 700,000         | \$260,000        |
| Long-term liabilities   | 850,000            | 290,000          | 920,000            | 270,000          |
| Common stock            | 600,000            | 180,000          | 600,000            | 180,000          |
| Retained earnings       | 470,000            | (40,000)         | 20,000             | 40,000           |
| Total                   | <u>\$2,560,000</u> | <u>\$700,000</u> | <u>\$2,240,000</u> | <u>\$750,000</u> |

**Required:**

- A.** Prepare a November 30, 2014, consolidated balance sheet workpaper for each of the foregoing cases. In Case I, any difference between book value of equity and the value implied by the purchase price relates to subsidiary long-term assets. In Case II, assume that any excess of book value over the value implied by purchase price is due to overvalued long-term assets.
- B.** Assume that Company S's balance sheet is the same as the balance sheet used in Case I (from part A). Suppose that there were 50,000 shares of S Company common stock outstanding and that Company P acquired

90% of the shares for \$4.50 a share. Shortly after acquisition, the noncontrolling shares were selling for \$4.25 a share. Prepare a computation and allocation of difference schedule considering this information.

**PROBLEM 3-2 Consolidated Balance Sheet Workpaper LO 8 LO 9**

On January 1, 2014, Perry Company purchased 8,000 shares of Soho Company's common stock for \$120,000. Immediately after the stock acquisition, the statements of financial position of Perry and Soho appeared as follows:

| <i>Assets</i>                         | <i>Perry</i>     | <i>Soho</i>      |
|---------------------------------------|------------------|------------------|
| Cash                                  | \$ 39,000        | \$ 19,000        |
| Accounts receivable                   | 53,000           | 31,000           |
| Inventory                             | 42,000           | 25,000           |
| Investment in Soho Company            | 120,000          |                  |
| Plant assets                          | 160,000          | 110,500          |
| Accumulated depreciation—plant assets | (52,000)         | (19,500)         |
| Total                                 | <u>\$362,000</u> | <u>\$166,000</u> |
| <i>Liabilities and Owners' Equity</i> |                  |                  |
| Current liabilities                   | \$ 18,500        | \$ 26,000        |
| Mortgage notes payable                | 40,000           |                  |
| Common stock, \$10 par value          | 120,000          | 100,000          |
| Other contributed capital             | 135,000          | 16,500           |
| Retained earnings                     | 48,500           | 23,500           |
| Total                                 | <u>\$362,000</u> | <u>\$166,000</u> |

**Required:**

- A. Calculate the percentage of Soho acquired by Perry Company. Prepare a schedule to compute the difference between book value of equity and the value implied by the purchase price. Any difference between the book value of equity and the value implied by the purchase price relates to subsidiary plant assets.
- B. Prepare a consolidated balance sheet workpaper as of January 1, 2014.
- C. Suppose instead that Perry acquired the 8,000 shares for \$20 per share including a \$5 per share control premium. Prepare a computation and allocation of difference schedule.

**PROBLEM 3-3 Intercompany Bond Holdings at Par, 90% Owned Subsidiary LO 8 LO 9**

Balance sheets for P Company and S Company on August 1, 2014, are as follows:

|                               | <i>P Company</i>   | <i>S Company</i> |
|-------------------------------|--------------------|------------------|
| Cash                          | \$ 165,500         | \$106,000        |
| Receivables                   | 366,000            | 126,000          |
| Inventory                     | 261,000            | 108,000          |
| Investment in bonds           | 306,000            | —0—              |
| Investment in S Company stock | 586,500            | —0—              |
| Plant and equipment (net)     | 573,000            | 320,000          |
| Land                          | 200,000            | 300,000          |
| Total                         | <u>\$2,458,000</u> | <u>\$960,000</u> |
| Accounts payable              | \$ 174,000         | \$ 58,000        |
| Accrued expenses              | 32,400             | 26,000           |
| Bonds payable, 8%             | —0—                | 200,000          |
| Common stock                  | 1,500,000          | 460,000          |
| Other contributed capital     | 260,000            | 60,000           |
| Retained earnings             | 491,600            | 156,000          |
| Total                         | <u>\$2,458,000</u> | <u>\$960,000</u> |

**Required:**

Prepare a workpaper for a consolidated balance sheet for P Company and its subsidiary on August 1, 2014, taking into consideration the following:

1. P Company acquired 90% of the outstanding common stock of S Company on August 1, 2014, for a cash payment of \$586,500.

- Included in the Investment in Bonds account are \$40,000 par value of S Company bonds payable that were purchased at par by P Company in 2002. The bonds pay interest on April 30 and October 31. S Company has appropriately accrued interest expense on August 1, 2014; P Company, however, inadvertently failed to accrue interest income on the S Company bonds.
- Included in P Company receivables is a \$35,000 cash advance to S Company that was mailed on August 1, 2014. S Company had not yet received the advance at the time of the preparation of its August 1, 2014.
- Assume that any excess of book value over the value implied by purchase price is due to overvalued plant and equipment.

### PROBLEM 3-4 Parent and Two Subsidiaries, Intercompany Notes

On January 2, 2014, Phillips Company purchased 80% of Sanchez Company and 90% of Thomas Company for \$225,000 and \$168,000, respectively. Immediately before the acquisitions, the balance sheets of the three companies were as follows:

|                           | <i>Phillips</i>  | <i>Sanchez</i>   | <i>Thomas</i>    |
|---------------------------|------------------|------------------|------------------|
| Cash                      | \$400,000        | \$ 43,700        | \$ 20,000        |
| Accounts receivable       | 28,000           | 24,000           | 20,000           |
| Note receivable           | —0—              | 10,000           | —0—              |
| Interest receivable       | —0—              | 300              | —0—              |
| Inventory                 | 120,000          | 96,000           | 43,000           |
| Equipment                 | 60,000           | 40,000           | 30,000           |
| Land                      | 180,000          | 80,000           | 70,000           |
| Total                     | <u>\$788,000</u> | <u>\$294,000</u> | <u>\$183,000</u> |
| Accounts payable          | \$ 28,000        | \$ 20,000        | \$ 18,000        |
| Note payable              | —0—              | —0—              | 10,000           |
| Common stock              | 300,000          | 120,000          | 75,000           |
| Other contributed capital | 300,000          | 90,000           | 40,000           |
| Retained earnings         | 160,000          | 64,000           | 40,000           |
| Total                     | <u>\$788,000</u> | <u>\$294,000</u> | <u>\$183,000</u> |

The note receivable and interest receivable of Sanchez relate to a loan made to Thomas Company on October 1, 2013. Thomas failed to record the accrued interest expense on the note.

#### Required:

Prepare a consolidated balance sheet workpaper as of January 2, 2014. Any difference between book value and the value implied by the purchase price relates to subsidiary land.

### PROBLEM 3-5 Determining Balance Sheet Prior to Consolidation LO 8

On January 1, 2014, Pat Company purchased 90% of the outstanding common stock of Solo Company for \$236,000 cash. The balance sheet for Pat Company just before the acquisition of Solo Company stock, along with the consolidated balance sheet prepared at the date of acquisition, follows.

|                                       | <i>Pat Company</i><br><i>December 31, 2013</i> | <i>Consolidated</i><br><i>January 1, 2014</i> |
|---------------------------------------|--|---|
| Cash                                  | \$ 540,000                                     | \$ 352,000                                    |
| Accounts receivable                   | 272,000  | 346,000                                       |
| Advances to Solo Company              | 10,000   |   |
| Inventory                             | 376,000  | 451,000                                       |
| Plant and equipment                   | 622,000  | 820,000                                       |
| Land                                  | 350,000  | 421,000                                       |
| Total                                 | <u>\$2,170,000</u>                             | <u>\$2,390,000</u>                            |
| Accounts payable                      | \$ 280,000                                     | \$ 386,000                                    |
| Long-term liabilities                 | 520,000  | 605,500                                       |
| Noncontrolling interest in subsidiary |  | 28,500  |
| Common stock                          | 890,000  | 890,000                                       |
| Other contributed capital             | 300,000  | 300,000                                       |
| Retained earnings                     | 180,000  | 180,000                                       |
| Total                                 | <u>\$2,170,000</u>                             | <u>\$2,390,000</u>                            |

One week before the acquisition, Pat Company had advanced \$10,000 to Solo Company. Solo Company had not yet recorded the transaction on the date of acquisition. In addition, on the date of acquisition, Solo Company owed Pat Company \$4,000 for purchases of merchandise on account. The merchandise had been sold to outside parties prior to the date of acquisition.

**Required:**

- Determine the amount of cash that appeared on Solo Company's balance sheet immediately prior to the acquisition of its stock by Pat Company.
- Determine the amount of total stockholders' equity on Solo Company's separate balance sheet at the date of acquisition.
- Determine the amount of total assets appearing on Solo Company's separate balance sheet on the date of acquisition.

**PROBLEM 3-6 In-Transit Items LO 8**

On July 31, 2014, Ping Company purchased 90% of Santos Company's common stock for \$2,010,000 cash. Immediately after the acquisition, the two companies' balance sheets were as follows:

|                              | <i>Ping</i>               | <i>Santos</i>             |
|------------------------------|---------------------------|---------------------------|
| Cash                         | \$ 320,000                | \$ 150,000                |
| Accounts receivable          | 600,000                   | 300,000                   |
| Note receivable              | 100,000                   | —0—                       |
| Inventory                    | 1,840,000                 | 400,000                   |
| Advance to Santos Company    | 60,000                    | —0—                       |
| Investment in Santos Company | 2,010,000                 | —0—                       |
| Plant and equipment (net)    | 3,000,000                 | 1,500,000                 |
| Land                         | 90,000                    | 90,000                    |
| <b>Total</b>                 | <b><u>\$8,020,000</u></b> | <b><u>\$2,440,000</u></b> |
| Accounts payable             | \$ 800,000                | \$ 140,000                |
| Notes payable                | 900,000                   | 100,000                   |
| Common stock                 | 2,400,000                 | 900,000                   |
| Other contributed capital    | 2,200,000                 | 680,000                   |
| Retained earnings            | 1,720,000                 | 620,000                   |
| <b>Total</b>                 | <b><u>\$8,020,000</u></b> | <b><u>\$2,440,000</u></b> |

Santos Company has not yet recorded the \$60,000 cash advance from Ping Company. Ping Company's accounts receivable include \$20,000 due from Santos Company. Santos Company's \$100,000 note payable is payable to Ping Company. Neither company has recorded \$7,000 of interest accrued on the note from January 1 to July 31. Any difference between book value and the value implied by the purchase price relates to land.

**Required:**

Prepare a consolidated balance sheet workpaper on July 31, 2014.

**PROBLEM 3-7 Purchase Using Cash and Using Stock LO 8**

Balance sheets for Prego Company and Sprague Company as of December 31, 2013, follow:

|                              | <i>Prego Company</i>      | <i>Sprague Company</i>  |
|------------------------------|---------------------------|-------------------------|
| Cash                         | \$ 700,000                | \$111,000               |
| Accounts receivable (net)    | 892,000                   | 230,000                 |
| Inventory                    | 544,000                   | 60,000                  |
| Property and equipment (net) | \$1,927,000               | \$468,000               |
| Land                         | 120,000                   | 94,000                  |
| <b>Total assets</b>          | <b><u>\$4,183,000</u></b> | <b><u>\$963,000</u></b> |
| Accounts payable             | \$ 302,000                | \$152,000               |
| Notes payable                | 588,000                   | 61,000                  |
| Long-term debt               | 350,000                   | 90,000                  |
| Common stock                 | 1,800,000                 | 500,000                 |
| Other contributed capital    | 543,000                   | 80,000                  |
| Retained earnings            | 600,000                   | 80,000                  |
| <b>Total equities</b>        | <b><u>\$4,183,000</u></b> | <b><u>\$963,000</u></b> |

The fair values of Sprague Company's assets and liabilities are equal to their book values.

**Required:**

Prepare a consolidated balance sheet as of January 1, 2014, under each of the following assumptions:

- A. On January 1, 2014, Prego Company purchased 90% of the outstanding common stock of Sprague Company for \$594,000.
- B. On January 1, 2014, Prego Company exchanged 11,880 of its \$20 par value common shares with a fair value of \$50 per share for 90% of the outstanding common shares of Sprague Company. The transaction is a purchase.

**PROBLEM 3-8 Intercompany Items, Two Subsidiaries LO7 LO8 LO9**

On February 1, 2014, Punto Company purchased 95% of the outstanding common stock of Sara Company and 85% of the outstanding common stock of Rob Company. Immediately before the two acquisitions, balance sheets of the three companies were as follows:

|                              | <i>Punto</i>     | <i>Sara</i>      | <i>Rob</i>      |
|------------------------------|------------------|------------------|-----------------|
| Cash                         | \$165,000        | \$ 45,000        | \$17,000        |
| Accounts receivable          | 35,000           | 35,000           | 26,000          |
| Notes receivable             | 18,000           | —0—              | —0—             |
| Merchandise inventory        | 106,000          | 35,500           | 14,000          |
| Prepaid insurance            | 13,500           | 2,500            | 500             |
| Advances to Sara Company     | 10,000           |                  |                 |
| Advances to Rob Company      | 5,000            |                  |                 |
| Land                         | 248,000          | 43,000           | 15,000          |
| Buildings (net)              | 100,000          | 27,000           | 16,000          |
| Equipment (net)              | 35,000           | 10,000           | 2,500           |
| <b>Total</b>                 | <u>\$735,500</u> | <u>\$198,000</u> | <u>\$91,000</u> |
| Accounts payable             | \$ 25,500        | \$ 20,000        | \$10,500        |
| Income taxes payable         | 30,000           | 10,000           | —0—             |
| Notes payable                | —0—              | 6,000            | 10,500          |
| Bonds payable                | 100,000          | —0—              | —0—             |
| Common stock, \$10 par value | 300,000          | 144,000          | 42,000          |
| Other contributed capital    | 150,000          | 12,000           | 38,000          |
| Retained earnings (deficit)  | 130,000          | 6,000            | (10,000)        |
| <b>Total</b>                 | <u>\$735,500</u> | <u>\$198,000</u> | <u>\$91,000</u> |

The following additional information is relevant.

1. One week before the acquisitions, Punto Company had advanced \$10,000 to Sara Company and \$5,000 to Rob Company. Sara Company recorded an increase to Accounts Payable for its advance, but Rob Company had not recorded the transaction.
2. On the date of acquisition, Punto Company owed Sara Company \$12,000 for purchases on account, and Rob Company owed Punto Company \$3,000 and Sara Company \$6,000 for such purchases. The goods purchased had all been sold to outside parties prior to acquisition.
3. Punto Company exchanged 13,400 shares of its common stock with a fair value of \$12 per share for 95% of the outstanding common stock of Sara Company. In addition, stock issue fees of \$4,000 were paid in cash. The acquisition was accounted for as a purchase.
4. Punto Company paid \$50,000 cash for the 85% interest in Rob Company.
5. Three thousand dollars of Sara Company's notes payable and \$9,500 of Rob Company's notes payable were payable to Punto Company.
6. Assume that for Sara, any difference between book value and the value implied by the purchase price relates to subsidiary land. However, for Rob, assume that any excess of book value over the value implied by the purchase price is due to overvalued buildings.

**Required:**

- A. Give the book entries to record the two acquisitions in the accounts of Punto Company.
- B. Prepare a consolidated balance sheet workpaper immediately after acquisition.
- C. Prepare a consolidated balance sheet at the date of acquisition for Punto Company and its subsidiaries.

**PROBLEM 3-9 Intercompany Notes, 90% Acquisition LO8 LO9**

On January 1, 2015, Pope Company purchased 90% of Sun Company's common stock for \$5,800,000 cash. Immediately after the acquisition, the two companies' balance sheets were as follows:

|                           | <i>Pope</i>         | <i>Sun</i>         |
|---------------------------|---------------------|--------------------|
| Cash                      | \$ 297,000          | \$ 165,000         |
| Accounts receivable       | 432,000             | 468,000            |
| Notes receivable          | 90,000              |                    |
| Inventory                 | 1,980,000           | 1,447,000          |
| Investment in Sun Company | 5,800,000           |                    |
| Plant and equipment (net) | 5,730,000           | 3,740,000          |
| Land                      | 1,575,000           | 908,000            |
| Total                     | <u>\$15,904,000</u> | <u>\$6,728,000</u> |
| Accounts payable          | \$ 698,000          | \$ 247,000         |
| Notes payable             | 2,250,000           | 110,000            |
| Common stock (\$15 par)   | 4,500,000           | 5,250,000          |
| Other contributed capital | 5,198,000           | 396,000            |
| Treasury stock held       |                     | (1,200,000)        |
| Retained earnings         | 3,258,000           | 1,925,000          |
| Total                     | <u>\$15,904,000</u> | <u>\$6,728,000</u> |

Sun Company's note payable includes a \$90,000 note payable to Pope Company, plus \$20,000 payable to a bank. Any difference between book value and the value implied by the purchase price relates to subsidiary property and equipment.

**Required:**

- A. Prepare a Computation and Allocation Schedule for the difference between book value of equity and the value implied by the purchase price.
- B. Prepare a consolidated balance sheet workpaper on January 1, 2015.

**PROBLEM 3-10A Deferred Tax Effects** (See Appendix 3A online at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter))

On January 1, 2015, Pruitt Company issued 25,500 shares of its common stock in exchange for 85% of the outstanding common stock of Shah Company. Pruitt's common stock had a fair value of \$28 per share at that time (par value of \$2 per share). Pruitt Company uses the cost method to account for its investment in Shah Company and files a consolidated income tax return. A schedule of the Shah Company assets acquired and liabilities assumed at book values (which are equal to their tax bases) and fair values follows.

| <i>Item</i>               | <i>Book Value/<br/>Tax Basis</i> | <i>Fair Value</i>  | <i>Excess</i>    |
|---------------------------|----------------------------------|--------------------|------------------|
| Receivables (net)         | \$125,000                        | \$ 125,000         | \$ —0—           |
| Inventory                 | 167,000                          | 195,000            | 28,000           |
| Land                      | 86,500                           | 120,000            | 33,500           |
| Plant assets (net)        | 467,000                          | 567,000            | 100,000          |
| Patents                   | 95,000                           | 200,000            | 105,000          |
| Total                     | <u>\$940,500</u>                 | <u>\$1,207,000</u> | <u>\$266,500</u> |
| Current liabilities       | \$ 89,500                        | \$ 89,500          | \$ —0—           |
| Bonds payable             | 300,000                          | 360,000            | 60,000           |
| Common stock              | 120,000                          |                    |                  |
| Other contributed capital | 164,000                          |                    |                  |
| Retained earnings         | 267,000                          |                    |                  |
| Total                     | <u>\$940,500</u>                 |                    |                  |

**Additional Information:**

1. Pruitt's income tax rate is 35%.
2. Shah's beginning inventory was all sold during 2015.
3. Useful lives for depreciation and amortization purposes are:

|              |          |
|--------------|----------|
| Plant assets | 10 years |
| Patents      | 8 years  |
| Bond premium | 10 years |
4. Pruitt uses the straight-line method for all depreciation and amortization purposes.

**Required:**

- A. Prepare the stock acquisition entry on Pruitt Company's books.
- B. Prepare the eliminating entries for a consolidated statements workpaper on January 1, 2015, immediately after acquisition.

*Note:* See Chapter 5, Problem 5-18 for an expanded version of this problem on the effects of deferred taxes in subsequent periods.



# Chapter 3

## APPENDIX 3A – DEFERRED TAXES ON THE DATE OF ACQUISITION (ONLINE)

If a purchase acquisition is tax-free to the seller, the tax bases of the acquired assets and liabilities are carried forward at historical book values. However, the assets and liabilities of the acquired company are recorded on the consolidated books at adjusted fair value. Under current guidelines, the tax effects of the difference between consolidated book values and the tax bases must be recorded as deferred tax liabilities or assets.

Consider the following example. Suppose that Purchasing Company acquires 90% of Selling Company by issuing stock valued at \$800,000. The only difference between book value and fair value relates to depreciable plant and equipment. Plant and equipment has a market value of \$400,000 and a book value of \$250,000. All other book values approximate market values. Assume that the combination qualifies as a nontaxable exchange. On the date of acquisition, Selling Company's book value of equity is \$600,000, which includes \$150,000 of common stock and \$450,000 of retained earnings. Assume a 30% tax rate. Consider the following Computation and Allocation Schedule with and without considering deferred taxes.

### Computation and Allocation of Difference Schedule (without Consideration of Deferred Taxes)

|   | <i>Parent Share</i> | <i>Noncontrolling Share</i> | <i>Total Value</i> |
|---|---------------------|-----------------------------|--------------------|
| Purchase price and implied value          | <b>\$800,000</b>    | <b>88,889</b>               | 888,889            |
| Less: Book value of subsidiary equity     | <u>540,000</u>      | <u>60,000</u>               | <u>600,000</u>     |
| Difference between implied and book value | 260,000             | 28,889                      | <b>288,889</b>     |
| Adjust plant and equipment upward         | <u>(135,000)</u>    | <u>(15,000)</u>             | <u>(150,000)</u>   |
| Balance                                   | 125,000             | 13,889                      | 138,889            |
| Goodwill                                  | <u>(125,000)</u>    | <u>(13,889)</u>             | <u>(138,889)</u>   |
| Balance                                   | <u><u>—0—</u></u>   | <u><u>—0—</u></u>           | <u><u>—0—</u></u>  |

**Computation and Allocation of Difference Schedule  
(with Consideration of Deferred Taxes)**

|  | <i>Parent Share</i> | <i>Noncontrolling Share</i> | <i>Total Value</i> |
|--|---------------------|-----------------------------|--------------------|
| Purchase price and implied value   | <b>\$800,000</b>    | <b>88,889</b>               | 888,889            |
| Less: Book value of subsidiary equity                                      | 540,000             | 60,000                      | 600,000            |
| Difference between implied and book value                                  | 260,000             | 28,889                      | <b>288,889</b>     |
| Adjust plant and equipment upward  | (135,000)           | (15,000)                    | <b>(150,000)</b>   |
| Deferred tax liability on plant and equipment<br>(400,000 – 250,000) (30%) | 40,500              | 4,500                       | <b>45,000</b>      |
| Balance  | 165,500             | 18,389                      | 183,889            |
| Goodwill   | (165,500)           | (18,389)                    | <b>(183,889)</b>   |
| Balance  | <u>—0—</u>          | <u>—0—</u>                  | <u>—0—</u>         |

Notice that goodwill is increased when deferred taxes are computed on the timing difference related to the depreciable bases of plant and equipment. This occurs because the additional future depreciation from the write-up of plant and equipment is reported on the consolidated income statement but is nondeductible for tax purposes, creating a timing difference between book and tax. Recall that deferred taxes are classified in the balance sheet according to the item that gave rise to them. Since plant and equipment are long-term assets, the deferred tax liability would also be *long-term*.

## ACCOUNTING FOR UNCERTAIN TAX POSITIONS

### Reasons for Change

In June 2006, the FASB issued Interpretation No. 48, *Accounting for Uncertain Tax Positions—an Interpretation of FASB Statement No. 109* (now included in FASB ASC topic 740 [Income Taxes]). The main reason FASB stated for the issuance of this interpretation was to clarify the accounting for uncertain tax positions and reduce diverse accounting practices, which had developed due to the lack of an explicitly defined confidence level to be met before recognizing benefits from an uncertain tax position.

For example, some enterprises recognize all tax positions taken or anticipated to be taken in a tax return and include the effects of any uncertainty about the detection and sustainability of the positions in the deferred tax asset valuation allowance, or in their analysis of the adequacy of the income tax liability. Other enterprises use a predetermined confidence threshold for initial recognition of benefits from tax positions and a probable loss threshold to provide for contingent losses related to uncertain tax positions. Still other enterprises have identified uncertain tax positions based on certain attributes, and then applied the guidance for gain contingencies in FASB ASC subtopic 450–30 [Contingencies—gain contingencies] [ASC 320–10–45].

According to FASB, this diversity in practice results in non-comparability in reporting income tax expense; thus the issues addressed in their interpretation should improve financial reporting by defining a criterion that an individual tax position must meet before the benefit is recognized in an enterprise's financial statements. The IASB has acknowledged similar diversity in the application of international standards on this topic.

The issued Interpretation has been criticized by power companies, as well as by the Edison Electric Institute, who claimed that the new rule is likely to result in overstated tax liabilities and a greater workload, while not improving financial reporting.<sup>16</sup>

<sup>16</sup> *Electric Utility Week*, September 26, 2005, "Power Commenters Question Need for FASB 'Uncertain Tax Positions' Rule."

## Main Issues and Changes

**Initial Recognition** Under the Interpretation, the recognition of a tax benefit would occur when it is “more likely than not” that the position would be sustained upon audit by the relevant taxing authority, including final resolution of any related litigation or appeals process. The “more-likely-than-not” criterion means a likelihood of more than 50 percent.

**Classification** In general, the Board concluded that the liability arising from the difference between the tax position and the amount recognized and measured should be classified as a current liability if anticipated to be paid within one year or the operating cycle. Only a liability related to a taxable temporary difference, as defined in FASB ASC section 740–10–45 should be classified as a deferred liability.

**Subsequent Recognition** Under the Interpretation, a tax position that fails to meet the “more-likely-than-not” threshold for initial recognition can be recognized in the first interim period that meets any one of the following conditions: a) the more-likely-than-not recognition threshold is met by the reporting date, b) the tax position is effectively settled, or c) the statute of limitations for the relevant taxing authority to examine and challenge the tax position has expired.

**Derecognition** Previously recognized tax benefits from positions that no longer meet the more-likely-than-not threshold would be derecognized by recording an income tax liability or eliminating a deferred tax asset.

Use of a valuation allowance as described in FASB ASC 740–10–30, or a valuation account as described in *SFAC No. 6, Elements of Financial Statements*, is not an appropriate substitute for the derecognition of a tax position when the derecognition threshold is met.

**Interest and Penalties** The Interpretation notes that if the payment of interest on the underpayment of income taxes is required by the relevant tax law, the accrual of interest should be based on the difference between the tax benefit recognized in the financial statements and the tax position. Interest should be accrued in the period the interest is incurred. If a penalty applies to a tax position, the liability for the penalty should be recognized in the period the penalty is deemed to have been incurred.

**Disclosures** The Board also concluded that liabilities recognized in financial statements pursuant to this Interpretation for tax positions for which it is reasonably possible that the total amounts of unrecognized tax benefits will significantly increase or decrease within 12 months of the reporting date should be disclosed (i.e., the nature of the uncertainty, the nature of the event that might cause the event to change, and an estimate of the range of the reasonably possible change).

The workpaper entry to eliminate the investment account is as follows:

|     |  |         |         |
|-----|--|---------|---------|
| (1) | Common Stock—Selling Company               | 150,000 |         |
|     | Retained Earnings—Selling Company          | 450,000 |         |
|     | Difference between Implied and Book Values | 288,889 |         |
|     | Investment in S Company                    |         | 800,000 |
|     | Noncontrolling Interest in Equity          |         | 88,889  |

The entry to allocate the difference between implied and book values is affected by the deferred tax amounts. The following entries show the allocation with and without deferred taxes.

|     |  | <i>Without Deferred Taxes</i> | <i>With Deferred Taxes</i> |
|-----|--|-------------------------------|----------------------------|
| (2) | Plant and Equipment                              | 150,000                       | 150,000                    |
|     | Goodwill   | 138,889                       | 183,889                    |
|     | Deferred tax liability<br>(Long-term)            |                               | 45,000                     |
|     | Difference between<br>Implied and<br>Book Values | 288,889                       | 288,889                    |

Of the two entries above, only the entry *with* deferred taxes is complete. Thus a deferred tax liability or asset should be recorded for each adjustment in the Computation and Allocation Schedule that creates a timing difference. For instance, if inventory value is increased, a *current* deferred tax liability would be created.

## APPENDIX 3B – CONSOLIDATION OF VARIABLE INTEREST ENTITIES

FASB has issued guidance for the consolidation of special-purpose entities (SPEs) through Interpretation No. 46(R) “Consolidation of Variable Interest Entities” and *SFAS No. 167*, “Amendments to FASB Interpretation No. 46(R) [see FASB ASC subtopic 810–10].”

An enterprise shall consolidate a variable interest entity (VIE) when that enterprise has a variable interest (or combination of variable interests) that provides the enterprise with a controlling financial interest on the basis of certain provisions (listed below). The enterprise that consolidates a variable interest entity is called the primary beneficiary of that entity.

*FASB Statement No. 167* requires ongoing reassessments of whether an enterprise is the primary beneficiary of a variable interest entity. Previously, Interpretation 46(R) required reconsideration of whether an enterprise is the primary beneficiary of a variable interest entity only when specific events occurred. *SFAS No. 167* eliminates the quantitative approach previously required for determining the primary beneficiary of a variable interest entity, which was based on determining which enterprise absorbs the majority of the entity’s expected losses, receives a majority of the entity’s expected residual returns, or both. *SFAS No. 167* requires enhanced disclosures that will provide users of financial statements with more transparent information about an enterprise’s involvement in a variable interest entity.

An enterprise with a variable interest in a variable interest entity shall assess whether the enterprise has a controlling financial interest in the entity and, thus, is the entity’s primary beneficiary. An enterprise shall be deemed to have a *controlling financial interest* in a variable interest entity *if* it has *both* of the following characteristics:

- a. The power to direct the activities of a variable interest entity that most significantly impact the entity’s economic performance.
- b. The obligation to absorb losses of the entity that could potentially be significant to the variable interest entity or the right to receive benefits from the entity that could potentially be significant to the variable interest entity.

The primary beneficiary of a VIE is required to disclose the following:

- The carrying amounts and classification of the variable interest entity’s assets and liabilities in the statement of financial position that are consolidated in accordance with this Interpretation, including qualitative information about the relationship(s) between those assets and liabilities. For example, if the variable interest entity’s assets can be used only to settle obligations of the variable interest entity, the enterprise shall disclose qualitative information about the nature of the restrictions on those assets.
- Lack of recourse if creditors (or beneficial interest holders) of a consolidated variable interest entity have no recourse to the general credit of the primary beneficiary.
- Terms of arrangements, giving consideration to both explicit arrangements and implicit variable interests that could require the enterprise to provide financial support (for example, liquidity arrangements and obligations to purchase assets) to the variable interest entity, including events or circumstances that could expose the enterprise to a loss.

In addition to disclosures required by other pronouncements, an enterprise that holds a variable interest in a variable interest entity, but is not the variable interest entity's primary beneficiary, shall disclose:

- (a) The carrying amounts and classification of the assets and liabilities in the enterprise's statement of financial position that relate to the enterprise's variable interest in the variable interest entity.
- (b) The enterprise's maximum exposure to loss as a result of its involvement with the variable interest entity, including how the maximum exposure is determined and the significant sources of the enterprise's exposure to the variable interest entity. If the enterprise's maximum exposure to loss as a result of its involvement with the variable interest entity cannot be quantified, that fact shall be disclosed.
- (c) A tabular comparison of the carrying amounts of the assets and liabilities, as required by (a) above, and the enterprise's maximum exposure to loss, as required by (b) above. An enterprise shall provide qualitative and quantitative information to allow financial statement users to understand the differences between the two amounts.
- (d) Information about any liquidity arrangements, guarantees, and/or other commitments by third parties that may affect the fair value or risk of the enterprise's variable interest in the variable interest entity is encouraged.

### Chapter 3 – Review Questions

The review questions accompanying this course are designed to assist you in achieving the course learning objectives. The review section is not graded; do not submit it in place of your qualified assessment. While completing the review questions, it may be helpful to study any unfamiliar terms in the glossary in addition to course content. After completing the review questions, proceed to the review question answers and rationales.

13. In a stock acquisition:
  - a. The acquiring company, referred to as the parent, will record its share of the acquired company's (the subsidiary's) assets and liabilities on its own balance sheet.
  - b. The party or parties holding any remaining stock in an acquired subsidiary are referred to as the non-controlling interest.
  - c. At acquisition, the acquired company will cease to exist and the acquiring company will account for any minority interest.
  - d. There is no longer a need for the acquired company to maintain separate financial statements other than for unit or division reporting.
  
14. All of the following statements regarding variable interest entities (VIEs) are accurate with the **EXCEPTION** of:
  - a. In a thinly capitalized entity, the company that owns a majority of the stock may not actually have financial control of the entity.
  - b. Variable interest entities have historically been a vehicle for avoiding rules of consolidation, delaying reporting incurred losses or to report illusory gains.
  - c. FASB has determined that all interests in VIEs should be consolidated unless such interest is "insignificant."
  - d. The identification of variable interests requires an economic analysis of the rights and obligation of a legal entity's assets, liabilities, equity, and other contracts.
  
15. With respect to "control":
  - a. IFRS differentiates between voting interest entities which are not VIEs and VIEs when determining the definition of control.
  - b. U.S. GAAP defines control for VIEs as the power to direct the activities that impact economic performance, the obligation to absorb the expected losses, and the right to receive expected residual returns.
  - c. U.S. GAAP defines control for all entities as the power to govern the entities' financial and operating policies so as to obtain benefits from its activities.
  - d. IFRS defines control for voting interest entities as the direct or indirect ability to determine the direction of management and policies through ownership, contract, or otherwise.

16. The first step in the consolidation process is to:
- Determine the difference between implied value and book value.
  - Eliminate the intercompany account.
  - Eliminate the investment in subsidiary account.
  - Convert the subsidiary's account from cost basis to fair value.
17. Which of the following is accurate about limitations and advantages of consolidated financial statements?
- Financial analysts usually favor consolidated financial statements over segment reporting.
  - The SEC has limited use for segment reporting despite FASB's requirement that it be shown in GAAP financial statements.
  - Consolidated financial statements of highly diversified companies operating across industries can be hard to interpret and compare to other companies.
  - FASB is considering a proposal to do away with segment reporting because there is so little need for it among financial statement users.

## **Chapter 4 – Consolidated Financial Statements After Acquisition**

### **Learning Objectives**

After completing this section of the course, you will be able to:

- Recognize differences between current accounting treatment for varying levels of influence and control by investors.
- Identify the appropriate accounting for investments under various different methods.
- Identify the approach to consolidating financial statements and computing implied book values.
- Cite the rules for accounting for interim acquisitions of subsidiary stock.
- Identify similarities and differences in consolidated cash flows depending on the method used to finance the acquisition.
- Recognize differences between GAAP and IFRS with respect to preparation of consolidated financial statements.



# CONSOLIDATED FINANCIAL STATEMENTS AFTER ACQUISITION

## CHAPTER CONTENTS

- 4.1 ACCOUNTING FOR INVESTMENTS BY THE COST, PARTIAL EQUITY, AND COMPLETE EQUITY METHODS
- 4.2 CONSOLIDATED STATEMENTS AFTER ACQUISITION—COST METHOD
- 4.3 RECORDING INVESTMENTS IN SUBSIDIARIES—EQUITY METHOD (PARTIAL OR COMPLETE)
- 4.4 ELIMINATION OF INTERCOMPANY REVENUE AND EXPENSE ITEMS
- 4.5 INTERIM ACQUISITIONS OF SUBSIDIARY STOCK
- 4.6 CONSOLIDATED STATEMENT OF CASH FLOWS
- 4.7 ILLUSTRATION OF PREPARATION OF A CONSOLIDATED STATEMENT OF CASH FLOWS—YEAR OF ACQUISITION
- 4.8 COMPARE U.S. GAAP AND IFRS REGARDING EQUITY METHOD

### IN THE NEWS

Intel announced its biggest acquisition in its 42-year history when it agreed to buy giant McAfee for \$7.68 billion in August 2010. McAfee, founded in 1987, was No. 2 in antivirus software with 21.9% of the market according to Infonetics Research. The move was designed to jump-start the chip giant's uphill effort to move its technology beyond computers and also improve the security of the chip. Intel is paying \$48 in cash for each McAfee share. The deal sent off shock waves on Wall Street and in Silicon Valley because of a lofty 60% premium.<sup>1</sup>

Investments in voting stock of other companies may be consolidated, or they may be separately reported in the financial statements at cost, at fair value, or carrying value of equity. The method of reporting adopted depends on a number of factors including the size of the investment, the extent to which the investor exercises control over the activities of the

<sup>1</sup> WSJ.com, "Intel Bets Its Chips on McAfee," by Don Clark, 8/19/10.

investee, and the marketability of the securities. **Investor** refers to a *business entity that holds an investment in voting stock of another company*. **Investee** refers to a *corporation that issued voting stock held by an investor or investors*.

## 4.1 ACCOUNTING FOR INVESTMENTS BY THE COST, PARTIAL EQUITY, AND COMPLETE EQUITY METHODS

**Lo 1** Varying levels of ownership are accounted for differently.

### RELATED CONCEPTS

When available for sale securities are adjusted to market, the unrealized gain or loss is recorded as *other comprehensive income* rather than a component of net income.

Generally speaking, there are three levels of influence or control by an investor over an investee, which determine the appropriate accounting treatment. There are no absolute percentages to distinguish among these levels, but there are guidelines. The three levels and the corresponding accounting treatments are summarized as follows:

| <i>Level</i>                       | <i>Guideline Percentages</i> | <i>Usual Accounting Treatment</i>   |
|------------------------------------|------------------------------|---|
| No significant influence           | Less than 20%                | Investment carried at fair value at current year-end (trading or available for sale securities)—method traditionally referred to as <i>cost</i> method with an adjustment for market changes. |
| Significant influence (no control) | 20 to 50% <sup>a</sup>       | Investment measured under the equity method; may be elected to be carried at fair value under an irrevocable option. <sup>b</sup>   |
| Effective control                  | Greater than 50%             | Consolidated statements required (investment eliminated, combined financial statements): investment recorded under <i>cost</i> , <i>partial equity</i> , or <i>complete equity</i> method.    |

<sup>a</sup> The IASB defines control as ‘the ability of an entity to direct the activities of another entity to generate returns for the reporting entity.’

<sup>b</sup> FASB ASC paragraph 825–10–25–4.

**IFRS**

The focus in this chapter is on presenting financial statements for consolidated entities (i.e., those in the third category above). Nonetheless, the parent company must account for its investment income from the subsidiary in its own books by one of the methods used for accounting for investments. Investment income will subsequently be eliminated, as will the investment account itself, when the two sets of books are merged into one consolidated set of financial data. Thus, so long as the eliminating process is carried out accurately, the parent has a certain amount of discretion in choosing how it accounts for its investment. This discretion exists because the consolidated financial statements will be identical, regardless of which method is used. However, ***if the parent issues parent-only financial statements for any purpose, the complete equity method should be used on those statements for investees over which the parent has either significant influence or effective control.***

To understand the effect of the earnings of the subsidiary on the consolidated entity, and on the noncontrolling interest, the reader needs to understand the mechanics that lead to the blending of two sets of books (income statement, retained earnings statement, and balance sheet) into one. Thus, we begin this chapter with a general discussion of accounting for investments, keeping in mind that our purpose is to prepare consolidated financial statements where appropriate.

In distinguishing among the three levels of influence/control, an investor is generally presumed not to have significant influence if the percentage owned is less than 20% of the investee’s outstanding common stock. Exceptions are possible; for example, the investor might own only 18% but be the single largest investor, with the remaining 82% spread among a large number of very small investors, in which case the 18% would represent significant influence, and the equity method would be appropriate. In general, however, an investor owning less than 20% of the investee’s stock accounts for the investment account at its fair value, under a method traditionally referred to as the “cost” method but with adjustments for changes in the fair value over time.

When a company owns a sufficient amount of another company's stock to have significant influence (usually at least 20%), but not enough to effectively control the other company (less than 50% in most cases), the equity method is required. Under FASB ASC paragraph 825-10-25-2, these equity investments may alternatively be carried at fair value under an irrevocable election to do so. Once the investor is deemed to have effective control over the other company (with or without a majority of stock ownership), consolidated statements are required.

In Chapter 3, we focused on the preparation of the consolidated balance sheet at the date of acquisition. With the passage of time, however, consolidating procedures are needed to prepare not only the consolidated balance sheet, but also a consolidated income statement, a consolidated statement of retained earnings, and a consolidated statement of cash flows. In this chapter we address the preparation of these statements subsequent to the date of acquisition.

When consolidated financial statements are appropriate (the investor has effective control over the investee), then the investment account, which is carried on the books of the parent company, will be eliminated in the consolidation process. Thus, it is not relevant to the consolidated statements whether the investor measures the investment account using the cost method or using the equity method, so long as the eliminating entries are properly prepared. When prepared correctly, the resulting consolidated financial statements will be identical, regardless of how the investment was carried in the books of the parent company (investor). At least three possible methods exist and are used in practice on the books of the parent company: the cost method, the partial equity method, and the complete equity method. Recognition of which of these methods is being used is important because the appropriate eliminating entries will vary depending on that choice. Further, because all three are used in practice, it is worthwhile to compare and contrast the three briefly at this point.

Of the three methods, only the complete equity method is acceptable for those investments where *significant influence but not control* is present. Our focus, however, is on investments that will be consolidated (for example, majority ownership). *Nonetheless, from an internal decision-making standpoint, if the parent firm relies upon the unconsolidated statements for any purposes, the complete equity method might be considered superior to the other two in terms of approximating the operating effects of the investment.* In contrast, the cost method is the simplest of the three to prepare on the books of the parent and is the most commonly used method in practice. The partial equity method might be viewed as a compromise, being somewhat easier to prepare on the books of the parent than the complete equity method but also providing a rough approximation of the operating effects of the investment. When decisions are based solely on the consolidated statements, the primary consideration is ease and cost of preparation; this may explain why many companies choose the simplest method (cost method).

***Under all three methods, the investment account is initially recorded at its cost. The differences among the three methods then lie in subsequent entries.*** If the cost method is used, the investment account is adjusted only when additional shares of stock in the investee are purchased or sold (or in the event of a liquidating dividend).<sup>2</sup> Fair value adjustments will be made periodically as needed, but these are generally accomplished using a separate account, Fair Value Adjustment, thus preserving historical cost in the investment account. (The Fair Value Adjustment account has a debit balance when fair value is higher than historical cost, and a credit balance when fair value is lower than historical cost.) Since these fair value adjustments have no impact on the consolidated financial statements (they would have to be reversed if made), we do not make such adjustments in this text.

Under the equity method, more frequent entries appear in the investment account on the books of the parent. Under the partial equity method, the investor adjusts the investment account upward for its share of the investee's earnings and downward for its share of the investee's dividends declared. Under the complete equity method, additional adjustments are made to the investment account for the effects of unrealized intercompany profits, the depreciation or amortization of any differences between market and book values, and

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<sup>2</sup> A liquidating dividend occurs when the investee has paid cumulative dividends in excess of cumulative earnings (since acquisition). Such excess dividends are treated as a return of capital and, upon their receipt, are recorded by the investor as a decrease in the investment account under the cost method.

possible impairment losses on any goodwill implied in the acquisition price. **Remember, the cost method and various forms of the equity method are methods to record investments after acquisition.** All acquisitions reflect cost at the date of acquisition.

Because all three methods have advantages and disadvantages, and because individual preferences will vary as to which method(s) are most important to the student, book entries and workpaper eliminating entries assuming the use of each of the three methods are discussed and illustrated in separate sections throughout this text. In *some* portions of this chapter, however, partial equity and complete equity methods are indistinguishable given the assumptions of the example, in which case they are illustrated only once to conserve space. Icons in the margin of the pages are used to distinguish between the cost and equity methods. To distinguish between partial and complete equity, the word “complete” or “partial” appears on the icon when needed. In addition, blue print is used to help identify those sections of text that distinguish the equity method from the cost method.

First, though, every student should have a basic understanding of the differences among the three methods in accounting for the investment on the books of the parent. These are illustrated below, and are also summarized in Illustration 4-1, presented at the end of this section.

## Cost Method on Books of Investor

To illustrate the accounting for an investment in a subsidiary accounted for by the **cost method**, assume that P Company acquired 90% of the outstanding voting stock of S Company at the beginning of Year 1 for \$800,000. As mentioned previously, icons in the margin of the pages are used to distinguish between the cost and equity methods. Income (loss) of S Company and dividends declared by S Company during the next three years are listed below. During the third year, the firm pays a liquidating dividend (i.e., the cumulative dividends declared exceeds the cumulative income earned).

| Year | Income<br>(Loss) | Dividends<br>Declared | Cumulative Income over<br>(under) Cumulative Dividends |
|------|------------------|-----------------------|--|
| 1    | \$90,000         | \$30,000              | \$60,000   |
| 2    | (20,000)         | 30,000                | 10,000   |
| 3    | 10,000           | 30,000                | (10,000)   |

Journal entries on the books of P Company to account for the investment in S Company during the three years follow:

**LO 2** Journal entries for Parent using cost method.

### Year 1—P's Books

|   |         |         |
|---|---------|---------|
| Investment in S Company                                 | 800,000 |         |
| Cash  |         | 800,000 |
| To record the initial investment.                       |         |         |
| Cash  | 27,000  |         |
| Dividend Income   |         | 27,000  |
| To record dividends received ( $0.9 \times \$30,000$ ). |         |         |

### Year 2—P's Books

|   |        |        |
|---|--------|--------|
| Cash  | 27,000 |        |
| Dividend Income   |        | 27,000 |
| To record dividends received ( $0.9 \times \$30,000$ ). |        |        |

### Year 3—P's Books

|   |        |        |
|---|--------|--------|
| Cash  | 27,000 |        |
| Dividend Income   |        | 18,000 |
| Investment in S Company   |        | 9,000  |
| To record dividends received, \$9,000 of which represents a return of investment. |        |        |

After these entries are posted, the investment account will appear as follows:

| Investment in S Company (Cost Method) |         |                             |
|---------------------------------------|---------|-----------------------------|
| Year 1 Cost                           | 800,000 |                             |
|                                       |         | Year 3 Liquidating dividend |
|                                       |         | 9,000                       |
| Year 3 Balance                        | 791,000 |                             |

Year 1 entries record the initial investment and the receipt of dividends from S Company. In year 2, although S Company incurred a \$20,000 loss, there was a \$60,000 excess of earnings over dividends from Year 1. Consequently, the dividends received are recognized as income by P Company. In year 3, however, a **liquidating dividend** occurs. From the point of view of a parent company, a purchased subsidiary is deemed to have distributed a liquidating dividend when the cumulative amount of its dividends declared exceeds its cumulative reported earnings after its acquisition. Such excess dividends are treated as a return of capital and are recorded as a reduction of the investment account rather than as dividend income. The liquidating dividend is 90% of the excess of dividends paid over cumulative earnings since acquisition (90% of \$10,000).

## Partial Equity Method on Books of Investor

**LO 2** Journal entries for Parent using partial equity method.

Next, assume that P Company has elected to use the partial equity method to record the investment in S Company above. The entries for the first three years would appear as follows:

### Year 1—P's Books

|  |         |         |
|--|---------|---------|
| Investment in S Company                    | 800,000 |         |
| Cash                                       |         | 800,000 |
| To record the initial investment.          |         |         |
| Investment in S Company                    | 81,000  |         |
| Equity in Subsidiary Income .9 (\$90,000)  |         | 81,000  |
| To record P's share of subsidiary income.  |         |         |
| Cash                                       | 27,000  |         |
| Investment in S Company                    |         | 27,000  |
| To record dividends received .9 (\$30,000) |         |         |

*Note:* The entries to record equity in subsidiary income and dividends received may be combined into one entry, if desired.

### Year 2—P's Books

|  |        |        |
|--|--------|--------|
| Equity in Subsidiary Loss                          | 18,000 |        |
| Investment in S Company                            |        | 18,000 |
| To record equity in subsidiary loss .9 (\$20,000). |        |        |
| Cash   | 27,000 |        |
| Investment in S Company                            |        | 27,000 |
| To record dividends received .9 (\$30,000).        |        |        |

### Year 3—P's Books

|  |        |        |
|--|--------|--------|
| Investment in S Company                              | 9,000  |        |
| Equity in Subsidiary Income                          |        | 9,000  |
| To record equity in subsidiary income .9 (\$10,000). |        |        |
| Cash   | 27,000 |        |
| Investment in S Company                              |        | 27,000 |
| To record dividends received .9 (\$30,000).          |        |        |

After these entries are posted, the investment account will appear as follows:

### Investment in S Company (Partial Equity Method)

|                                    |         |                                    |        |
|------------------------------------|---------|------------------------------------|--------|
| Year 1 Cost                        | 800,000 | Year 1 Share of dividends declared | 27,000 |
| Year 1 Equity in subsidiary income | 81,000  |                                    |        |
| Year 1 Balance                     | 854,000 | Year 2 Equity in subsidiary loss   | 18,000 |
|                                    |         | Year 2 Share of dividends declared | 27,000 |
| Year 2 Balance                     | 809,000 |                                    |        |
| Year 3 Equity in subsidiary income | 9,000   | Year 3 Share of dividends declared | 27,000 |
| Year 3 Balance                     | 791,000 |                                    |        |

## Complete Equity Method on Books of Investor

### IN THE NEWS

“BlackRock, a U.S.-based investment management firm with approximately \$342 billion in assets under management, acquired Merrill Lynch’s investment management business in exchange for a 49 percent ownership interest. Upon the closing of this transaction, PNC Financial Services continued to own 44.5 million shares of BlackRock, representing an ownership interest of approximately 34 percent. Thereafter, BlackRock was deconsolidated from PNC’s financial statements and was accounted for using the equity method.”<sup>3</sup>

1. Although Merrill Lynch did not own more than 50% of BlackRock, would you consider Merrill to have “control” of BlackRock? Why or why not?
2. Does PNC have “control” of BlackRock, as defined by FASB?

### LO 2 Journal entries for Parent using complete equity method.

The complete equity method is usually required to report common stock investments in the 20% to 50% range, assuming the investor has the ability to exercise significant influence over the operating activities of the investee and does *not* have effective control over the investee. In addition, a parent company may use, in its own books, the complete equity method to *account for* investments in subsidiaries that will be consolidated. This method is similar to the partial equity method up to a point, but it requires additional entries in most instances.

Continuing the illustration above, assume additionally that the \$800,000 purchase price exceeded the book value of the underlying equity of S Company by \$100,000; and that the difference was attributed half to goodwill (\$50,000) and half to an excess of market over book values of depreciable assets (\$50,000). Under current FASB regulations, goodwill would be capitalized and not amortized. The additional depreciation expense implied by the difference between market and book values, however, must still be accounted for. The depreciation of the excess, if spread over a remaining useful life of 10 years, would result in a charge to earnings of \$5,000 per year. This charge has the impact of lowering the equity in subsidiary income, or increasing the equity in subsidiary loss, recorded by the parent.

The entries for the first three years under the complete equity method are as follows:

#### Year 1—P’s Books

|   |         |         |
|---|---------|---------|
| Investment in S Company   | 800,000 |         |
| Cash  |         | 800,000 |
| To record the initial investment.                                 |         |         |
| Investment in S Company   | 81,000  |         |
| Equity in Subsidiary Income .9 (\$90,000)                         |         | 81,000  |
| To record equity in subsidiary income.                            |         |         |
| Equity in Subsidiary Income                                       | 5,000   |         |
| Investment in S Company (\$50,000/10 years)                       |         | 5,000   |
| To adjust equity in subsidiary income for the excess depreciation |         |         |
| Cash  | 27,000  |         |
| Investment in S Company   |         | 27,000  |
| To record dividends received .9 (\$30,000).                       |         |         |

*Note:* The entries to record equity in subsidiary income and dividends received may be combined into one entry, if desired.

#### Year 2—P’s Books

|  |        |        |
|--|--------|--------|
| Equity in Subsidiary Loss  | 18,000 |        |
| Investment in S Company  |        | 18,000 |
| To record equity in subsidiary loss .9 (\$20,000).               |        |        |
| Equity in Subsidiary Loss (\$50,000/10 years)                    | 5,000  |        |
| Investment in S Company  |        | 5,000  |
| To adjust equity in subsidiary loss for the excess depreciation. |        |        |

<sup>3</sup> PNC Financial Services Group press release, “PNC to Report \$1.6 Billion Gain on the Merger of BlackRock and Merrill Lynch Investment Managers,” 2/15/06.

|   |        |        |
|---|--------|--------|
| Cash  | 27,000 |        |
| Investment in S Company                     |        | 27,000 |
| To record dividends received .9 (\$30,000). |        |        |

|  |        |        |
|--|--------|--------|
| <b>Year 3—P's Books</b>  |        |        |
| Investment in S Company  | 9,000  |        |
| Equity in Subsidiary Income  |        | 9,000  |
| To record equity in subsidiary income .9 (\$10,000).               |        |        |
| Equity in Subsidiary Income (\$50,000/10 years)                    | 5,000  |        |
| Investment in S Company  |        | 5,000  |
| To adjust equity in subsidiary income for the excess depreciation. |        |        |
| Cash   | 27,000 |        |
| Investment in S Company  |        | 27,000 |
| To record dividends received .9 (\$30,000).                        |        |        |

After these entries are posted, the investment account will appear as follows:

| <b>Investment in S Company (Complete Equity Method)</b> |         |                                    |        |
|---|---------|------------------------------------|--------|
| Year 1 Cost   | 800,000 |                                    |        |
| Year 1 Equity in subsidiary income                      | 81,000  | Year 1 Excess depreciation         | 5,000  |
|   |         | Year 1 Share of dividends declared | 27,000 |
| Year 1 Balance  | 849,000 |                                    |        |
|   |         | Year 2 Equity in subsidiary loss   | 18,000 |
|   |         | Year 2 Excess depreciation         | 5,000  |
|   |         | Year 2 Share of dividends declared | 27,000 |
| Year 2 Balance  | 799,000 |                                    |        |
| Year 3 Equity in subsidiary income                      | 9,000   | Year 3 Excess depreciation         | 5,000  |
|   |         | Year 3 Share of dividends declared | 27,000 |
| Year 3 Balance  | 776,000 |                                    |        |

The additional entry to adjust the equity in subsidiary income for the additional depreciation in Year 1 may be viewed as reversing out a portion of the income recognized; the result is a net equity in subsidiary income for Year 1 of \$76,000 (\$81,000 minus \$5,000). In Year 2, however, since the subsidiary showed a loss for the period, the additional depreciation has the effect of increasing the loss from the amount initially recorded (\$18,000) to a larger loss of \$23,000.

A solid understanding of the entries made on the books of the investor (presented above) will help greatly in understanding the eliminating entries presented in the following sections. In some sense these entries may be viewed as “undoing” the above entries. It is important to realize, however, that the eliminating entries are not “parent-only” entries. In many cases an eliminating entry will affect certain accounts of the parent and others of the subsidiary. For example, the entry to eliminate the investment account (a parent company account) against the equity accounts of the subsidiary affects both parent and subsidiary accounts. Some accounts do not need elimination because the effects on parent and subsidiary are offsetting. For example, in the entries above, we saw that the parent debited cash when dividends were received from the subsidiary. We know that cash on the books of the subsidiary is credited when dividends are paid. The net effect on cash of the consolidated entry is thus zero. No entry is made to the cash account in the consolidating process. See Illustration 4-1 for a comparison of the three methods on the books of the parent.

**ILLUSTRATION 4-1****Comparison of the Investment T-Accounts  
(Cost vs. Partial Equity vs. Complete Equity Method)**

| Investment in S Company—Cost Method |         |  |       |
|-------------------------------------|---------|--|-------|
| Year 1 Acquisition cost             | 800,000 |  |       |
| Year 1 and 2 Balance                | 800,000 |  |       |
| Year 3 Balance                      | 791,000 | Year 3 Subsidiary liquidating dividend | 9,000 |

| Investment in S Company—Partial Equity Method |         |                                    |        |
|---|---------|------------------------------------|--------|
| Year 1 Acquisition cost                       | 800,000 |                                    |        |
| Year 1 Equity in subsidiary income            | 81,000  | Year 1 Share of dividends declared | 27,000 |
| Year 1 Balance                                | 854,000 |                                    |        |
| Year 2 Balance                                | 809,000 | Year 2 Equity in subsidiary loss   | 18,000 |
| Year 3 Balance                                | 791,000 | Year 2 Share of dividend declared  | 27,000 |
| Year 3 Equity in subsidiary income            | 9,000   | Year 3 Share of dividend declared  | 27,000 |

| Investment in S Company—Complete Equity Method                         |         |   |        |
|--|---------|---|--------|
| Year 1 Acquisition cost  | 800,000 |   |        |
| Year 1 Equity in subsidiary income<br>adjusted for excess depreciation | 76,000  | Year 1 Share of dividend declared             | 27,000 |
| Year 1 Balance   | 849,000 |   |        |
| Year 2 Balance   | 799,000 | Year 2 Equity in subsidiary loss,<br>adjusted | 23,000 |
| Year 3 Balance   | 776,000 | Year 2 Share of dividend declared             | 27,000 |
| Year 3 Equity in subsidiary income<br>adjusted for excess depreciation | 4,000   | Year 3 Share of dividend declared             | 27,000 |

**TEST YOUR KNOWLEDGE****4.1**

**NOTE:** Solutions to *Test Your Knowledge* questions are found at the end of each chapter before the end-of-chapter questions.

**True or False**

- \_\_\_\_\_ a. Under the cost method for recording investments, dividends are recorded by reducing the Investment in Subsidiary asset account.  
\_\_\_\_\_ b. Under *current GAAP* additional depreciation due to market values in excess of book values no longer necessitates a reduction in the equity in subsidiary income (on the books of the parent) under the complete equity method.

**Multiple Choice**

- Assuming that the acquisition price of Company S includes some differences between market and book values of depreciable assets, differences arise between the complete equity method and the partial equity method in how the accounts of the parent reflect:
  - Dividends
  - Income
  - Retained Earnings
  - Both B and C
- Which of the following statements regarding methods to record investments after acquisition is incorrect?
  - It is not relevant to the consolidated financial statements whether the parent company measures its investment account using the cost method or using one of the equity methods so long as the eliminating entries are properly prepared.
  - Initial recording of the investment (at its cost) is identical in all three methods, i.e., cost, partial equity, or complete equity method.
  - Under the partial equity method, the investor adjusts the investment account upward for its share of the investee's earnings and dividends declared.
  - For periods subsequent to acquisition, both the investment account and the equity in subsidiary income will be larger under the partial equity method than under the complete equity method if the subsidiary carries depreciable assets with market values greater than book values.



## 4.2 CONSOLIDATED STATEMENTS AFTER ACQUISITION—COST METHOD

The preparation of consolidated financial statements after acquisition is not materially different in concept from preparing them at the acquisition date in the sense that reciprocal accounts are eliminated and remaining balances are combined. The process is more complex, however, because time has elapsed and business activity has taken place between the date of acquisition and the date of consolidated statement preparation. On the date of acquisition, the only relevant financial statement is the consolidated balance sheet; after acquisition, a complete set of consolidated financial statements—income statement, retained earnings statement, balance sheet, and statement of cash flows—must be prepared for the affiliated group of companies. Deferred tax issues are presented in Appendix 4B found online at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter).

### Workpaper Format

#### LO 3 Use of workpapers.

Accounting workpapers are used to accumulate, classify, and arrange data for a variety of accounting purposes, including the preparation of financial reports and statements. Although workpaper style and technique vary among firms and individuals, we have adopted a three-section workpaper for illustrative purposes in this book. The format includes a separate section for each of three basic financial statements—income statement, retained earnings statement, and balance sheet. In some cases the input to the workpaper comes from the individual financial statements of the affiliates to be consolidated, in which case the three-section workpaper is particularly appropriate. At other times, however, input may be from affiliate trial balances, and the data must be arranged in financial statement form before the workpaper can be completed. Organizing the data provides a useful review for students, however, and emphasizes the linkages among these three financial statements. An alternative format to preparing the workpaper is provided in Appendix A in this chapter (using the information in Illustration 4-5).



The fourth statement, the statement of cash flows, is prepared from the information in the consolidated income statement and from two comparative consolidated balance sheets. It will be presented later in this chapter.

#### ILLUSTRATION 4-2

##### P Company and S Company Trial Balances December 31, 2015

|                              | <i>P Company</i> |                  | <i>S Company</i> |                  |
|------------------------------|------------------|------------------|------------------|------------------|
|                              | <i>Dr.</i>       | <i>Cr.</i>       | <i>Dr.</i>       | <i>Cr.</i>       |
| Cash                         | \$ 79,000        |                  | \$ 18,000        |                  |
| Accounts Receivable (net)    | 64,000           |                  | 28,000           |                  |
| Inventory, 1/1               | 56,000           |                  | 32,000           |                  |
| Investment in S Company      | 165,000          |                  |                  |                  |
| Property and Equipment (net) | 180,000          |                  | 165,000          |                  |
| Goodwill                     | 35,000           |                  | 17,000           |                  |
| Accounts Payable             |                  | \$ 35,000        |                  | \$ 24,000        |
| Other Liabilities            |                  | 62,000           |                  | 37,000           |
| Common Stock, \$10 par value |                  | 200,000          |                  | 100,000          |
| Other Contributed Capital    |                  | 40,000           |                  | 50,000           |
| Retained Earnings, 1/1       |                  | 210,000          |                  | 40,000           |
| Dividends Declared           | 20,000           |                  | 10,000           |                  |
| Sales                        |                  | 300,000          |                  | 160,000          |
| Dividend Income              |                  | 8,000            |                  |                  |
| Purchases                    | 186,000          |                  | 95,000           |                  |
| Expenses                     | 70,000           |                  | 46,000           |                  |
|                              | <u>\$855,000</u> | <u>\$855,000</u> | <u>\$411,000</u> | <u>\$411,000</u> |
| Inventory, 12/31             | <u>\$ 67,000</u> |                  | <u>\$ 43,000</u> |                  |

The discussion and illustrations that follow are based on trial balances at December 31, 2015, for P Company and S Company given in Illustration 4-2. Throughout this chapter, any difference between the cost of the investment and the book value of the equity interest acquired is assumed to relate to the under- or over-valuation of subsidiary goodwill or to land and is, therefore, assigned to goodwill or land in the second eliminating entry. Because neither goodwill nor land is subject to depreciation or amortization under current GAAP, this serves to defer at least one complication to Chapter 5. More realistic assumptions, and the resulting complications, will be dealt with fully in Chapter 5.

## Year of Acquisition—Cost Method

Assume that P Company purchased 80% of the outstanding shares of S Company common stock on January 1, 2015, for \$165,000. The underlying book value of S company's net assets on that date was \$190,000. P Company made the following entry:

| P's Books               |         |         |
|-------------------------|---------|---------|
| Investment in S Company | 165,000 |         |
| Cash                    |         | 165,000 |

On June 6, 2015, S Company paid a \$10,000 dividend and made the following entry:

| S's Books          |        |        |
|--------------------|--------|--------|
| Dividends Declared | 10,000 |        |
| Cash               |        | 10,000 |

(Recall that the Dividends Declared account is a temporary account that is closed to retained earnings at year-end. An alternative is to debit retained earnings directly when dividends are declared.) Since P Company owns 80% of S Company's common stock, the receipt of the dividend was recorded by P Company as follows:

| P's Books                        |       |       |
|----------------------------------|-------|-------|
| Cash                             | 8,000 |       |
| Dividend Income (80% × \$10,000) |       | 8,000 |

### LO 4 Preparing Computation and Allocation Difference (CAD) Schedule

Note that the trial balance data in Illustration 4-2 reflect the effects of both the investment and dividend transactions. Also note that the existing balances in goodwill on the books of both companies indicate that both firms have been involved in previous net asset acquisitions (as discussed in Chapter 2).

Begin the consolidating process, as always, by preparing a Computation and Allocation Schedule, as follows:

#### Computation and Allocation of Difference Schedule

|   | Parent Share     | Noncontrolling Share | Total Value     |
|---|------------------|----------------------|-----------------|
| Purchase price and implied value          | <u>\$165,000</u> | <u>41,250</u>        | <u>206,250</u>  |
| Less: Book value of equity acquired:      |                  |                      |                 |
| Common stock                              | 80,000           | 20,000               | <b>100,000</b>  |
| Other contributed capital                 | 40,000           | 10,000               | <b>50,000</b>   |
| Retained earnings                         | 32,000           | 8,000                | <b>40,000</b>   |
| Total book value                          | <u>152,000</u>   | <u>38,000</u>        | <u>190,000</u>  |
| Difference between implied and book value | 13,000           | 3,250                | <b>16,250</b>   |
| Record new goodwill                       | <u>(13,000)</u>  | <u>(3,250)</u>       | <u>(16,250)</u> |
| Balance                                   | <u>—0—</u>       | <u>—0—</u>           | <u>—0—</u>      |

### RELATED CONCEPTS

The *historical cost principle* allows for the recording of goodwill only when a purchase transaction occurs. Whether or not the total value implied by the purchase price should extend to the NCI is a subject of much debate.

Because the difference between implied and book values is established only at the date of acquisition, *this schedule will not change in future periods*. Thus, there will be \$16,250 to distribute each year, although the makeup of that distribution may shift over time. Since it is attributed to goodwill in this example, the distribution will not change unless the goodwill is subsequently impaired.



A workpaper for the preparation of consolidated financial statements at December 31, 2015, the end of the year of acquisition, is presented in Illustration 4-3.

Data from the trial balances are arranged in statement form and entered on the workpaper. Consolidated financial statements should include only balances resulting from transactions with outsiders. Eliminating techniques are designed to accomplish this end. The consolidated income statement is essentially a combination of the revenue, expense, gain, and loss accounts of all consolidated affiliates after elimination of amounts representing the effect of transactions among the affiliates. The combined income of the affiliates, after eliminating any intercompany transactions, is referred to as **consolidated net income**. This amount is allocated to the controlling and noncontrolling interests. In the workpaper, consolidated net income is reduced by the noncontrolling interest's share (if any) of the net income of the subsidiaries to arrive at the **controlling interest in consolidated net income**. Note that in the past, the controlling interest has often been referred to as consolidated net income. The terminology used here and by the FASB reflects the change from the parent concept to the economic entity concept for consolidated financial statements. The controlling interest in consolidated net income consists of parent company net income plus (minus) its share of the affiliate's income (loss) resulting from transactions with outside parties. The consolidated retained earnings statement consists of beginning consolidated retained earnings plus the controlling interest in consolidated net income (or minus the controlling interest in a consolidated loss), minus parent company dividends declared. The net balance represents consolidated retained earnings at the end of the period. The noncontrolling interest in net assets is reflected as a separate component of equity.

## Workpaper Observations

### Lo 5 Workpaper eliminating entries.

Several observations should be noted concerning the workpaper presented in Illustration 4-3.

1. *Each section of the workpaper represents one of three consolidated financial statements:* Note that the **entire bottom line** of the income statement, which represents net income, is transferred to the Net Income line on the retained earnings statement. Similarly, the **entire bottom line** of the retained earnings statement, which represents ending retained earnings, is transferred to the Retained Earnings line on the balance sheet.
2. *Elimination of the investment account:* The elimination of the investment account at the end of the first year is the same one that would be made at the date of acquisition for the preparation of a consolidated balance sheet. One exception is that S Company's beginning retained earnings is eliminated in the **retained earnings section** of the workpaper, rather than in the balance sheet section. In subsequent years, the debit to Retained Earnings—S Company will always be for the subsidiary retained earnings balance at the **beginning of the current year**. Changes in retained earnings during the current year are always reflected in the retained earnings statement section of the workpaper. Also note that in subsequent years, there will be an additional entry preceding the elimination of the investment account, and this entry will arise from changes in the Retained Earnings account of the subsidiary from the date of acquisition to the beginning of the current year. This entry is not needed in year 1 because no such change has occurred yet.

It is useful to formulate eliminating entries in **general journal entry form**, even though they are not recorded in the general journal, to be sure that they balance before entering them in the workpaper. Be sure to number each entry as it is entered in the workpaper. This helps to keep the eliminating entries in balance as well. It may also be helpful to think of each entry by a shortened name, as indicated in quotation marks after the following entries.

|  |         |         |
|--|---------|---------|
| (1) Common Stock—S Company                 | 100,000 |         |
| Other Contributed Capital—S Company        | 50,000  |         |
| 1/1 Retained Earnings—S Company            | 40,000  |         |
| Difference between Implied and Book Values | 16,250  |         |
| Investment in S Company                    |         | 165,000 |
| Noncontrolling Interest in Equity          |         | 41,250  |
| “The investment entry”                     |         |         |

## Cost Method

## ILLUSTRATION 4-3

| Consolidated Statements Workpaper—Cost Method                 |                |                |                |                |                         |                       |
|---|----------------|----------------|----------------|----------------|-------------------------|-----------------------|
| 80% Owned   |                |                |                |                |                         |                       |
| P Company and Subsidiary for the Year Ended December 31, 2015 |                |                |                |                |                         |                       |
| Year of Acquisition   | P Company      | S Company      | Eliminations   |                | Noncontrolling Interest | Consolidated Balances |
|   |                |                | Dr.            | Cr.            |                         |                       |
| <b>Income Statement</b>                                       |                |                |                |                |                         |                       |
| Sales   | 300,000        | 160,000        |                |                |                         | 460,000               |
| Dividend Income   | 8,000          |                | (3)            | 8,000          |                         |                       |
| Total Revenue   | <u>308,000</u> | <u>160,000</u> |                |                |                         | <u>460,000</u>        |
| Cost of Goods Sold:   |                |                |                |                |                         |                       |
| Inventory, 1/1  | 56,000         | 32,000         |                |                |                         | 88,000                |
| Purchases   | <u>186,000</u> | <u>95,000</u>  |                |                |                         | <u>281,000</u>        |
|   | 242,000        | 127,000        |                |                |                         | 369,000               |
| Inventory, 12/31  | <u>67,000</u>  | <u>43,000</u>  |                |                |                         | <u>110,000</u>        |
| Cost of Goods Sold  | 175,000        | 84,000         |                |                |                         | 259,000               |
| Expenses  | <u>70,000</u>  | <u>46,000</u>  |                |                |                         | <u>116,000</u>        |
| Total Cost and Expense  | <u>245,000</u> | <u>130,000</u> |                |                |                         | <u>375,000</u>        |
| Net/Consolidated Income                                       | 63,000         | 30,000         |                |                |                         | 85,000                |
| Noncontrolling Interest in Income                             |                |                |                |                | 6,000                   | (6,000)*              |
| Net Income to Retained Earnings                               | <u>63,000</u>  | <u>30,000</u>  | <u>8,000</u>   | <u>—0—</u>     | <u>6,000</u>            | <u>79,000</u>         |
| <b>Retained Earnings Statement</b>                            |                |                |                |                |                         |                       |
| 1/1 Retained Earnings   |                |                |                |                |                         |                       |
| P Company   | 210,000        |                |                |                |                         | 210,000               |
| S Company   |                | 40,000         | (1)            | 40,000         |                         |                       |
| Net Income from above   | 63,000         | 30,000         | 8,000          | —0—            | 6,000                   | 79,000                |
| Dividends Declared  |                |                |                |                |                         |                       |
| P Company   | (20,000)       |                |                |                |                         | (20,000)              |
| S Company   |                | (10,000)       |                | (3)            | 8,000                   | (2,000)               |
| 12/31 Retained Earnings to Balance Sheet                      | <u>253,000</u> | <u>60,000</u>  | <u>48,000</u>  | <u>8,000</u>   | <u>4,000</u>            | <u>269,000</u>        |
| <b>Balance Sheet</b>  |                |                |                |                |                         |                       |
| Cash  | 79,000         | 18,000         |                |                |                         | 97,000                |
| Accounts Receivable (net)                                     | 64,000         | 28,000         |                |                |                         | 92,000                |
| Inventory, 12/31  | 67,000         | 43,000         |                |                |                         | 110,000               |
| Investment in S Company                                       | 165,000        |                |                | (1)            | 165,000                 |                       |
| Difference between Implied and Book Value                     |                |                | (1)            | 16,250         | (2)                     | 16,250                |
| Property and Equipment (net)                                  | 180,000        | 165,000        |                |                |                         | 345,000               |
| Goodwill  | <u>35,000</u>  | <u>17,000</u>  | (2)            | 16,250         |                         | <u>68,250</u>         |
| Total   | <u>590,000</u> | <u>271,000</u> |                |                |                         | <u>712,250</u>        |
| Accounts Payable  | 35,000         | 24,000         |                |                |                         | 59,000                |
| Other Liabilities   | 62,000         | 37,000         |                |                |                         | 99,000                |
| Common Stock  |                |                |                |                |                         |                       |
| P Company   | 200,000        |                |                |                |                         | 200,000               |
| S Company   |                | 100,000        | (1)            | 100,000        |                         |                       |
| Other Contributed Capital                                     |                |                |                |                |                         |                       |
| P Company   | 40,000         |                |                |                |                         | 40,000                |
| S Company   |                | 50,000         | (1)            | 50,000         |                         |                       |
| Retained Earnings from above                                  | 253,000        | 60,000         | 48,000         | 8,000          | 4,000                   | 269,000               |
| 1/1 Noncontrolling Interest in Net Assets                     |                |                |                |                |                         |                       |
|   |                |                |                | (1)            | 41,250                  | 41,250                |
| 12/31 Noncontrolling Interest in Net Assets                   |                |                |                |                |                         |                       |
|   |                |                |                |                | <u>45,250</u>           | <u>45,250</u>         |
| Total   | <u>590,000</u> | <u>271,000</u> | <u>230,500</u> | <u>230,500</u> |                         | <u>712,250</u>        |

\* .2(\$30,000) = \$6,000

(1) To eliminate the investment in S Company and create noncontrolling interest account.

(2) To allocate the difference between implied and book value to goodwill.

(3) To eliminate intercompany dividends.

## RELATED CONCEPTS

When control is achieved with a relatively low percentage ownership (55% for example), a *conservative* view might question whether it is appropriate to record the entire (100%) implied value of \$16,250 of goodwill.

## IFRS

3. *Allocation of the difference between implied and book value:* The second elimination entry is also identical to that which would have been made at the date of acquisition. It serves to distribute the difference between implied and book values of subsidiary equity to the appropriate account(s), in this case to goodwill.

|     |   |        |        |
|-----|---|--------|--------|
| (2) | Goodwill                                  | 16,250 |        |
|     | Difference between Implied and Book Value |        | 16,250 |
|     | <i>“The differential entry”</i>           |        |        |

It is worth noting that the recording of goodwill is one of the more controversial of the topics addressed by FASB in its decisions regarding business combinations. Some respondents during the comment period expressed a preference to conform to the International Accounting model used in the past for business combinations, which has marked the identifiable net assets entirely to their fair value at the date of the acquisition (as here), but has recorded goodwill only to the extent of the parent’s percentage of the subsidiary. In other words, goodwill would be recorded for only  $80\% \times \$16,250$ , or \$13,000, and the noncontrolling interest would be lowered by \$3,250 if the choice allowed under IFRS, which permits recognition of goodwill using either the “full” goodwill method or “parent-only” goodwill method, were followed.

4. *Intercompany dividends:* The elimination of intercompany dividends is made by a debit to Dividend Income and a credit to Dividends Declared. In placing this entry into the Eliminations columns of the workpaper, note that the Dividend Income debit appears in the *Income Statement* section, while the Dividends Declared credit appears in the *Retained Earnings Statement* section. It is commonly the case that an eliminating entry will affect more than one of the three statements, as here (and also in entry (1)).

|     |                              |       |       |
|-----|------------------------------|-------|-------|
| (3) | Dividend Income              | 8,000 |       |
|     | Dividends Declared—S Company |       | 8,000 |
|     | <i>“The dividend entry”</i>  |       |       |

This eliminating entry also serves to prevent the double counting of income, since the subsidiary’s individual income and expense items are combined with the parent’s in the determination of consolidated income.

5. *Noncontrolling interest in consolidated net income:* There is one number on the workpaper that is calculated and then inserted directly into the income statement, and does not flow from the trial balance columns. That number is the *noncontrolling interest in consolidated net income*. To facilitate the calculation of the noncontrolling and controlling interests in consolidated income, a t-account approach is helpful. In later chapters, the presence of intercompany profits and other complications will make the calculation more complex than it is at this point. It is, therefore, useful to form the habit of using the t-accounts now.



**Noncontrolling Interest in Consolidated Net Income**

|  |            |
|--|------------|
| Internally generated income of S Company | \$30,000   |
| Any needed adjustments (see Chapter 5)   | <u>0</u>   |
| Adjusted income of subsidiary            | 30,000     |
| Noncontrolling percentage owned          | <u>20%</u> |
| Noncontrolling interest in income        | 6,000      |

The first t-account (above) calculates the distribution of consolidated net income to the noncontrolling interest. This number can be inserted directly into the next-to-bottom line of the **Income Statement** Section. When this amount is subtracted from the consolidated income of \$85,000, the resulting amount of \$79,000 represents the **controlling interest in consolidated net income**. (\$30,000).8

The parent company t-account serves as a useful check of the controlling interest in consolidated net income. The 80% controlling percentage in the adjusted income of subsidiary (\$30,000 from t-account above) will appear in P Company’s t-account as part of the controlling interest. For the parent company, the internally generated income represents the amount from the first column of the trial balance (\$63,000) minus any income which came from the subsidiary (dividend income, in this case, of \$8,000), or \$55,000 income from P Company’s independent operations.

**Controlling Interest in Consolidated Net Income**

|  |               |
|--|---------------|
| Internally generated income of P Company<br>(\$63,000 income minus \$8,000 dividend<br>income from subsidiary) | \$55,000      |
| Any needed adjustments (see Chapter 5)   | 0             |
| Percentage of subsidiary adjusted income<br>(80%)(30,000)  | <u>24,000</u> |
| Controlling interest in income   | \$79,000      |

6. *Consolidated retained earnings:* Consolidated retained earnings on December 31, 2015, of \$269,000 can be determined as follows:

|  |                  |
|--|------------------|
| P Company’s reported retained earnings, 1/1                    | \$210,000        |
| Plus: controlling interest in consolidated net income for 2015 | 79,000           |
| Less: P Company’s dividends declared during 2015               | <u>(20,000)</u>  |
| Consolidated Retained Earnings, 12/31                          | <u>\$269,000</u> |

The calculation above appears in the final column of the workpaper in the Retained Earnings Statement section. Alternatively, or as a check, consolidated retained earnings may be determined as:

|  |                  |
|--|------------------|
| P Company’s reported retained earnings, 12/31  | \$253,000        |
| Plus P Company’s share of the increase in S Company’s<br>retained earnings from the date of acquisition to the<br>end of 2015: .8(\$60,000 – \$40,000) | <u>16,000</u>    |
| Consolidated Retained Earnings, 12/31  | <u>\$269,000</u> |

7. The eliminations columns in each section do not balance, since individual eliminations made involve more than one section. The total eliminations for all three sections, however, must be in balance.

8. Noncontrolling interest in consolidated net assets or equity at the beginning of the year (\$41,250) can be obtained from the first line of the CAD schedule, or can be determined directly by multiplying the noncontrolling interest percentage times the implied value of the subsidiary at acquisition. Thus, noncontrolling interest in consolidated net assets can be computed as  $\$206,250 \times 20\%$  at this date. To calculate the noncontrolling interest at year-end, sum the following components:

The sum of the noncontrolling interest column is transferred to the consolidated balance sheet as one amount since it reflects the noncontrolling stockholders’ interest in the net assets of the consolidated group.



| <i>Total Noncontrolling Interest</i> |   |
|--------------------------------------|---|
| \$41,250                             | Noncontrolling interest at the date of acquisition, representing 20% of the implied value of the subsidiary.  |
| 6,000                                | A \$6,000 (20% × \$30,000) interest in the amount of S Company income that is included in consolidated net income. The \$6,000 is considered an allocation of consolidated net income to the noncontrolling shareholders. |
| (2,000)                              | A \$2,000 (20% × \$10,000) decrease for dividends distributed to the noncontrolling stockholders during the year. The other \$8,000 in dividends represents parent company dividend income and is, therefore, eliminated. |
| <u>\$45,250</u>                      | Total Noncontrolling Interest   |

### After Year of Acquisition—Cost Method

**Lo 5** Workpaper eliminating entries after acquisition (cost method).

For illustrative purposes, assume continuation of the previous example with data updated to the following year. Trial balances for P Company and S Company at December 31, 2016, are given in Illustration 4-4. Because we are using the cost method, the Investment in S Company account still reflects the cost of the investment, \$165,000. The beginning retained earnings balances for P and S Companies on January 1, 2016, are the same as the ending retained earnings balances on December 31, 2015 (confirmed in Illustration 4-3, first two columns). Although the trial balance is dated December 31, 2016, the retained earnings balance is dated January 1, 2016, because the income statement and Dividends Declared accounts are still open.

A workpaper for the preparation of consolidated financial statements for P and S Companies for the year ended December 31, 2016, is presented in Illustration 4-5. Note that the detail comprising cost of goods sold is provided in Illustration 4-3. (beginning inventory plus purchases minus ending inventory). In Illustration 4-5 and subsequent illustrations in this chapter, the detail will be collapsed into one item, Cost of Goods Sold. In later chapters, however, we will use the detailed accounts when the focus is more directly upon inventory and the calculation of cost of goods sold (in the presence of intercompany profit, for instance).

#### ILLUSTRATION 4-4

##### P Company and S Company Trial Balances December 31, 2016

|                              | <i>P Company</i> |                  | <i>S Company</i> |                  |
|------------------------------|------------------|------------------|------------------|------------------|
|                              | <i>Dr.</i>       | <i>Cr.</i>       | <i>Dr.</i>       | <i>Cr.</i>       |
| Cash                         | \$ 74,000        |                  | \$ 41,000        |                  |
| Accounts Receivable (net)    | 71,000           |                  | 33,000           |                  |
| Inventory, 1/1               | 67,000           |                  | 43,000           |                  |
| Investment in S Company      | 165,000          |                  |                  |                  |
| Property and Equipment (net) | 245,000          |                  | 185,000          |                  |
| Goodwill                     | 35,000           |                  | 17,000           |                  |
| Accounts Payable             |                  | \$ 61,000        |                  | \$ 30,000        |
| Other Liabilities            |                  | 70,000           |                  | 45,000           |
| Common Stock, \$10 par value |                  | 200,000          |                  | 100,000          |
| Other Contributed Capital    |                  | 40,000           |                  | 50,000           |
| Retained Earnings, 1/1       |                  | 253,000          |                  | 60,000           |
| Dividends Declared           | 30,000           |                  | 10,000           |                  |
| Sales                        |                  | 350,000          |                  | 190,000          |
| Dividend Income              |                  | 8,000            |                  |                  |
| Purchases                    | 215,000          |                  | 90,000           |                  |
| Expenses                     | 80,000           |                  | 56,000           |                  |
|                              | <u>\$982,000</u> | <u>\$982,000</u> | <u>\$475,000</u> | <u>\$475,000</u> |
| Inventory, 12/31             | \$ 82,000        |                  | \$ 39,000        |                  |

The workpaper entries in years after the year of acquisition are essentially the same as those made for the year of acquisition (Illustration 4-3) with one major exception. Before the elimination of the investment account, a workpaper entry, (1) in Illustration 4-5, is made to the investment account and P Company’s beginning retained earnings to recognize P Company’s share of the cumulative undistributed income or loss of S Company from the *date of acquisition to the beginning of the current year* as follows:

|     |  |        |        |
|-----|--|--------|--------|
| (1) | Investment in S Company  | 16,000 |        |
|     | 1/1 Retained Earnings—P Company<br>(Consolidated Retained Earnings)<br>[80% × (\$60,000 – \$40,000)] |        | 16,000 |

This entry may be viewed as either *the entry to convert from the cost method to the equity method or the entry to establish reciprocity*. The following two points explain these essentially complementary views of the entry.

1. The reciprocity entry adjusts P Company’s beginning retained earnings balance on the workpaper to the appropriate beginning consolidated retained earnings amount. As indicated earlier, consolidated retained earnings on January 1, 2016, consists of P Company’s reported retained earnings plus P Company’s share of the undistributed earnings (income less dividends) of S Company from the date of stock acquisition to the beginning of 2016. Note that, after the reciprocity entry is made, the beginning (1/1/16) consolidated retained earnings of \$269,000 (Illustration 4-5) equals the ending (12/31/15) consolidated retained earnings amount (Illustration 4-3).
2. If this entry is viewed as a conversion to the equity method, the following question might well arise: Why should we convert to the equity method if all methods are acceptable and all yield the same final results? Recall that under the equity method, the parent records its equity in the subsidiary income in its income statement and thus ultimately in its retained earnings. If we consider the two accounts in the conversion entry, it is true that the investment is going to be eliminated to zero anyway; but the retained earnings account of the parent company, which must ultimately reflect the equity in subsidiary income, will not be eliminated. Instead, it needs to be adjusted if the cost method is used.

Although it is true that the investment account must be eliminated after it is adjusted, the reciprocity (conversion) entry facilitates this elimination. The amount needed for the workpaper entry to establish reciprocity can be most accurately computed by multiplying the parent company’s percentage of ownership times the increase or decrease in the subsidiary’s retained earnings from the date of stock acquisition to the beginning of the current year. This approach adjusts for complications that might arise where the subsidiary may have made direct entries to its retained earnings for prior period adjustments.

This approach is also the most efficient because it provides a shortcut in lieu of making separate entries for each year’s income and each year’s dividend declarations. Recall that the workpaper entries are just that, workpaper only, and as such they do not get posted to the accounts of either the parent or subsidiary company. Hence entries that were made on a previous year’s workpaper must be “caught up” in subsequent periods. If income and dividend entries were made separately for each year, imagine the number of entries in year 9 or year 20!

After the investment account is adjusted by workpaper entry (1), P Company’s share of S Company’s equity is eliminated against the **adjusted investment account** in entry (2) below:



|     |  |         |         |
|-----|--|---------|---------|
| (2) | Common Stock—S Company   | 100,000 |         |
|     | Other Contributed Capital—S Company                                | 50,000  |         |
|     | 1/1 Retained Earnings—S Company                                    | 60,000  |         |
|     | Difference between Implied and Book Value                          | 16,250  |         |
|     | Investment in S Company [\$165,000 + .8(60,000 – 40,000)]          |         | 181,000 |
|     | Noncontrolling Interest in Equity [\$41,250 + .2(60,000 – 40,000)] |         | 45,250  |



| Cost Method                                 |                | ILLUSTRATION 4-5  |                |                |                         |                       |
|---|----------------|---|----------------|----------------|-------------------------|-----------------------|
| 80% Owned                                   |                | Consolidated Statements Workpaper                             |                |                |                         |                       |
| Subsequent to Year of Acquisition           |                | P Company and Subsidiary for the Year Ended December 31, 2016 |                |                |                         |                       |
| Income Statement                            | P              | S   | Eliminations   |                | Noncontrolling Interest | Consolidated Balances |
|   | Company        | Company   | Dr.            | Cr.            |                         |                       |
| Sales                                       | 350,000        | 190,000   |                |                |                         | 540,000               |
| Dividend Income                             | 8,000          |   | (4)            | 8,000          |                         |                       |
| Total Revenue                               | <u>358,000</u> | <u>190,000</u>  |                |                |                         | <u>540,000</u>        |
| Cost of Goods Sold                          | 200,000        | 94,000  |                |                |                         | 294,000               |
| Expenses                                    | 80,000         | 56,000  |                |                |                         | 136,000               |
| Total Cost and Expense                      | <u>280,000</u> | <u>150,000</u>  |                |                |                         | <u>430,000</u>        |
| Net/Consolidated Income                     | 78,000         | 40,000  |                |                |                         | 110,000               |
| Noncontrolling Interest in Income           |                |   |                |                | 8,000                   | (8,000)*              |
| Net Income to Retained Earnings             | <u>78,000</u>  | <u>40,000</u>   | <u>8,000</u>   | <u>—0—</u>     | <u>8,000</u>            | <u>102,000</u>        |
| <i>Retained Earnings Statement</i>          |                |   |                |                |                         |                       |
| 1/1 Retained Earnings                       |                |   |                |                |                         |                       |
| P Company                                   | 253,000        |   |                | (1) 16,000     |                         | 269,000               |
| S Company                                   |                | 60,000  | (2) 60,000     |                |                         |                       |
| Net Income from above                       | 78,000         | 40,000  | 8,000          | —0—            | 8,000                   | 102,000               |
| Dividends Declared                          |                |   |                |                |                         |                       |
| P Company                                   | (30,000)       |   |                |                |                         | (30,000)              |
| S Company                                   |                | (10,000)  |                | (4) 8,000      | (2,000)                 |                       |
| 12/31 Retained Earnings to Balance Sheet    | <u>301,000</u> | <u>90,000</u>   | <u>68,000</u>  | <u>24,000</u>  | <u>6,000</u>            | <u>341,000</u>        |
| <i>Balance Sheet</i>                        |                |   |                |                |                         |                       |
| Cash  | 74,000         | 41,000  |                |                |                         | 115,000               |
| Accounts Receivable (net)                   | 71,000         | 33,000  |                |                |                         | 104,000               |
| Inventory, 12/31                            | 82,000         | 39,000  |                |                |                         | 121,000               |
| Investment in S Company                     | 165,000        |   | (1) 16,000     | (2) 181,000    |                         |                       |
| Difference between Implied and Book Value   |                |   | (2) 16,250     | (3) 16,250     |                         |                       |
| Property and Equipment (net)                | 245,000        | 185,000   |                |                |                         | 430,000               |
| Goodwill                                    | 35,000         | 17,000  | (3) 16,250     |                |                         | 68,250                |
| Total                                       | <u>672,000</u> | <u>315,000</u>  |                |                |                         | <u>838,250</u>        |
| Accounts Payable                            | 61,000         | 30,000  |                |                |                         | 91,000                |
| Other Liabilities                           | 70,000         | 45,000  |                |                |                         | 115,000               |
| Common Stock                                |                |   |                |                |                         |                       |
| P Company                                   | 200,000        |   |                |                |                         | 200,000               |
| S Company                                   |                | 100,000   | (2) 100,000    |                |                         |                       |
| Other Contributed Capital                   |                |   |                |                |                         |                       |
| P Company                                   | 40,000         |   |                |                |                         | 40,000                |
| S Company                                   |                | 50,000  | (2) 50,000     |                |                         |                       |
| Retained Earnings from above                | 301,000        | 90,000  | 68,000         | 24,000         | 6,000                   | 341,000               |
| 1/1 Noncontrolling Interest in Net Assets   |                |   |                | (2) 45,250**   | 45,250                  |                       |
| 12/31 Noncontrolling Interest in Net Assets |                |   |                |                | 51,250                  | 51,250                |
| Total                                       | <u>672,000</u> | <u>315,000</u>  | <u>266,500</u> | <u>266,500</u> |                         | <u>838,250</u>        |

\*  $.2(\$40,000) = \$8,000$ .

\*\*  $\$41,250 + (\$60,000 - \$40,000) \times .2 = \$45,250$ .

(1) To recognize P Company's share (80%) of S Company's undistributed income from date of acquisition to beginning of the current year. (Also referred to as "To establish reciprocity" or "to convert to equity method".)

(2) To eliminate the investment in S Company and create noncontrolling interest account.

(3) To allocate the difference between implied and book value to goodwill.

(4) To eliminate intercompany dividends.

Entry (3) distributes the difference between implied and book values, as follows:

|  |        |        |
|--|--------|--------|
| (3) Goodwill                               | 16,250 |        |
| Difference between Implied and Book Values |        | 16,250 |

Next, intercompany dividend income is eliminated as follows:

|                              |       |       |
|------------------------------|-------|-------|
| (4) Dividend Income          | 8,000 |       |
| Dividends Declared—S Company |       | 8,000 |

Consolidated balances are then determined in the same manner as in previous illustrations. Remember that the entry to establish reciprocity (convert to equity) is a cumulative one that recognizes the parent's share of the change in the subsidiary's retained earnings from the date of acquisition to the beginning of the current year. Thus, for example, the reciprocity entry for the *third year* in the December 31, 2017, workpaper is as follows:

|  |        |        |
|--|--------|--------|
| Investment in S Company                                  | 40,000 |        |
| 1/1 Retained Earnings—P Company .8(\$90,000 – \$40,000)  |        | 40,000 |
| <i>“The reciprocity/conversion entry for year three”</i> |        |        |

An example of a consolidated statement of income and retained earnings and a consolidated balance sheet (based on Illustration 4-5) is presented in Illustration 4-6. Notice that *all*

#### ILLUSTRATION 4-6

##### **P Company and Subsidiary Consolidated Statement of Income and Retained Earnings for the Year Ended December 31, 2016**

|                                   |                         |
|-----------------------------------|-------------------------|
| Sales                             | \$540,000               |
| Cost of goods sold                | <u>294,000</u>          |
| Gross margin                      | 246,000                 |
| Expenses                          | <u>136,000</u>          |
| Consolidated net income           | 110,000                 |
| Noncontrolling interest in income | <u>8,000</u>            |
| Controlling interest in income    | 102,000                 |
| Retained earnings, 1/1/2016       | <u>269,000</u>          |
| Total                             | 371,000                 |
| Dividends declared                | <u>30,000</u>           |
| Retained earnings, 12/31/2016     | <u><u>\$341,000</u></u> |

##### **P Company and Subsidiary Consolidated Balance Sheet December 31, 2016**

###### *Assets*

|                              |                         |
|------------------------------|-------------------------|
| Current Assets:              |                         |
| Cash                         | \$115,000               |
| Accounts Receivable (net)    | 104,000                 |
| Inventories                  | <u>121,000</u>          |
| Total current assets         | 340,000                 |
| Property and Equipment (net) | 430,000                 |
| Goodwill                     | <u>68,250</u>           |
| Total assets                 | <u><u>\$838,250</u></u> |

###### *Liabilities and Stockholders' Equity*

|  |                         |
|--|-------------------------|
| Accounts payable                           | \$ 91,000               |
| Other liabilities                          | <u>115,000</u>          |
| Total liabilities                          | 206,000                 |
| Stockholders' equity:                      |                         |
| Noncontrolling interest in net assets      | 51,250                  |
| Common Stock, \$10 par value               | 200,000                 |
| Other contributed capital                  | 40,000                  |
| Retained earnings                          | <u>341,000</u>          |
| Total liabilities and stockholders' equity | <u><u>\$838,250</u></u> |

(100%) of *S Company's revenues and expenses* are included in the consolidated income statement. The noncontrolling interest's share of the subsidiary's income is shown as a separate component of consolidated net income and is deducted from consolidated net income (NI) to arrive at the controlling interest. Likewise, *all of S Company's assets and liabilities* are included with those of P Company in the consolidated balance sheet. The noncontrolling interest's share of the net assets is then included as a separate item within the stockholders' equity section of the consolidated balance sheet.

### TEST YOUR KNOWLEDGE 4.2

**NOTE:** Solutions to *Test Your Knowledge* questions are found at the end of each chapter before the end-of-chapter questions.

#### Multiple Choice

- The entry to establish reciprocity or convert from the cost to the equity method usually involves a debit to Investment in Subsidiary and a credit to what account?
  - Subsidiary's end-of-the-year Retained Earnings
  - Parent's end-of-the-year Retained Earnings
  - Parent's beginning-of-the-year Retained Earnings
  - Subsidiary's beginning-of-the-year Retained Earnings

## 4.3 RECORDING INVESTMENTS IN SUBSIDIARIES—EQUITY METHOD (PARTIAL OR COMPLETE)

Companies may elect to use the equity method to record their investments in subsidiaries to estimate the operating effects of their investments for internal decision-making purposes. As with the cost method, the investment is recorded initially at its cost under the equity method. Subsequent to acquisition, the major differences between the cost and equity methods pertain to the period in which subsidiary income is formally recorded on the books of the parent company and the amount of income recognized. Under the assumptions of this chapter, partial and complete equity methods are indistinguishable. Thus, the differences between the two do not become important until Chapter 5. In Chapter 5, we will explore alternative assumptions regarding the disposition of the difference between implied value and book value, which will necessitate amortization, depreciation, or impairment adjustments. In subsequent chapters, we will explore other complications that may arise under the complete equity method. **To facilitate an understanding of the differences among the methods, the sections of text that differ depending on the method choice are presented in blue for the equity method.**

One frequent complication occurs when the parent and subsidiary have different year-ends. The SEC allows the parent to use a different year-end for its subsidiary provided the subsidiary data are not more than 93 days old. The parent simply combines the data for the subsidiary's 12 months with its own, just as though the year-ends were the same. The SEC requirement has become broadly acceptable in practice. In some cases, firms find it desirable for the subsidiary's year to end earlier to facilitate the adjusting, closing, and consolidating procedures in a timely fashion. However, the preference is to use the "best available data," weighing the tradeoffs between reliability and timeliness. Thus, in some cases, the best alternative may be to combine the subsidiary's interim data with the parent's year-end data.



As illustrated in previous sections of this chapter, no income from the subsidiary is recorded by the parent company under the cost method until it is distributed as dividends. When distributed, the parent records its share of the dividends as dividend income. Under the equity method, income is recorded in the books of the parent company in the same accounting period that it is reported by the subsidiary company, whether or not such income is distributed to the parent company.

Assume that P Company purchased 80% of the outstanding shares of S Company common stock on January 1, 2015, for \$165,000. The underlying book value of S Company's net assets (100%) on that date was \$190,000. P Company made the following entry:

| P's Books               |         |         |
|-------------------------|---------|---------|
| Investment in S Company | 165,000 |         |
| Cash                    |         | 165,000 |



EQUITY

P Company would record income in the first year based not on dividends received, but on its share of the subsidiary's income. Under the partial equity method, this amount will be based on income *reported* by the subsidiary. Under the complete equity method, the subsidiary's reported income will be adjusted under certain circumstances, as illustrated at the beginning of this chapter. Throughout the remainder of this chapter, however, we assume that those adjustments will not be needed. Hence adjusted income will equal reported income. The "adjustments" concept will be introduced very briefly in this chapter and developed in later chapters.

Assuming a current period income of \$30,000 reported by S Company, P Company would make the following entry on its books:

| P's Books                                |        |        |
|--|--------|--------|
| Investment in S Company                  | 24,000 |        |
| Equity in subsidiary income .8(\$30,000) |        | 24,000 |

Dividends received from the subsidiary (parent's share assumed to be \$8,000) are then *credited* to the Investment account, as follows:

| P's Books                      |       |       |
|--------------------------------|-------|-------|
| Cash (or Dividends Receivable) | 8,000 |       |
| Investment in S Company        |       | 8,000 |

Consequently, the parent company's share of the *cumulative undistributed income (income less dividends)* of the subsidiary is accumulated over time as an addition to the investment account. In this example, the parent's share of undistributed income for the year was \$16,000 (i.e., the same amount as the reciprocity entry for firms using the cost method!).

## Investment Carried at Equity—Year of Acquisition

**Lo 5** Workpaper eliminating entries (equity method).

In this section we illustrate the consolidated workpaper used to prepare consolidated financial statements under the equity method. Keep in mind that workpapers are just that, a means to an end, with the real goal being the preparation of correct financial statements. Regardless of whether the parent's books are kept using the cost method or one of the equity methods, the consolidated financial statements should be identical. The eliminating entries needed to achieve the correct balances, however, are not identical.

Assume that at the end of the first year, the trial balances of P Company and S Company appear as shown in Illustration 4-7. Begin the consolidating process, as always, by preparing a Computation and Allocation (CAD) Schedule, as follows:



EQUITY

### Computation and Allocation of Difference Schedule

|   | Parent Share    | Noncontrolling Share | Total Value     |
|---|-----------------|----------------------|-----------------|
| Purchase price and implied value          | <u>165,000</u>  | <u>41,250</u>        | <u>206,250</u>  |
| Less: Book value of equity acquired:      |                 |                      |                 |
| Common stock                              | 80,000          | 20,000               | <b>100,000</b>  |
| Other contributed capital                 | 40,000          | 10,000               | <b>50,000</b>   |
| Retained earnings                         | <u>32,000</u>   | <u>8,000</u>         | <b>40,000</b>   |
| Total book value                          | <u>152,000</u>  | <u>38,000</u>        | <u>190,000</u>  |
| Difference between implied and book value | 13,000          | 3,250                | <b>16,250</b>   |
| Record new goodwill                       | <u>(13,000)</u> | <u>(3,250)</u>       | <u>(16,250)</u> |
| Balance                                   | <u>—0—</u>      | <u>—0—</u>           | <u>—0—</u>      |

## ILLUSTRATION 4-7

## P Company and S Company Trial Balances December 31, 2015

|                              | P Company        |                  | S Company        |                  |
|------------------------------|------------------|------------------|------------------|------------------|
|                              | Dr.              | Cr.              | Dr.              | Cr.              |
| Cash                         | \$ 79,000        |                  | \$ 18,000        |                  |
| Accounts Receivable (net)    | 64,000           |                  | 28,000           |                  |
| Inventory, 1/1               | 56,000           |                  | 32,000           |                  |
| Investment in S Company      | 181,000          |                  |                  |                  |
| Property and Equipment (net) | 180,000          |                  | 165,000          |                  |
| Goodwill                     | 35,000           |                  | 17,000           |                  |
| Accounts Payable             |                  | \$ 35,000        |                  | \$ 24,000        |
| Other Liabilities            |                  | 62,000           |                  | 37,000           |
| Common Stock, \$10 par value |                  | 200,000          |                  | 100,000          |
| Other Contributed Capital    |                  | 40,000           |                  | 50,000           |
| Retained Earnings, 1/1       |                  | 210,000          |                  | 40,000           |
| Dividends Declared           | 20,000           |                  | 10,000           |                  |
| Sales                        |                  | 300,000          |                  | 160,000          |
| Equity in Subsidiary Income  |                  | 24,000           |                  |                  |
| Purchases                    | 186,000          |                  | 95,000           |                  |
| Expenses                     | 70,000           |                  | 46,000           |                  |
|                              | <u>\$871,000</u> | <u>\$871,000</u> | <u>\$411,000</u> | <u>\$411,000</u> |
| Inventory, 12/31             | \$ 67,000        |                  | \$ 43,000        |                  |

Because the difference between implied and book values is established only at the date of acquisition, this schedule will not change in future periods.

Note that the trial balance data in Illustration 4-7 reflect the effects of the investment, equity in subsidiary income, and dividend transactions presented above. These balances are next arranged into *income statement*, *retained earnings statement*, and *balance sheet statement* sections as they are entered into the first two columns of the consolidated workpaper presented in Illustration 4-8.

When the investment account is carried on the Equity basis, it is necessary first to make a workpaper entry reversing the effects of the parent company's entries to the Investment account for subsidiary income and dividends during the current year. Here the entry differs from that under the Cost Method.

To eliminate the account "equity in subsidiary income" from the consolidated income statement, the following workpaper entry, presented in general journal form, is made:

|                                 |        |        |
|---------------------------------|--------|--------|
| (1) Equity in Subsidiary Income | 24,000 |        |
| Investment in S Company         |        | 24,000 |

Next, to eliminate intercompany dividends under the equity method, this workpaper entry is made:

|                             |       |       |
|-----------------------------|-------|-------|
| (2) Investment in S Company | 8,000 |       |
| Dividends Declared          |       | 8,000 |

Alternatively, these two entries may be collapsed into one entry, as follows:

|                                     |        |        |
|-------------------------------------|--------|--------|
| (1)–(2) Equity in Subsidiary Income | 24,000 |        |
| Investment in S Company             |        | 16,000 |
| Dividends Declared                  |        | 8,000  |



EQUITY

This reversal has two effects. First, it eliminates the equity in subsidiary income and dividends recorded by P Company. Second, it returns the investment account to its balance as of the beginning of the year. This is necessary because it is the parent company's share of

| Equity Method                               |                | ILLUSTRATION 4-8  |                |                |                           |                       |
|---|----------------|---|----------------|----------------|---------------------------|-----------------------|
| 80% Owned Subsidiary                        |                | Consolidated Statements Workpaper                             |                |                |                           |                       |
| Year of Acquisition                         |                | P Company and Subsidiary for the Year Ended December 31, 2015 |                |                |                           |                       |
| Income Statement                            | P              | S   | Eliminations   |                | Noncontrolling Interest   | Consolidated Balances |
|   | Company        | Company   | Dr.            | Cr.            |                           |                       |
| Sales                                       | 300,000        | 160,000   |                |                |                           | 460,000               |
| Equity in Subsidiary Income                 | <u>24,000</u>  |   | (1)            | 24,000         |                           |                       |
| Total Revenue                               | <u>324,000</u> | <u>160,000</u>  |                |                |                           | <u>460,000</u>        |
| Cost of Goods Sold                          | 175,000        | 84,000  |                |                |                           | 259,000               |
| Expenses                                    | <u>70,000</u>  | <u>46,000</u>   |                |                |                           | <u>116,000</u>        |
| Total Cost and Expense                      | <u>245,000</u> | <u>130,000</u>  |                |                |                           | <u>375,000</u>        |
| Net/Consolidated Income                     | 79,000         | 30,000  |                |                |                           | 85,000                |
| Noncontrolling Interest in NI               |                |   |                |                | 6,000*                    | (6,000)               |
| Net Income to Retained Earnings             | <u>79,000</u>  | <u>30,000</u>   | <u>24,000</u>  | <u>—0—</u>     | <u>6,000</u>              | <u>79,000</u>         |
| <i>Retained Earnings Statement</i>          |                |   |                |                |                           |                       |
| 1/1 Retained Earnings                       |                |   |                |                |                           |                       |
| P Company                                   | 210,000        |   |                |                |                           | 210,000               |
| S Company                                   |                | 40,000  | (3)            | 40,000         |                           |                       |
| Net Income from above                       | 79,000         | 30,000  | 24,000         | —0—            | 6,000                     | 79,000                |
| Dividends Declared                          |                |   |                |                |                           |                       |
| P Company                                   | (20,000)       |   |                |                |                           | (20,000)              |
| S Company                                   |                | (10,000)  |                | (2)            | 8,000                     | (2,000)               |
| 12/31 Retained Earnings to Balance Sheet    | <u>269,000</u> | <u>60,000</u>   | <u>64,000</u>  | <u>8,000</u>   | <u>4,000</u>              | <u>269,000</u>        |
| <i>Balance Sheet</i>                        |                |   |                |                |                           |                       |
| Cash  | 79,000         | 18,000  |                |                |                           | 97,000                |
| Accounts Receivable (net)                   | 64,000         | 28,000  |                |                |                           | 92,000                |
| Inventory, 12/31                            | 67,000         | 43,000  |                |                |                           | 110,000               |
| Investment in S Company                     | 181,000        |   | (2)            | 8,000          | (1) 24,000<br>(3) 165,000 |                       |
| Difference between Implied and Book Value   |                |   | (3)            | 16,250         | (4) 16,250                |                       |
| Property and Equipment (net)                | 180,000        | 165,000   |                |                |                           | 345,000               |
| Goodwill                                    | <u>35,000</u>  | <u>17,000</u>   | (4)            | 16,250         |                           | <u>68,250</u>         |
| Total                                       | <u>606,000</u> | <u>271,000</u>  |                |                |                           | <u>712,250</u>        |
| Accounts Payable                            | 35,000         | 24,000  |                |                |                           | 59,000                |
| Other Liabilities                           | 62,000         | 37,000  |                |                |                           | 99,000                |
| Common Stock                                |                |   |                |                |                           |                       |
| P Company                                   | 200,000        |   |                |                |                           | 200,000               |
| S Company                                   |                | 100,000   | (3)            | 100,000        |                           |                       |
| Other Contributed Capital                   |                |   |                |                |                           |                       |
| P Company                                   | 40,000         |   |                |                |                           | 40,000                |
| S Company                                   |                | 50,000  | (3)            | 50,000         |                           |                       |
| Retained Earnings from above                | 269,000        | 60,000  | 64,000         | 8,000          | 4,000                     | 269,000               |
| 1/1 Noncontrolling Interest in Net Assets   |                |   |                | (3)            | 41,250                    | 41,250                |
| 12/31 Noncontrolling Interest in Net Assets |                |   |                |                | <u>45,250</u>             | <u>45,250</u>         |
| Total                                       | <u>606,000</u> | <u>271,000</u>  | <u>254,500</u> | <u>254,500</u> |                           | <u>712,250</u>        |

\* 20% × \$30,000 = \$6,000.

- (1) To reverse the effect of parent company entry during the year for subsidiary income.
- (2) To reverse the effect of parent company entry during the year for subsidiary dividends.
- (3) To eliminate the investment in S Company and create noncontrolling interest.
- (4) To allocate the excess of implied over book value to goodwill.

the subsidiary's retained earnings at the *beginning of the year* that is eliminated in the investment elimination entry.

A third eliminating entry must then be made to eliminate the Investment account against subsidiary equity, and the fourth entry distributes the difference between implied and book values of equity, as follows:

|     |  |         |         |
|-----|--|---------|---------|
| (3) | Common Stock—S Company                     | 100,000 |         |
|     | Other Contributed Capital—S Company        | 50,000  |         |
|     | 1/1 Retained Earnings—S Company            | 40,000  |         |
|     | Difference between Implied and Book Values | 16,250  |         |
|     | Investment in S Company                    |         | 165,000 |
|     | Noncontrolling Interest in Equity          |         | 41,250  |
|     | <i>“The investment entry”</i>              |         |         |
| (4) | Goodwill                                   | 16,250  |         |
|     | Difference between Implied and Book Value  |         | 16,250  |
|     | <i>“The differential entry”</i>            |         |         |

The next few paragraphs relate to basic workpaper concepts that do not differ between the cost and equity methods. Thus, for those who have already read the section of the chapter on the cost method, this will serve as a review.

To complete the worksheet, the account balances are extended from left to right. Two lines merit attention. First, the *entire bottom line* of the income statement, which represents net income, is transferred to the Net Income line on the retained earnings statement. Similarly, the *entire bottom line* of the retained earnings statement, which represents ending retained earnings, is transferred to the retained earnings line on the balance sheet. Throughout this and future chapters on consolidation, we will see that *any eliminating entries to the account Retained Earnings will be entered in the Beginning Balance on the retained earnings statements (not on the balance sheet, ending balance)*. Because the Current Year Income and Dividends Declared accounts are still open, current year changes in Retained Earnings will be adjusted through those accounts (or in the retained earnings section of the workpaper).

There is one number on the workpaper that is calculated and then inserted directly into the income statement, and does not flow from the trial balance columns. That number is the *noncontrolling interest in consolidated net income*. To facilitate the calculation of the noncontrolling and controlling interests in consolidated net income, a t-account approach is helpful. In later chapters, the presence of intercompany profits and other complications will make the calculation more complex than it is at this point. It is, nonetheless, useful to form the habit of using the t-accounts now.

The first t-account (below) calculates the distribution of consolidated net income to the noncontrolling interest. This number can be inserted directly into the next-to-bottom line of the Income Statement section. When this amount is subtracted from the consolidated income of \$85,000, the resulting amount of \$79,000 represents the *controlling interest in consolidated net income*. It is interesting to note that this is the very same amount that the parent reported in its trial balance originally. In future chapters, we will see that this is the case only if the parent uses the complete equity method. For example, if profit or loss on intercompany sales between parent and subsidiary must be eliminated at the balance sheet date, an adjustment will be required to reconcile the two numbers under the partial equity method. Similarly, if any difference between implied and book values is attributed to depreciable assets, an adjustment will also be needed under the partial equity method. Hence it is useful to check the calculation of the controlling interest in consolidated net income.



### Noncontrolling Interest in Consolidated Net Income

|  |            |
|--|------------|
| Internally generated income of S Company | \$30,000   |
| Any needed adjustments (see Chapter 5)   | <u>0</u>   |
| Adjusted income of subsidiary            | 30,000     |
| Noncontrolling percentage owned          | <u>20%</u> |
| Noncontrolling interest in income        | 6,000      |

The next t-account serves as a check of the controlling interest in consolidated income. The 80% controlling percentage in the adjusted income of subsidiary (\$30,000 from t-account above) will appear in P Company's t-account as part of the controlling interest. For the parent company, the internally generated income represents the amount from the first column of the trial balance (\$79,000) minus any income which came from the subsidiary (equity in subsidiary income, in this case, of \$24,000), or \$55,000 income from P Company's independent operations.

(\$30,000).8

### Controlling Interest in Consolidated Net Income

|  |               |
|--|---------------|
| Internally generated income (\$79,000 income minus \$24,000 equity in subsidiary income) | \$55,000      |
| Any needed adjustments (see Chapter 5)   | 0             |
| Percentage of subsidiary adjusted income (80%) (\$30,000)                                | <u>24,000</u> |
| Controlling interest in income   | \$79,000      |



**Consolidated retained earnings** on December 31, 2015, of \$269,000 can be determined as follows:

|   |                  |
|---|------------------|
| P Company's reported retained earnings, 1/1                   | \$210,000        |
| Plus controlling interest in consolidated net income for 2015 | 79,000           |
| Less P Company's dividends declared during 2015               | <u>(20,000)</u>  |
| Consolidated Retained Earnings, 12/31                         | <u>\$269,000</u> |

The calculation above appears in the final column of the workpaper in the Retained Earnings Statement section.

Under the complete equity method (or the partial equity method if there are no complicating adjustments, as here), the ending Consolidated Retained Earnings equals Retained Earnings—P at the end of the year as shown in the first column of the workpaper.

Note that the eliminations columns in each section do not balance, since individual eliminations often involve more than one section. The total eliminations for all three sections, however, must be in balance.

Noncontrolling interest in consolidated net assets or equity at the beginning of the year (\$41,250) can be obtained from the first line of the CAD schedule, or can be determined directly by multiplying the noncontrolling interest percentage times the implied value of the subsidiary at acquisition. Thus, noncontrolling interest in consolidated net assets can be computed as  $\$206,250 \times 20\%$  at this date. To calculate the noncontrolling interest at year-end, sum the following components:

#### Total Noncontrolling Interest

|                 |   |
|-----------------|---|
| \$41,250        | Noncontrolling interest at the date of acquisition, representing 20% of the implied value of the subsidiary.  |
| 6,000           | A \$6,000 ( $20\% \times \$30,000$ ) interest in the amount of S Company income that is included in consolidated net income. The \$6,000 is considered an allocation of consolidated net income to the noncontrolling shareholders. |
| (2,000)         | A \$2,000 ( $20\% \times \$10,000$ ) decrease for dividends distributed to the noncontrolling stockholders during the year. The other \$8,000 in dividends represents parent company dividend income and is, therefore, eliminated. |
| <u>\$45,250</u> | Total Noncontrolling Interest   |

Comparison of Illustration 4-3 and Illustration 4-8 brings out an important observation. **The consolidated column of the workpaper is the same under the cost and equity methods. Thus, the decision to use the cost or equity method to record investments in subsidiaries that will be consolidated has no impact on the consolidated financial statements. Only the elimination process is affected.**



Note once more that P Company's reported net income of \$79,000 (Illustration 4-8) and consolidated net income are identical. Likewise, P Company's December 31, 2015, retained earnings equal consolidated retained earnings at that date. In later chapters we will see that this will always be true under the complete equity method, but not under the partial equity method. We obtain this result here because P Company has recorded its share of S Company's earnings, and because of the absence of complicating assumptions.

## Investment Carried at Equity—After Year of Acquisition

To illustrate the preparation of a consolidated workpaper for years after the year of acquisition under the equity method, assume the data given in Illustration 4-9, and the use of the equity method rather than the cost method. After P Company has recorded its share of S Company's income (\$32,000) and dividends declared (\$8,000), the Investment in S Company account appears as follows:

The preparation of the Computation and Allocation (CAD) Schedule is the same as it was in the year of acquisition; that is, it does not need to be prepared again. The elimination process also follows the same procedures as in the year of acquisition (with current year amounts). A consolidated statements workpaper in this case is presented in Illustration 4-10. We next review the workpaper entries in general journal entry form. Note that although the CAD Schedule does not change, the third eliminating entry (to eliminate the Investment account against the equity accounts of the subsidiary) will change to reflect the Retained Earnings balance of the subsidiary at the *beginning of the current year* and the corresponding change in the Investment account  $(\$60,000 - \$40,000) \times 80\%$  and in the noncontrolling interest  $(\$60,000 - \$40,000) \times 20\%$ .

As in the year of acquisition, the Equity in Subsidiary account must be eliminated against the Investment in Subsidiary account. The amount of this entry is obtained from the trial balance column for P Company, and it equals the parent's percentage (80%) of S Company's reported net income (\$40,000):

**Lo 5** Workpaper eliminating entries after acquisition (equity method).

|     |                             |        |        |
|-----|-----------------------------|--------|--------|
| (1) | Equity in Subsidiary Income | 32,000 |        |
|     | Investment in S Company     |        | 32,000 |

Next, to eliminate intercompany dividends under the equity method, this workpaper entry is made:

|     |                         |       |       |
|-----|-------------------------|-------|-------|
| (2) | Investment in S Company | 8,000 |       |
|     | Dividends Declared      |       | 8,000 |



EQUITY

### ILLUSTRATION 4-9

#### P Company and S Company Trial Balances (Year after Acquisition) December 31, 2016

|                              | P Company          |                    | S Company        |                  |
|------------------------------|--------------------|--------------------|------------------|------------------|
|                              | Dr.                | Cr.                | Dr.              | Cr.              |
| Cash                         | \$ 74,000          |                    | \$ 41,000        |                  |
| Accounts Receivable (net)    | 71,000             |                    | 33,000           |                  |
| Inventory, 1/1               | 67,000             |                    | 43,000           |                  |
| Investment in S Company      | 205,000            |                    |                  |                  |
| Property and Equipment (net) | 245,000            |                    | 185,000          |                  |
| Goodwill                     | 35,000             |                    | 17,000           |                  |
| Accounts Payable             |                    | \$ 61,000          |                  | \$ 30,000        |
| Other Liabilities            |                    | 70,000             |                  | 45,000           |
| Common Stock                 |                    | 200,000            |                  | 100,000          |
| Other Contributed Capital    |                    | 40,000             |                  | 50,000           |
| Retained Earnings, 1/1       |                    | 269,000            |                  | 60,000           |
| Dividends Declared           | 30,000             |                    | 10,000           |                  |
| Sales                        |                    | 350,000            |                  | 190,000          |
| Equity in Subsidiary Income  |                    | 32,000             |                  |                  |
| Purchases                    | 215,000            |                    | 90,000           |                  |
| Expenses                     | 80,000             |                    | 56,000           |                  |
|                              | <u>\$1,022,000</u> | <u>\$1,022,000</u> | <u>\$475,000</u> | <u>\$475,000</u> |
| Inventory, 12/31             | \$ 82,000          |                    | \$ 39,000        |                  |

|          |                   | Investment in S Company |                 |
|----------|-------------------|-------------------------|-----------------|
| 12/31/13 | Balance           | 181,000                 | Dividends 8,000 |
|          | Subsidiary income | 32,000                  |                 |
| 12/31/14 | Balance           | 205,000                 |                 |

Alternatively, these two entries may be collapsed into one entry, as follows:

|         |                             |        |        |
|---------|-----------------------------|--------|--------|
| (1)–(2) | Equity in Subsidiary Income | 32,000 |        |
|         | Investment in S Company     |        | 24,000 |
|         | Dividends Declared          |        | 8,000  |

As in the year of acquisition, these entries eliminate the equity in subsidiary income and dividends recorded by P Company, and return the investment account to its balance as of the beginning of the year. This is necessary because it is the subsidiary's retained earnings at the *beginning of the year* that is eliminated in the third or investment elimination entry.

The third eliminating entry eliminates the Investment account against subsidiary equity and recognizes the noncontrolling interest as of the beginning of the current year. The fourth entry distributes the difference between implied and book values of equity, as follows:

|     |  |         |         |
|-----|--|---------|---------|
| (3) | Common Stock—S Company   | 100,000 |         |
|     | Other Contributed Capital—S Company                                | 50,000  |         |
|     | 1/1 Retained Earnings—S Company                                    | 60,000  |         |
|     | Difference between Implied and Book Value                          | 16,250  |         |
|     | Investment in S Company $\$165,000 + .8(60,000 - 40,000)$          |         | 181,000 |
|     | or $(\$205,000 - \$24,000, \text{ from entries (1) and (2)})$      |         |         |
|     | Noncontrolling Interest in Equity $\$41,250 + .2(60,000 - 40,000)$ |         | 45,250  |
| (4) | Goodwill   | 16,250  |         |
|     | Difference between Implied and Book Values                         |         | 16,250  |

The only differences in the affiliates' account data as compared to the cost method workpaper appear in P Company's statements. The Investment account in P Company's balance sheet shows a balance of \$205,000 rather than \$165,000; and equity in subsidiary income of \$32,000, rather than dividend income of \$8,000, is listed in P Company's income statement. In addition, P Company's beginning and ending retained earnings are \$16,000 and \$40,000 larger, respectively, which reflects the effect of recording its share (80%) of S Company's income in 2015 and 2016 rather than recording only its share of dividends distributed by S Company.



EQUITY

Also, observe that the consolidated columns in Illustration 4-5 and Illustration 4-10 are the same; regardless of the method used (cost or equity), the consolidated results are unaffected.

## Investment Carried at Complete Equity

**LO 5** Workpaper eliminating entries (complete equity method).

Under the assumptions of the preceding illustration, the complete equity method and the partial equity method are identical, not only in the end result but also in the steps to consolidate. Under other assumptions, however, the two may differ in the steps (though not in the end result).

Recall that the complete equity method is quite similar to the partial equity method, but involves additional entries to the investment account on the books of the parent. These additional adjustments are made to the investment account for the amortization, depreciation, or impairment of differences between market and book values, for the effects of unrealized intercompany profits, and for stockholders' equity transactions undertaken by the subsidiary.

In the absence of these types of transactions, the complete equity method is identical to the partial equity method, both on the books of the parent and in the workpaper eliminating entries, as in the preceding illustration.

Let us assume that no unrealized intercompany profits are involved (neither the parent nor the subsidiary made sales to the other party), and the subsidiary did not participate in any stockholders' equity transactions. In this situation we need only consider the possible amortization, depreciation, or impairment of differences between market and book values,

## Equity Method

## ILLUSTRATION 4-10

80% Owned Subsidiary

## Consolidated Statements Workpaper

Subsequent to Year  
of AcquisitionP Company and Subsidiary for  
the Year Ended December 31, 2016

|  | P<br>Company   | S<br>Company   | Eliminations   |                | Noncontrolling<br>Interest | Consolidated<br>Balances |
|--|----------------|----------------|----------------|----------------|----------------------------|--------------------------|
|  |                |                | Dr.            | Cr.            |                            |                          |
| <b>Income Statement</b>                          |                |                |                |                |                            |                          |
| Sales  | 350,000        | 190,000        |                |                |                            | 540,000                  |
| Equity in Subsidiary Income                      | 32,000         |                | (1)            | 32,000         |                            |                          |
| Total Revenue                                    | <u>382,000</u> | <u>190,000</u> |                |                |                            | <u>540,000</u>           |
| Cost of Goods Sold                               | 200,000        | 94,000         |                |                |                            | 294,000                  |
| Expenses   | 80,000         | 56,000         |                |                |                            | 136,000                  |
| Total Cost and Expense                           | <u>280,000</u> | <u>150,000</u> |                |                |                            | <u>430,000</u>           |
| Net/Consolidated Income                          | 102,000        | 40,000         |                |                |                            | 110,000                  |
| Noncontrolling Interest<br>in Income             |                |                |                |                | 8,000                      | (8,000)*                 |
| Net Income to Retained<br>Earnings               | <u>102,000</u> | <u>40,000</u>  | <u>32,000</u>  | <u>—0—</u>     | <u>8,000</u>               | <u>102,000</u>           |
| <b>Retained Earnings Statement</b>               |                |                |                |                |                            |                          |
| 1/1 Retained Earnings                            |                |                |                |                |                            |                          |
| P Company  | 269,000        |                |                |                |                            | 269,000                  |
| S Company  |                | 60,000         | (3)            | 60,000         |                            |                          |
| Controlling Interest in Net<br>Income from above | 102,000        | 40,000         | 32,000         | —0—            | 8,000                      | 102,000                  |
| Dividends Declared                               |                |                |                |                |                            |                          |
| P Company  | (30,000)       |                |                |                |                            | (30,000)                 |
| S Company  |                | (10,000)       |                | (2)            | 8,000                      | (2,000)                  |
| 12/31 Retained Earnings to<br>Balance Sheet      | <u>341,000</u> | <u>90,000</u>  | <u>92,000</u>  | <u>8,000</u>   | <u>6,000</u>               | <u>341,000</u>           |
| <b>Balance Sheet</b>                             |                |                |                |                |                            |                          |
| Cash   | 74,000         | 41,000         |                |                |                            | 115,000                  |
| Accounts Receivable (net)                        | 71,000         | 33,000         |                |                |                            | 104,000                  |
| Inventory, 12/31                                 | 82,000         | 39,000         |                |                |                            | 121,000                  |
| Investment in S Company                          | 205,000        |                | (2)            | 8,000          | (1)                        | 32,000                   |
|  |                |                |                |                | (3)                        | 181,000                  |
| Difference between Implied<br>and Book Value     |                |                | (3)            | 16,250         | (4)                        | 16,250                   |
| Property and Equipment (net)                     | 245,000        | 185,000        |                |                |                            | 430,000                  |
| Goodwill   | 35,000         | 17,000         | (4)            | 16,250         |                            | 68,250                   |
| Total  | <u>712,000</u> | <u>315,000</u> |                |                |                            | <u>838,250</u>           |
| Accounts Payable                                 | 61,000         | 30,000         |                |                |                            | 91,000                   |
| Other Liabilities                                | 70,000         | 45,000         |                |                |                            | 115,000                  |
| Common Stock                                     |                |                |                |                |                            |                          |
| P Company  | 200,000        |                |                |                |                            | 200,000                  |
| S Company  |                | 100,000        | (3)            | 100,000        |                            |                          |
| Other Contributed Capital                        |                |                |                |                |                            |                          |
| P Company  | 40,000         |                |                |                |                            | 40,000                   |
| S Company  |                | 50,000         | (3)            | 50,000         |                            |                          |
| Retained Earnings from above                     | 341,000        | 90,000         | 92,000         | 8,000          | 6,000                      | 341,000                  |
| 1/1 Noncontrolling Interest<br>in Net Assets     |                |                |                | (3)            | 45,250**                   | 45,250                   |
| 12/31 Noncontrolling<br>Interest in Net Assets   |                |                |                |                | 51,250                     | 51,250                   |
| Total  | <u>712,000</u> | <u>315,000</u> | <u>282,500</u> | <u>282,500</u> |                            | <u>838,250</u>           |

\* 20% × \$40,000 = \$8,000.

\*\* \$41,250 + (\$60,000 − \$40,000) × .2 = \$45,250.

- (1) To reverse the effect of parent company entry during the year for subsidiary income.
- (2) To reverse the effect of parent company entry during the year for subsidiary dividends.
- (3) To eliminate the investment in S Company and create noncontrolling interest account.
- (4) To allocate the excess of implied over book value to goodwill.

in addition to the concepts presented in the preceding illustration. In that illustration, we assumed that any difference between purchase price and the book value of equity acquired related to goodwill. Under generally accepted accounting principles, we do not amortize, depreciate, or appreciate goodwill over time. Instead it is reviewed for impairment. In Chapter 5, we will explore alternative assumptions regarding the disposition of the difference between implied value and book value, which will necessitate amortization or depreciation adjustments. In subsequent chapters, we will explore other complications that may result in differences between the partial and complete equity methods.

## Summary of Workpaper Eliminating Entries

Basic workpaper consolidating (eliminating/adjusting) entries depend on whether (1) the cost method or equity method is used to record the investment on the books of the parent company, and (2) the workpaper is being prepared at the end of the year of acquisition or at the end of periods after the year of acquisition. Workpaper eliminating entries for the alternatives are summarized in Illustration 4-11.

### ILLUSTRATION 4-11

#### Summary of Basic Workpaper Eliminating Entries

| <i>Cost Method</i>   | <i>Partial Equity Method</i>   | <i>Complete Equity Method</i>  |
|--|--|--|
| <i>End of Year of Acquisition</i>  |  |  |
| <b>Dividend Income</b><br><b>Dividends Declared—S</b>  | <b>Equity in Subsidiary Income</b><br><b>Dividends Declared—S</b><br><b>Investment in S Company</b>  | <b>Equity in Subsidiary Income</b><br><b>Dividends Declared—S</b><br><b>Investment in S Company</b>  |
| To eliminate intercompany dividend income.   | To eliminate equity in subsidiary <i>reported</i> income and dividends and return the investment account to its cost at date of acquisition.                 | To eliminate equity in subsidiary <i>adjusted</i> income and dividends and return the investment account to its cost at date of acquisition. (Adjustments are addressed in Chapter 5.)                 |
| <b>Capital Stock—S</b><br><b>Other Contributed Capital—S</b><br><b>Retained Earnings—S</b><br><b>Difference between Implied and Book Value</b><br><b>Investment in S Company</b><br><b>NCI</b> | <b>Same as Cost Method</b>   | <b>Same as Cost Method</b>   |
| To eliminate P Company's share of S Company's stockholders' equity against the investment account, and create an account for the noncontrolling interest, if any.                              |  |  |
| <i>End of Periods Subsequent to Year of Acquisition</i>  |  |  |
| <b>Investment in S Company</b><br><b>Retained Earnings—P</b>   | <b>No Entry Needed</b>   | <b>No Entry Needed</b>   |
| To recognize P Company's share of S Company's undistributed income from the date of acquisition to beginning of the current year (reciprocity or conversion entry).                            |  |  |
| <b>Dividend Income</b><br><b>Dividends Declared—S</b>  | <b>Equity in Subsidiary Income</b><br><b>Dividends Declared—S</b><br><b>Investment in S Company</b>  | <b>Equity in Subsidiary Income</b><br><b>Dividends Declared—S</b><br><b>Investment in S Company</b>  |
| To eliminate intercompany dividend income.   | To eliminate equity in subsidiary <i>reported</i> income and dividends and return the investment account to its balance as of beginning of the current year. | To eliminate equity in subsidiary <i>adjusted</i> income and dividends and return the investment account to its balance as of beginning of the current year. (Adjustments are addressed in Chapter 5.) |
| <b>Capital Stock—S</b><br><b>Other Contributed Capital—S</b><br><b>Retained Earnings—S</b><br><b>Difference between Implied and Book Value</b><br><b>Investment in Company</b><br><b>NCI</b>   | <b>Same as Cost Method</b>   | <b>Same as Cost Method</b>   |
| To eliminate P Company's share of S Company's stockholders' equity against the investment account, and recognize NCI.  |  |  |

## 4.4 ELIMINATION OF INTERCOMPANY REVENUE AND EXPENSE ITEMS

Discussion and illustrations to this point have emphasized the procedures used to eliminate the parent company's interest in subsidiary equity against the investment account at the end of the year of stock acquisition and for subsequent periods. Before proceeding with a discussion of some special topics relating to consolidated statements in succeeding chapters, it should be noted that several types of intercompany revenue and expense items must be eliminated in the preparation of a consolidated income statement.

Affiliates often engage in numerous sale/purchase transactions with other affiliates, such as the sale of merchandise or equipment by a subsidiary to its parent, or vice versa. Procedures used to eliminate these intercompany sales (purchases), as well as any unrealized profit remaining in inventories, are discussed and illustrated in Chapters 6 and 7. Eliminating workpaper entries are also needed for such intercompany revenue and expense items as interest, rent, and professional services. For example, the workpaper entry to eliminate intercompany interest revenue and expense takes the following form:

|                  |       |       |
|------------------|-------|-------|
| Interest Revenue | 8,000 |       |
| Interest Expense |       | 8,000 |

### TEST YOUR KNOWLEDGE 4.3

**NOTE:** Solutions to *Test Your Knowledge* questions are found at the end of each chapter before the end-of-chapter questions.

#### Multiple Choice

- In periods subsequent to acquisition and in *the absence of intercompany profits or other complicating transactions*, the noncontrolling interest (as shown in the consolidated balance sheet) can be determined by summing the noncontrolling interest in equity at acquisition *and*:
  - The noncontrolling percentage of the book value of the subsidiary's net assets.
  - The noncontrolling percentage of the fair value of the subsidiary's net assets.
  - The noncontrolling percentage of the subsidiary's year-end retained earnings.
  - The noncontrolling percentage of the change in subsidiary retained earnings from acquisition to the end of the current year.

## 4.5 INTERIM ACQUISITIONS OF SUBSIDIARY STOCK

**LO 6** Two approaches for interim acquisitions.

Discussion and illustrations to this point have been limited to situations in which the parent company acquired its interest in a subsidiary at the beginning of the subsidiary's fiscal period. That condition is unrealistic because many stock acquisitions are made during the subsidiary's fiscal period. Thus, the proper treatment in consolidated financial statements of the subsidiary's revenue and expense items for the partial period *before* acquisition must be considered.

For example, suppose that P Company acquires 90% of the outstanding common stock of S Company on April 1, 2015. Both companies close their books on December 31. Consider S's income statement in Illustration 4-12. In this illustration, the revenues and expenses for S Company are presented in total, and also separately for the periods before and after the acquisition. S Company earns \$36,000 of income for the entire year. P Company is entitled to 90% of the income earned since April (90% of \$27,000 or \$24,300). As mentioned earlier, *under acquisition accounting, revenues and expenses of the acquired company are included with those of the acquiring company only from the date of acquisition forward*. In essence, the amounts to be combined with the parent in the year of acquisition are shown in the third column of Illustration 4-12. However, the totals from column 1 are often shown as the starting point for two reasons: (1) the revenue and expense accounts in the books of the subsidiary are likely to reflect the entire year, and (2) users may be interested in preacquisition information.

## ILLUSTRATION 4-12

**S Company**  
**Income Statement and Allocation to Various Interests**  
**for the Year Ended December 31, 2015**

|  | (1)<br><i>Entire Year</i> | (2)<br><i>January to April</i> | (3)<br><i>April to December</i> |
|--|---------------------------|--------------------------------|---------------------------------|
| <i>Income Statement</i>  |                           |                                |                                 |
| Sales  | 160,000                   | 40,000                         | 120,000                         |
| Dividend Income  |                           |                                |                                 |
| Total Revenue  | <u>160,000</u>            | <u>40,000</u>                  | <u>120,000</u>                  |
| Cost of Goods Sold   | 80,000                    | 20,000                         | 60,000                          |
| Other Expenses   | 44,000                    | 11,000                         | 33,000                          |
| Total Cost and Expense   | <u>124,000</u>            | <u>31,000</u>                  | <u>93,000</u>                   |
| Net Income   | <u>36,000</u>             | <u>9,000</u>                   | 27,000                          |
| Noncontrolling Interest in Income (10%) after Purchase           |                           |                                | 2,700                           |
| Controlling Interest in Consolidated Net Income (after Purchase) |                           |                                | <u>24,300</u>                   |

Note: P acquires S Company on April 1, 2015.

FASB requires that the consolidated financial statements include the subsidiary's revenues, expenses, gains, and losses only from the date of acquisition (FASB ASC paragraph 810-10-45-4). To accomplish this, the subsidiary usually closes the books on the date of acquisition (i.e., preacquisition income is closed to retained earnings). In Illustration 4-12, the third column shows the revenues and expenses to be reported under this approach.

## Interim Acquisition under the Cost Method

Assume that P Company acquired 90% of the outstanding common stock of S Company on April 1, 2015, for a cash payment of \$290,700. The difference between implied and book value relates to the undervaluation of S Company land. Trial balances at December 31, 2015, for P and S companies appear below.



COST

|                           | <i>P Company</i>   |                    | <i>S Company</i> |                  |
|---------------------------|--------------------|--------------------|------------------|------------------|
|                           | <i>Dr.</i>         | <i>Cr.</i>         | <i>Dr.</i>       | <i>Cr.</i>       |
| Current Assets            | \$ 145,300         |                    | \$ 71,000        |                  |
| Investment in S Company   | 290,700            |                    |                  |                  |
| Plant and Equipment (net) | 326,000            |                    | 200,000          |                  |
| Land                      | 120,000            |                    | 90,000           |                  |
| Liabilities               |                    | \$ 100,000         |                  | \$ 65,000        |
| Common Stock              |                    | 500,000            |                  | 200,000          |
| Retained Earnings, 1/1    |                    | 214,000            |                  | 80,000           |
| Dividends Declared, 11/1  | 50,000             |                    | 20,000           |                  |
| Sales                     |                    | 600,000            |                  | 160,000          |
| Dividend Income           |                    | 18,000             |                  |                  |
| Cost of Goods Sold        | 380,000            |                    | 80,000           |                  |
| Other Expense             | 120,000            |                    | 44,000           |                  |
|                           | <u>\$1,432,000</u> | <u>\$1,432,000</u> | <u>\$505,000</u> | <u>\$505,000</u> |

In the computation of subsidiary income before acquisition, it is assumed that S Company's income of \$36,000 was earned evenly throughout the year. Because one-fourth of the year had expired by April 1, the date of acquisition, net income prior to the acquisition date was  $\$36,000 \times \frac{1}{4}$  or \$9,000. Only three-fourths of S Company's sales, cost of goods sold, and other expense are included in the consolidated income statement as if S Company's books had been closed on April 1, 2015. These are the amounts shown in column 3 of Illustration 4-12.

If the books are actually closed on April 1, 2015, this alternative is facilitated. The following entry should be made on S's books:

| <b>S's Books</b>  |       |       |
|-------------------|-------|-------|
| Income Summary    | 9,000 |       |
| Retained Earnings |       | 9,000 |

If this occurs, the balance in the retained earnings account on the books of the subsidiary (after closing entries on 4/1) is: \$80,000 (balance at 1/1) + \$9,000 (income for first three months of the year, column 2 of Illustration 4-12), or \$89,000.

#### Computation and Allocation of Difference Schedule

|   | <i>Parent Share</i> | <i>Noncontrolling Share</i> | <i>Total Value</i> |
|---|---------------------|-----------------------------|--------------------|
| Purchase price and implied value          | <u>290,700</u>      | <u>32,300</u>               | <u>323,000</u>     |
| Less: Book value of equity:               |                     |                             |                    |
| Common stock                              | 180,000             | 20,000                      | <b>200,000</b>     |
| Retained earnings, 4/1                    | 80,100              | 8,900                       | <b>89,000</b>      |
| Total book value                          | <u>260,100</u>      | <u>28,900</u>               | <u>289,000</u>     |
| Difference between implied and book value | 30,600              | 3,400                       | <b>34,000</b>      |
| Adjust land upward (mark to market)       | (30,600)            | (3,400)                     | <b>(34,000)</b>    |
| Balance                                   | <u>—0—</u>          | <u>—0—</u>                  | <u>—0—</u>         |



COST

A workpaper for the preparation of consolidated financial statements on December 31, 2015, is presented in Illustration 4-13.

The workpaper entry to eliminate the investment account is:

|     |  |         |         |
|-----|--|---------|---------|
| (1) | Common Stock—S Company                     | 200,000 |         |
|     | 4/1 Retained Earnings—S Company            | 89,000  |         |
|     | Difference between Implied and Book Values | 34,000  |         |
|     | Investment in S Company                    |         | 290,700 |
|     | Noncontrolling Interest in Equity          |         | 32,300  |

Note that S Company's beginning retained earnings is \$9,000 greater than it is in Illustration 4-12, reflecting the effect of the closing to retained earnings of income earned during the first three months. Noncontrolling interest in net income included in consolidated net income is 10% of \$27,000, or \$2,700 earned subsequent to acquisition. Note that consolidated net income, consolidated retained earnings, and the consolidated balance sheet are identical to those in Illustration 4-13. Only the detail included in the consolidated income statement is different.

## Interim Acquisition: The Equity Method

The preceding discussion assumed that the parent company recorded its investment using the cost method. If the equity method had been used, P Company would have recognized (in actual entries posted to the general ledger) its share of subsidiary income earned *after* acquisition. On the books of the parent company, dividends would be treated as usual as a reduction in the investment account. Thus, still using the example introduced in Illustration 4-12, P Company would make the following dividend and earnings entries relative to its investment in S Company for the year 2015.



EQUITY

| <b>P's Books</b>                           |        |        |
|--|--------|--------|
| Investment in S Company                    | 24,300 |        |
| Equity in Subsidiary Income .9(\$27,000)   |        | 24,300 |
| To record equity in subsidiary income.     |        |        |
| Cash                                       | 18,000 |        |
| Investment in S Company                    |        | 18,000 |
| To record dividends received .9(\$20,000). |        |        |

## Cost Method

## ILLUSTRATION 4-13

Interim Purchase of Stock

## Consolidated Statements Workpaper

90% Owned Subsidiary

P Company and Subsidiary

for the Year Ended December 31, 2015

| <i>Income Statement</i>                     | <i>P Company</i> | <i>S Company</i> | <i>Eliminations</i> |                | <i>Noncontrolling Interest</i> | <i>Consolidated Balances</i> |
|---|------------------|------------------|---------------------|----------------|--------------------------------|------------------------------|
|   |                  |                  | <i>Dr.</i>          | <i>Cr.</i>     |                                |                              |
| Sales                                       | 600,000          | 120,000          |                     |                |                                | 720,000                      |
| Dividend Income                             | 18,000           |                  | (3) 18,000          |                |                                |                              |
| Total Revenue                               | <u>618,000</u>   | <u>120,000</u>   |                     |                |                                | <u>720,000</u>               |
| Cost of Goods Sold                          | 380,000          | 60,000           |                     |                |                                | 440,000                      |
| Other Expenses                              | 120,000          | 33,000           |                     |                |                                | 153,000                      |
| Total Cost and Expense                      | <u>500,000</u>   | <u>93,000</u>    |                     |                |                                | <u>593,000</u>               |
| Net/Consolidated Income                     | 118,000          | 27,000           |                     |                |                                | 127,000                      |
| Noncontrolling Interest in Income           |                  |                  |                     |                | 2,700*                         | (2,700)                      |
| Net Income to Retained Earnings             | <u>118,000</u>   | <u>27,000</u>    | <u>18,000</u>       | <u>—0—</u>     | <u>2,700</u>                   | <u>124,300</u>               |
| <i>Retained Earnings Statement</i>          |                  |                  |                     |                |                                |                              |
| Retained Earnings                           |                  |                  |                     |                |                                |                              |
| P Company                                   | 214,000          |                  |                     |                |                                | 214,000                      |
| S Company                                   |                  | 89,000           | (1) 89,000          |                |                                |                              |
| Net Income from above                       | 118,000          | 27,000           | 18,000              | —0—            | 2,700                          | 124,300                      |
| Dividends Declared                          |                  |                  |                     |                |                                |                              |
| P Company                                   | (50,000)         |                  |                     |                |                                | (50,000)                     |
| S Company                                   |                  | (20,000)         |                     | (3) 18,000     | (2,000)                        |                              |
| 12/31 Retained Earnings to Balance Sheet    | <u>282,000</u>   | <u>96,000</u>    | <u>107,000</u>      | <u>18,000</u>  | <u>700</u>                     | <u>288,300</u>               |
| <i>Balance Sheet</i>                        |                  |                  |                     |                |                                |                              |
| Current Assets                              | 145,300          | 71,000           |                     |                |                                | 216,300                      |
| Investment in S Company                     | 290,700          |                  |                     | (1) 290,700    |                                |                              |
| Difference between Implied and Book Value   |                  |                  | (1) 34,000          | (2) 34,000     |                                |                              |
| Property and Equipment (net)                | 326,000          | 200,000          |                     |                |                                | 526,000                      |
| Land  | 120,000          | 90,000           | (2) 34,000          |                |                                | 244,000                      |
| Total                                       | <u>882,000</u>   | <u>361,000</u>   |                     |                |                                | <u>986,300</u>               |
| Liabilities                                 | 100,000          | 65,000           |                     |                |                                | 165,000                      |
| Common Stock                                |                  |                  |                     |                |                                |                              |
| P Company                                   | 500,000          |                  |                     |                |                                | 500,000                      |
| S Company                                   |                  | 200,000          | (1) 200,000         |                |                                |                              |
| Retained Earnings from above                | 282,000          | 96,000           | 107,000             | 18,000         | 700                            | 288,300                      |
| 4/1 Noncontrolling Interest in Net Assets   |                  |                  |                     | (1) 32,300     | 32,300                         |                              |
| 12/31 Noncontrolling Interest in Net Assets |                  |                  |                     |                | 33,000                         | 33,000                       |
| Total                                       | <u>882,000</u>   | <u>361,000</u>   | <u>375,000</u>      | <u>375,000</u> |                                | <u>986,300</u>               |

\* NCI = .1 (\$27,000) = \$2,700.

(1) To eliminate the investment in S Company and create noncontrolling interest account.

(2) To allocate the difference between implied and book value to land.

(3) To eliminate intercompany dividends.



The CAD schedule is:

| <b>Computation and Allocation of Difference Schedule</b> |                         |                                 |                        |
|--|-------------------------|---------------------------------|------------------------|
|  | <i>Parent<br/>Share</i> | <i>Noncontrolling<br/>Share</i> | <i>Total<br/>Value</i> |
| Purchase price and implied value                         | <u>290,700</u>          | <u>32,300</u>                   | <u>323,000</u>         |
| Less: Book value of equity acquired:                     |                         |                                 |                        |
| Common stock   | 180,000                 | 20,000                          | <b>200,000</b>         |
| Retained earnings, 4/1                                   | 80,100                  | 8,900                           | <b>89,000</b>          |
| Total book value   | <u>260,100</u>          | <u>28,900</u>                   | <u>289,000</u>         |
| Difference between implied and book value                | 30,600                  | 3,400                           | <b>34,000</b>          |
| Adjust land upward (mark to market)                      | (30,600)                | (3,400)                         | <b>(34,000)</b>        |
| Balance  | <u>—0—</u>              | <u>—0—</u>                      | <u>—0—</u>             |

A workpaper for the preparation of consolidated financial statements on December 31, 2015, is presented in Illustration 4-14. Workpaper elimination entries are then as follows:

|  |         |         |
|--|---------|---------|
| (1) Equity in Subsidiary Income            | 24,300  |         |
| Investment in S Company                    |         | 24,300  |
| (2) Investment in S Company                | 18,000  |         |
| Dividends Declared—S Company               |         | 18,000  |
| (3) Common Stock—S Company                 | 200,000 |         |
| 4/1 Retained Earnings—S Company            | 89,000  |         |
| Difference between Implied and Book Values | 34,000  |         |
| Investment in S Company                    |         | 290,700 |
| Noncontrolling Interest in Equity          |         | 32,300  |
| (4) Land                                   | 34,000  |         |
| Difference between Implied and Book Value  |         | 34,000  |

To verify the amount of income reported, prepare t-accounts for the noncontrolling and controlling interests as follows:

#### Noncontrolling Interest in Consolidated Net Income

|   |              |                |
|---|--------------|----------------|
| Internally generated income of S Company<br>(after acquisition) | \$27,000     |                |
| Any needed adjustments (Chapter 5)                              | 0            |                |
| Adjusted income of subsidiary                                   | 27,000       |                |
| Noncontrolling percentage owned                                 | 10%          |                |
| Noncontrolling interest in income                               | <u>2,700</u> |                |
|   |              | (90%) (27,000) |

#### Controlling Interest in Consolidated Income

|   |                  |  |
|---|------------------|--|
| Internally generated income of P Company<br>(entire year: \$124,300 – \$24,300) | \$100,000        |  |
| Any needed adjustments (Chapter 5)  | 0                |  |
| Percentage of subsidiary adjusted<br>income (90%) (\$27,000)                    | <u>24,300</u>    |  |
| Controlling interest in income  | <u>\$124,300</u> |  |

### TEST YOUR KNOWLEDGE 4.4

**NOTE:** Solutions to *Test Your Knowledge* questions are found at the end of each chapter before the end-of-chapter questions.

#### Multiple Choice

- Cash spent or received in consummating an acquisition should be reflected in which of the following sections of the statement of cash flows:
  - Operating
  - Investing
  - Financing
  - Notes to the statement of cash flows

**ILLUSTRATION 4-14**

**Consolidated Statements Workpaper**

**P Company and Subsidiary**

**for the Year Ended December 31, 2015**

| Income Statement                               | P<br>Company   | S<br>Company   | Eliminations   |                           | Noncontrolling<br>Interest | Consolidated<br>Balances |
|--|----------------|----------------|----------------|---------------------------|----------------------------|--------------------------|
|  |                |                | Dr.            | Cr.                       |                            |                          |
| Sales  | 600,000        | 120,000        |                |                           |                            | 720,000                  |
| Equity in Subsidiary Income                    | <u>24,300</u>  |                | (1) 24,300     |                           |                            | <u>720,000</u>           |
| Total Revenue                                  | <u>624,300</u> | <u>120,000</u> |                |                           |                            | <u>720,000</u>           |
| Cost of Goods Sold                             | 380,000        | 60,000         |                |                           |                            | 440,000                  |
| Other Expenses                                 | <u>120,000</u> | <u>33,000</u>  |                |                           |                            | <u>153,000</u>           |
| Total Cost and Expense                         | <u>500,000</u> | <u>93,000</u>  |                |                           |                            | <u>593,000</u>           |
| Net/Consolidated Income                        | 124,300        | 27,000         |                |                           |                            | 127,000                  |
| Noncontrolling Interest<br>in Income           |                |                |                |                           | 2,700*                     | (2,700)                  |
| Net Income to Retained<br>Earnings             | <u>124,300</u> | <u>27,000</u>  | <u>24,300</u>  | <u>—0—</u>                | <u>2,700</u>               | <u>124,300</u>           |
| <b>Retained Earnings Statement</b>             |                |                |                |                           |                            |                          |
| Retained Earnings                              |                |                |                |                           |                            |                          |
| P Company                                      | 214,000        |                |                |                           |                            | 214,000                  |
| S Company                                      |                | 89,000         | (3) 89,000     |                           |                            |                          |
| Net Income from above                          | 124,300        | 27,000         | 24,300         | —0—                       | 2,700                      | 124,300                  |
| Dividends Declared                             |                |                |                |                           |                            |                          |
| P Company                                      | (50,000)       |                |                |                           |                            | (50,000)                 |
| S Company                                      |                | (20,000)       |                | (2) 18,000                | (2,000)                    |                          |
| 12/31 Retained Earnings to<br>Balance Sheet    | <u>288,300</u> | <u>96,000</u>  | <u>113,300</u> | <u>18,000</u>             | <u>700</u>                 | <u>288,300</u>           |
| <b>Balance Sheet</b>                           |                |                |                |                           |                            |                          |
| Current Assets                                 | 145,300        | 71,000         |                |                           |                            | 216,300                  |
| Investment in S Company                        | 297,000        |                | (2) 18,000     | (1) 24,300<br>(3) 290,700 |                            |                          |
| Difference between Implied<br>and Book Value   |                |                | (3) 34,000     | (4) 34,000                |                            |                          |
| Property and Equipment (net)                   | 326,000        | 200,000        |                |                           |                            | 526,000                  |
| Land   | <u>120,000</u> | <u>90,000</u>  | (4) 34,000     |                           |                            | <u>244,000</u>           |
| Total  | <u>888,300</u> | <u>361,000</u> |                |                           |                            | <u>986,300</u>           |
| Liabilities                                    | 100,000        | 65,000         |                |                           |                            | 165,000                  |
| Common Stock                                   |                |                |                |                           |                            |                          |
| P Company                                      | 500,000        |                |                |                           |                            | 500,000                  |
| S Company                                      |                | 200,000        | (3) 200,000    |                           |                            |                          |
| Retained Earnings from above                   | 288,300        | 96,000         | 113,300        | 18,000                    | 700                        | 288,300                  |
| 4/1 Noncontrolling Interest<br>in Net Assets   |                |                |                | (1) 32,300                | 32,300                     |                          |
| 12/31 Noncontrolling<br>Interest in Net Assets |                |                |                |                           | <u>33,000</u>              | <u>33,000</u>            |
| Total  | <u>888,300</u> | <u>361,000</u> | <u>399,300</u> | <u>399,300</u>            |                            | <u>986,300</u>           |

\*NCI = .10(\$27,000) = \$2,700.

- (1) To reverse the effect of parent company entry during the year for subsidiary income.
- (2) To reverse the effect of parent company entry during the year for subsidiary dividends.
- (3) To eliminate the investment in S Company and create noncontrolling interest account.
- (4) To allocate the excess of implied over book value to land.

## 4.6 CONSOLIDATED STATEMENT OF CASH FLOWS

### LO 7 Peculiarities of Consolidated Statement of Cash Flows.

The procedures followed in the preparation of a statement of cash flows are discussed in most intermediate accounting texts. When the company is reporting on a consolidated basis, the statement of cash flows must also be presented on a consolidated basis. The starting point for the consolidated cash flow statement is the consolidated income statement and comparative consolidated balance sheets (beginning and end of current year). Thus the preparation of the consolidated statement of cash flows will be the same, regardless of how the parent accounts for its investment (cost method, partial equity method, or complete equity method). This is true because the final product (the consolidated financial statements) is always the same if the consolidating procedures are done correctly.

We will first discuss years subsequent to the year of acquisition, and then the preparation of the consolidated statement of cash flows in the year of acquisition. In years subsequent to the year of acquisition, a consolidated balance sheet should be available for both the beginning and end of the current year. The consolidated statement of cash flows reflects all cash outlays and inflows of the consolidated entity except those between parent and subsidiary. Therefore, we are interested in explaining 100% of the changes in balance sheet accounts of parent and subsidiary (not just the portion of the subsidiary controlled by the parent). Because the consolidated balance sheet reflects 100% of the assets and liabilities of both parent and subsidiary, the preparation of a consolidated statement of cash flows is quite similar in most respects to that of a single (unconsolidated) firm. At least three aspects of the statement do, however, differ (or require modification). They are:

1. *Noncontrolling interest in consolidated net income.* Accounting standards require the disclosure of cash flows from operating activities for the reporting period. Like the consolidated balance sheet and the consolidated income statement, the consolidated statement of cash flows presents **combined** information for the parent and its subsidiaries (i.e., combined cash flows). Cash flows from operating activities may be presented by either the direct or the indirect method. Under the indirect method, we begin with net income for the period and add back (or deduct) any items recognized in determining that net income that did not result in an outflow (or inflow) of cash. These adjustments normally include such items as depreciation and amortization. ***If the statement of cash flows starts with consolidated net income, then the noncontrolling interest is already included and need not be added back.*** However, if the starting amount (net income) reflects only the **controlling interest** in consolidated net income (often the “bottom line” on the consolidated income statement), an additional adjustment for a consolidated statement of cash flows is the **add-back of the noncontrolling interest in consolidated net income** (or deduction of the noncontrolling interest’s share of a loss).
2. *Subsidiary dividends paid:* Because we are interested in reflecting 100% of cash outlays and inflows between the consolidated entity and outsiders, any subsidiary dividends **paid to the noncontrolling stockholders** must be included with dividends paid by the parent company when calculating cash outflow from financing activities. The dividends paid by the subsidiary to the parent do not involve cash flows to or from outsiders and thus are not reported on the consolidated statement of cash flows.
3. *Parent company acquisition of additional subsidiary shares:* The cost of the acquisition of additional shares in a subsidiary by the parent company may or may not constitute a cash outflow from investing activities. If the acquisition is an open market purchase, it does represent such an outflow.

### Illustration of Preparation of a Consolidated Statement of Cash Flows—Year after Acquisition

As an illustration of the preparation of a consolidated statement of cash flows, a consolidated income statement and comparative consolidated balance sheets for P Company and its 90% owned subsidiary, S Company, along with other information, are presented in Illustration 4–15.

#### Other Information for the Current Year:

1. Depreciation expense of \$26,000 is included in operating expenses.
2. Manufacturing equipment was acquired for cash of \$185,000.
3. Investments include a 30% common stock investment in Zorn Company on which \$6,000 of equity in investee income was recognized. No dividends were received during the year.

**ILLUSTRATION 4-15****P Company and Subsidiary  
Consolidated Income Statement  
for the Year Ended December 31, 2016**

|  |                         |
|--|-------------------------|
| Sales  | \$540,000               |
| Cost of goods sold                                 | 294,000                 |
| Gross profit                                       | <u>246,000</u>          |
| Operating expenses                                 | 136,000                 |
| Income from operations                             | <u>110,000</u>          |
| Equity in income of Zorn Company                   | 6,000                   |
| Consolidated net income                            | <u>116,000</u>          |
| Noncontrolling interest in consolidated net income | <u>4,000</u>            |
| Controlling interest in consolidated net income    | <u><u>\$112,000</u></u> |

**P Company and S Company Comparative  
Consolidated Balance Sheets**

| <i>Assets</i>                         | <i>December 31</i> |                  |
|---------------------------------------|--------------------|------------------|
|                                       | <i>2015</i>        | <i>2016</i>      |
| Cash                                  | \$ 60,000          | 97,000           |
| Accounts receivable (net)             | 92,000             | 120,000          |
| Inventories                           | 110,000            | 101,000          |
| Plant and equipment (net)             | 245,000            | 404,000          |
| Investments                           | 152,000            | 158,000          |
| Goodwill                              | 20,000             | 20,000           |
| Total assets                          | <u>\$679,000</u>   | <u>\$900,000</u> |
| <i>Liabilities and Equity</i>         |                    |                  |
| Accounts payable                      | \$ 60,000          | \$ 93,000        |
| Accrued expenses payable              | 99,000             | 89,000           |
| Total liabilities                     | <u>159,000</u>     | <u>182,000</u>   |
| <b>Stockholders' equity:</b>          |                    |                  |
| Noncontrolling interest in net assets | 20,000             | 22,000           |
| Common stock, \$2 par value           | 200,000            | 220,000          |
| Other contributed capital             | 40,000             | 140,000          |
| Retained earnings                     | <u>260,000</u>     | <u>336,000</u>   |
| Total stockholders' equity            | <u>520,000</u>     | <u>718,000</u>   |
| Total Liabilities and Equity          | <u>\$679,000</u>   | <u>\$900,000</u> |

- Noncontrolling interest in consolidated net income was \$4,000. However, \$2,000 was distributed to noncontrolling stockholders as dividends during the year. Thus noncontrolling interest in net assets on the balance sheet increased by only \$2,000.
- Ten thousand shares of common stock were issued by P Company on the open market for cash at \$12 per share.
- Dividend payments totaled \$38,000, of which \$36,000 were to P Company stockholders (thereby reducing consolidated retained earnings), and \$2,000 were to S Company noncontrolling stockholders.

A consolidated statement of cash flows, using the indirect method of presenting cash flows from operating activities, is shown in Illustration 4-16.

**ILLUSTRATION 4-16****P Company and Subsidiary  
Consolidated Statement of Cash Flows  
for the Year Ended December 31, 2016**

|   |                 |                        |
|---|-----------------|------------------------|
| <b>Cash flows from operating activities:</b>                                  |                 |                        |
| Consolidated Net Income   |                 | \$116,000              |
| Adjustments to convert net income to net cash flow from operating activities: |                 |                        |
| Depreciation expense  |                 | 26,000                 |
| Increase in accounts receivable   |                 | (28,000)               |
| Decrease in inventories   |                 | 9,000                  |
| Increase in accounts payable  |                 | 33,000                 |
| Decrease in accrued expenses payable  |                 | (10,000)               |
| Equity in income of Zorn Company  |                 | (6,000)                |
| Net cash flow from operating activities                                       |                 | <u>\$140,000</u>       |
| <b>Cash flows from investing activities:</b>                                  |                 |                        |
| Payments for purchase of plant assets   |                 | (185,000)              |
| <b>Cash flows from financing activities:</b>                                  |                 |                        |
| Proceeds from the issuance of common stock                                    | \$120,000       |                        |
| Cash dividends declared and paid  | <u>(38,000)</u> |                        |
| Net cash flow from financing activities                                       |                 | <u>82,000</u>          |
| Increase in cash  |                 | \$37,000               |
| Cash Balance, beginning   |                 | 60,000                 |
| Cash Balance, ending  |                 | <u><u>\$97,000</u></u> |

If the direct method is used to report cash from operations on the consolidated statement of cash flows, the statement would be identical to Illustration 4-16 with one exception. The “cash flows from operating activities” would be replaced with the following:

|   |                |                    |
|---|----------------|--------------------|
| Cash flows from operating activities:   |                |                    |
| Cash received from customers (1)        |                | \$512,000          |
| Less cash paid for:                     |                |                    |
| Purchases of merchandise (2)            | \$252,000      |                    |
| Operating expenses (3)                  | <u>120,000</u> | 372,000            |
| Net cash flow from operating activities |                | <u>\$140,000</u>   |
| (1) Beginning accounts receivable       |                | \$ 92,000          |
| Sales                                   |                | 540,000            |
| Ending accounts receivable              |                | (120,000)          |
| Cash received from customers            |                | <u>(\$512,000)</u> |
| (2) Cost of goods sold                  |                | \$294,000          |
| Beginning inventory                     |                | (110,000)          |
| Ending inventory                        |                | <u>101,000</u>     |
| Accrual basis purchases                 |                | 285,000            |
| Beginning accounts payable              |                | 60,000             |
| Ending accounts payable                 |                | (93,000)           |
| Cash basis purchases                    |                | <u>\$252,000</u>   |
| (3) Operating expenses                  |                | \$136,000          |
| Depreciation expense                    |                | (26,000)           |
| Beginning accrued expenses              |                | 99,000             |
| Ending accrued expenses                 |                | <u>(89,000)</u>    |
| Cash paid for operating expenses        |                | <u>\$120,000</u>   |

## 4.7 ILLUSTRATION OF PREPARATION OF A CONSOLIDATED STATEMENT OF CASH FLOWS—YEAR OF ACQUISITION

### LO 8 Stock issued as Consideration in Statement of Cash Flows.

The preparation of the consolidated statement of cash flows in the year of acquisition is complicated slightly because the comparative balance sheets at the beginning and end of the current year are dissimilar. Specifically, the balance sheet at the *end* of the year of acquisition reflects consolidated balances, while the beginning of the year reflects parent-only balances. Thus the net change in cash that investors wish to interpret is the change from the parent's beginning-of-year balance to the combined (consolidated) end-of-year cash balance. To accomplish this reconciliation, two realizations are important.

1. Any cash spent or received in the acquisition itself should be reflected in the *Investing* activities section of the consolidated statement of cash flows. For example, if the parent paid total cash of \$1,000,000 to acquire a subsidiary, which brought \$300,000 cash to the consolidated entity, the net decrease in cash would appear as a \$700,000 outlay. On the other hand, if the parent issued only stock or debt (no cash) to acquire the same subsidiary, the net increase would appear as a \$300,000 cash inflow. The issuance of stock or debt would appear in the notes to the financial statements as a significant non-cash investing and financing activity.
2. To explain the change in cash successfully, the assets and liabilities of the subsidiary *at the date of acquisition* must be added to those of the parent at the beginning of the current year. For example, assume that P Company had \$1,500,000 in long-term notes payable at the beginning of the year, S Company had \$500,000 in long-term notes payable at the date of acquisition, and the consolidated entity had \$3,000,000 in long-term notes payable at the end of the year. To explain the net change, the *Financing* section of the statement of cash flows might reflect a cash inflow of \$1,000,000 from borrowing activities.

To illustrate the preparation of a consolidated statement of cash flows in the year of acquisition, consider the information in Illustration 4-17. In this problem, P Company acquires 80% of S Company on April 1, 2016 for \$200,000 cash. In this illustration the last six columns are the familiar columns used to prepare the consolidated balance sheet and income statement at the end of 2016. However, two additional columns have been added: one showing the beginning-of-year balances (January 1, 2016) for the balance sheet accounts for P Company and one showing the balances on the date of acquisition (April 1, 2016) for S Company. The information in these columns is needed to prepare the consolidated statement of cash flows for 2016, but does not affect any of the extensions or calculations needed to complete the worksheet in Illustration 4-17. Other information used in the example includes the following:

1. Total consolidated depreciation expense is \$30,000.
2. The companies issued \$205,000 of debt.
3. The companies purchased \$95,000 of property, plant, and equipment.
4. The excess of implied over book value is attributable to land ( $\$200,000 - .8(\$160,000 + \$80,000) = \$8,000$ ).
5. The partial-year alternative is used for presenting subsidiary income and expense accounts.

The comparative consolidated balance sheet, prepared from Illustration 4-17, is shown in Illustration 4-18. Notice that the beginning of the year balance sheet amounts are the same as P Company's beginning of the year balance sheet (or the first column in the worksheet in Illustration 4-17). Therefore, the change in cash in the consolidated statement of cash flows is an increase of \$35,000, calculated as the \$115,000 ending consolidated balance less the \$80,000 beginning balance.

## ILLUSTRATION 4-17

**Consolidated Statements Worksheet  
for the Year Ended December 31, 2016**

## Cost Method

Interim Purchase of Stock  
80% Owned Subsidiary

| Income Statement                            | P Company   |             | S Company   |             | P Company    |              | S Company    |              | Eliminations |         | Noncontrolling Consolidated |          |
|---|-------------|-------------|-------------|-------------|--------------|--------------|--------------|--------------|--------------|---------|-----------------------------|----------|
|   | At 1/1/2016 | At 4/1/2016 | At 1/1/2016 | At 4/1/2016 | 1/1 to 12/31 | 4/1 to 12/31 | 4/1 to 12/31 | 4/1 to 12/31 | Dr.          | Cr.     | Interest                    | Balances |
| Sales                                       |             |             | 350,000     |             | 200,000      |              |              |              | (3)          | 9,600   |                             | 550,000  |
| Dividend Income .8(\$12,000)                |             |             | 9,600       |             |              |              |              |              |              |         |                             | 550,000  |
| Total Revenue                               |             |             | 359,600     |             | 200,000      |              |              |              |              |         |                             | 550,000  |
| Cost of Goods Sold                          |             |             | 200,000     |             | 95,000       |              |              |              |              |         |                             | 295,000  |
| Other Expenses                              |             |             | 80,000      |             | 65,000       |              |              |              |              |         |                             | 145,000  |
| Total Cost and Expense                      |             |             | 280,000     |             | 160,000      |              |              |              |              |         |                             | 440,000  |
| Net/Consolidated Income                     |             |             | 79,600      |             | 40,000       |              |              |              |              |         |                             | 110,000  |
| Noncontrolling Interest in Income           |             |             |             |             |              |              |              |              |              |         | 8,000*                      | (8,000)  |
| Net Income to Retained Earnings             |             |             | 79,600      |             | 40,000       |              |              |              | 9,600        | —       | 8,000                       | 102,000  |
| Retained Earnings                           |             |             |             |             |              |              |              |              |              |         |                             |          |
| P Company, 1/1                              |             |             | 90,000      |             | 80,000       |              |              |              | (1)          | 80,000  |                             | 90,000   |
| S Company, 4/1                              |             |             | 79,600      |             | 40,000       |              |              |              | 9,600        | —       | 8,000                       | 102,000  |
| Net Income from above                       |             |             | (30,000)    |             | (12,000)     |              |              |              |              | (3)     | (2,400)                     | (30,000) |
| Dividends Declared                          |             |             |             |             |              |              |              |              |              |         |                             |          |
| P Company                                   |             |             |             |             |              |              |              |              |              |         |                             |          |
| S Company                                   |             |             |             |             |              |              |              |              |              |         |                             |          |
| 12/31 Retained Earnings to                  |             |             | 139,600     |             | 108,000      |              |              |              | 89,600       | 9,600   | 5,600                       | 162,000  |
| Balance Sheet                               |             |             |             |             |              |              |              |              |              |         |                             |          |
| Balance Sheet                               |             |             | At 1/1/2016 | At 4/1/2016 | At 12/31/16  | At 12/31/16  | At 12/31/16  |              |              |         |                             |          |
| Cash  | 80,000      | 28,000      | 75,000      | 40,000      |              |              |              |              |              |         |                             | 115,000  |
| Accounts Receivable                         | 65,000      | 38,000      | 70,000      | 53,000      |              |              |              |              |              |         |                             | 123,000  |
| Inventory                                   | 70,000      | 53,000      | 86,600      | 40,000      |              |              |              |              |              |         |                             | 126,600  |
| Investment in S Company                     |             |             | 200,000     |             |              |              |              |              | (1)          | 200,000 |                             |          |
| Difference between Implied and Book Value   |             |             |             |             |              |              |              |              | (1)          | 10,000  | (2)                         | 10,000   |
| Property and Equipment (net)                | 180,000     | 175,000     | 245,000     | 175,000     |              |              |              |              | (2)          | 10,000  |                             | 420,000  |
| Land  | 35,000      | 27,000      | 35,000      | 27,000      |              |              |              |              |              |         |                             | 72,000   |
| Total                                       | 430,000     | 321,000     | 711,600     | 335,000     |              |              |              |              |              |         |                             | 856,600  |
| Accounts Payable                            | 35,000      | 34,000      | 60,000      | 22,000      |              |              |              |              |              |         |                             | 82,000   |
| Other Liabilities                           | 65,000      | 47,000      | 272,000     | 45,000      |              |              |              |              |              |         |                             | 317,000  |
| Common Stock                                |             |             |             |             |              |              |              |              |              |         |                             |          |
| P Company                                   | 240,000     |             | 240,000     | 160,000     |              |              |              |              | (1)          | 160,000 |                             | 240,000  |
| S Company                                   | 90,000      | 80,000      | 139,600     | 108,000     |              |              |              |              | 89,600       | 9,600   | 5,600                       | 162,000  |
| Retained Earnings                           |             |             |             |             |              |              |              |              |              |         |                             |          |
| 4/1 Noncontrolling Interest in Net Assets   |             |             |             |             |              |              |              |              | (1)          | 50,000  |                             | 50,000   |
| 12/31 Noncontrolling Interest in Net Assets |             |             |             |             |              |              |              |              |              |         |                             | 55,600   |
| Total                                       | 430,000     | 321,000     | 711,600     | 335,000     |              |              |              |              | 269,600      | 269,600 |                             | 856,600  |

\* .2 (\$40,000) = \$8,000

(1) To eliminate the investment in S Company and create noncontrolling interest account.

(2) To allocate the difference between implied and book value to land.

(3) To eliminate intercompany dividends.

Now consider the two points made above. How is the \$200,000 cash acquisition reported on the statement of cash flows? The acquisition is listed in the investing activities section and represents the net assets acquired. But since S Company had \$28,000 cash on hand on the date of acquisition, the net effect on cash from the acquisition is the \$200,000 paid less the \$28,000 acquired or \$172,000. Hence, on the statement of cash flows, the acquisition is listed as a \$172,000 cash outflow. The consolidated statement of cash flows is shown in Illustration 4-19.

Second, all calculations of changes in balance sheet accounts require that assets and liabilities acquired from S Company be added to the beginning P Company balances. For instance, on the comparative balance sheets shown in Illustration 4-18, accounts receivable has a beginning balance of \$65,000 and an ending balance of \$123,000. Because accounts receivable of \$38,000 were acquired on April 1, 2016, the change in receivables is the ending consolidated amount of \$123,000 less the beginning balance of \$65,000 and the amount purchased in the acquisition of \$38,000. (See Illustration 4-17.) This gives the correct increase in accounts receivable of \$20,000. As a result, in published annual reports, the changes in the working capital accounts from the previous year's balance sheet do not reconcile to the amounts shown on the statement of cash flows in the year of acquisition. Similar reasoning is used for all the remaining changes in balance sheet accounts, such as property, plant, and equipment.

Another point about the consolidated statement of cash flows concerns the \$12,000 dividends paid by S Company. Since P Company purchased 80% of S Company, \$9,600 of the dividends must be eliminated. However, the \$2,400 remaining dividends paid by S Company to the noncontrolling shareholders must be subtracted as a financing item. We have shown this separately on the cash flow statement in Illustration 4-19 even though in practice the dividend amounts paid by P Company and S Company are often combined.

#### ILLUSTRATION 4-18

##### P Company and S Company (S Company Included in 2016 Only) Comparative Consolidated Balance Sheets

|                                       | <i>December 31</i> |                  |
|---------------------------------------|--------------------|------------------|
|                                       | <i>2015</i>        | <i>2016</i>      |
| <i>Assets</i>                         |                    |                  |
| Cash                                  | \$80,000           | \$115,000        |
| Accounts receivable (net)             | 65,000             | 123,000          |
| Inventories                           | 70,000             | 126,600          |
| Plant and equipment (net)             | 180,000            | 420,000          |
| Land                                  | 35,000             | 72,000           |
| Total assets                          | <u>\$430,000</u>   | <u>\$856,600</u> |
| <i>Liabilities and Equity</i>         |                    |                  |
| Accounts payable                      | \$ 35,000          | \$ 82,000        |
| Other Liabilities                     | 65,000             | 317,000          |
| Total liabilities                     | <u>100,000</u>     | <u>399,000</u>   |
| Stockholders' equity:                 |                    |                  |
| Noncontrolling interest in net assets |                    | 55,600           |
| Common stock, \$2 par value           | 240,000            | 240,000          |
| Retained earnings                     | 90,000             | 162,000          |
| Total stockholders' equity            | <u>330,000</u>     | <u>457,600</u>   |
| Total Liabilities and Equity          | <u>\$430,000</u>   | <u>\$856,600</u> |



**ILLUSTRATION 4-19****P Company and Subsidiary Consolidated Statement of Cash Flows  
for the Year Ended December 31, 2016**

|  |           |             |
|--|-----------|-------------|
| <b>Cash flows from operating activities:</b>   |           |             |
| Consolidated Net Income  | 110,000   |             |
| Adjustments to convert net income to net cash flow<br>from operating activities:               |           |             |
| Depreciation expense   | 30,000    |             |
| Increase in accounts receivable (\$123,000 – 65,000 – 38,000)                                  | (20,000)  |             |
| Increase in inventories (\$126,600 – 70,000 – 53,000)  | (3,600)   |             |
| Increase in accounts payable (\$82,000 – 35,000 – 34,000)                                      | 13,000    |             |
| Net cash flow from operating activities  |           | \$129,400   |
| <b>Cash flows from investing activities:</b>   |           |             |
| Payments for purchase of plant assets  | (95,000)  |             |
| Cash paid (net) for acquisition of S (\$200,000 less<br>cash acquired of \$28,000)             | (172,000) |             |
| Net cash flow from investing activities  |           | (\$267,000) |
| <b>Cash flows from financing activities:</b>   |           |             |
| Proceeds from the issuance of debt   | \$205,000 |             |
| Cash dividends declared and paid by P Company  | (30,000)  |             |
| Cash dividends declared and paid by S Company to<br>noncontrolling shareholders (.2)(\$12,000) | (2,400)   |             |
| Net cash flow from financing activities  |           | \$172,600   |
| Increase in cash (\$115,000 – \$80,000)  |           | 35,000      |
| Cash Balance, beginning  |           | 80,000      |
| Cash Balance, ending   |           | \$115,000   |

Finally, the preparation of the consolidated statement of cash flows is the same regardless of whether the parent uses the cost method, partial equity method, or complete equity method to account for its investment in any subsidiaries that are consolidated. This is true because the preparation is based on the consolidated income statement and consolidated balance sheets, and these are identical under the three methods.

## 4.8 COMPARE U.S. GAAP AND IFRS REGARDING EQUITY METHOD

### IFRS

In the following table, we provide a comparison of the similarities and differences between the equity method used for investments in the United States and the accounting for associates (IASB term for equity investments) under IFRS.

**LO 9** Describe some of the differences between U.S. GAAP and IFRS in accounting for equity investments.

### Application of the Equity Method

| <i>Issue</i>                              | <i>U.S. GAAP</i>  | <i>IFRS</i>  |
|---|---|--|
| <b>Relevant standards</b>                 | FASB ASC 323 [Investments—Equity] Method and ASC 825 [Financial Instruments]  | IAS 28   |
| <b>Terminology</b>                        | Equity method investments.  | Investments in associates.   |
| <b>Requirement to apply equity method</b> | Corporate entities that exert significant influence (but not control) must use the equity method (unless the investor has elected the fair value option). | An <b>associate</b> is an entity in which the investor has significant influence (excluding subsidiaries and joint ventures). Investments in associates are accounted for using the equity method. |
| <b>Significant influence</b>              | Presumed if the investor has 20% or more of the voting rights in a corporate investee.  | Same as in the United States.  |
| <b>Potential voting rights</b>            | Generally not considered.   | Consider the existence and effects of potential voting rights on currently exercisable or convertible instruments.   |
| <b>Joint ventures</b>                     | Equity method is required for jointly controlled entities.  | Use proportionate consolidation. The equity method may be used, but is not recommended (there is a current proposal to eliminate proportionate consolidation).                                     |
| <b>Limited partnerships</b>               | The equity method is generally applied to investments of more than 3 to 5%.   | Equity method is applied to investments using the “significant influence” principle.   |
| <b>Carrying value of the investment</b>   | Increased (decreased) with the investor’s share of profit (loss) of the investee after the date of acquisition.   | Same as in the United States.  |
| <b>Uniform accounting policies</b>        | Not required.   | Uniform accounting policies are required (use top-side adjustments when policies are different).   |
| <b>Different reporting dates</b>          | Permits a three-month difference (and disclose significant events)  | Permits a three-month difference if it is impractical to change; however, investors must adjust for significant events.  |
| <b>Exemptions from the equity method</b>  | FASB ASC 825–10–25–1 gives entities the option to account for equity investments at fair value.   | Associates classified as held for sale.  |

## SUMMARY

- 1 Describe the accounting treatment required under current GAAP for varying levels of influence or control by investors. With few exceptions, all **subsidiaries** (investments in which the investor has a controlling interest), as well as other entities controlled by the investor, either directly or indirectly, must be consolidated and may not be reported as separate investments in the consolidated financial statements. The equity method is used to account for investments in investees in which the investor has significant influence but **not control** (usually more than 20%) unless the fair value option is chosen at acquisition. For investments in investees where the investor does not have significant influence (normally less than 20%), the investment should be reported at its fair value.
- 2 Prepare journal entries on the parent’s books to account for an investment using the cost method, the partial equity method, and the complete equity method. The most important difference between the cost and equity methods pertains to the period in which the parent recognizes subsidiary income on its books. If the cost method is in use, the parent recognizes its share of subsidiary income only when dividends are declared by the subsidiary. Under the partial equity method, the investor will recognize its share of the subsidiary’s income when reported by the subsidiary, regardless of whether dividends have been distributed. A debit to cash and a credit to the investment account record the receipt of dividends under the partial equity method. The complete equity method differs from the partial

equity method in that the share of subsidiary income is often adjusted from the amount reported by the subsidiary (e.g., for depreciation on the excess of market over book values).

- 3 **Understand the use of the workpaper in preparing consolidated financial statements.** Accounting workpapers are helpful in accumulating, classifying, and arranging data for the preparation of consolidated financial statements. The three-section workpaper format used in this text includes a separate section for each of three basic financial statements—income statement, retained earnings statement, and balance sheet. In some cases the input to the workpaper comes from the individual financial statements of the affiliates to be consolidated, in which case the three-section workpaper is particularly appropriate. At other times, however, input may be from affiliate trial balances, and the data must be arranged in financial statement form before the workpaper can be completed.
- 4 **Prepare a schedule for the computation and allocation of the difference between implied and book values.** The schedule begins with the cost (or purchase price) and divides this amount by the percentage acquired to compute the implied value of the subsidiary. Next, the book value of the subsidiary's equity at the date of acquisition is subtracted from the implied value. This difference is then allocated to adjust the assets and/or liabilities of the subsidiary for differences between their book values and fair values. Any remaining excess is labeled as goodwill. Special rules apply for bargain purchases.
- 5 **Prepare the workpaper eliminating entries for the year of acquisition (and subsequent years) for the cost and equity methods.** Under the cost method, dividends declared by the subsidiary are eliminated against dividend income recorded by the parent. The investment account is eliminated against the equity accounts of the subsidiary, and an account is created for the noncontrolling interest in equity. The difference between implied and book values is recorded in a separate account by that name. The difference is then allocated to adjust underlying assets and/or liabilities, and to record goodwill in some cases. Under the equity method, the dividends declared by the subsidiary are eliminated against the investment account, as is the equity in subsidiary income. In subsequent years, the cost method requires an initial entry to establish reciprocity or convert to equity. This entry debits the investment account and credits retained earnings of the parent (for the change in retained earnings of the subsidiary from the date of acquisition to the beginning of the current year multiplied by the parent's ownership percentage).
- 6 **Describe how to account for interim acquisitions of subsidiary stock at the end of the first year.** If an investment in the common stock of a subsidiary is made during the year rather than on the first day, only the subsidiary revenues, expenses, gains, and losses for the period after acquisition are included in the consolidated income statement.
- 7 **Explain how the consolidated statement of cash flows differs from a single firm's statement of cash flows.** In the preparation of a consolidated statement of cash flows, the starting point under the indirect approach should be **consolidated net income** (including the noncontrolling interest). Subsidiary dividend payments to noncontrolling shareholders represent a **Financing** outflow of cash. Subsidiary dividend payments to the parent company represent an intercompany transfer and thus are not reflected on the consolidated statement of cash flows. The cost of acquiring additional subsidiary shares of common stock is an **Investing** outflow of cash if the purchase is made from outsiders, but not if made directly from the subsidiary.
- 8 **Understand how the reporting of an acquisition on the consolidated statement of cash flows differs when stock is issued rather than cash.** Any cash spent or received in the acquisition itself should be reflected in the **Investing** activities section of the consolidated statement of cash flows. The issuance of stock or debt would appear in the **Notes to the Financial Statements** as a significant noncash investing and financing activity.
- 9 **Describe some of the differences between IFRS and U.S. GAAP in the accounting for equity investments.** In the United States, the investments are referred to as "equity investments"; under international standards, the investments are referred to as "investments in associates." Potential voting rights are considered under international standards in determining significant influence, while potential voting rights are not explicitly considered under U.S. GAAP.

Appendix 4A, "Alternative Workpaper format," and Appendix 4B, "Deferred Tax Consequences When Affiliates File Separate Income Tax Returns—Undistributed Income," are available online at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter).

#### TEST YOUR KNOWLEDGE SOLUTIONS

- 4.1 1. a. F b. F 2. d 3. c    4.2 1. c    4.3 1. d    4.4 1. b

## QUESTIONS

(The letter A or B indicated for a question, exercise, or problem refers to a related appendix.)

- LO 1** 1. How should nonconsolidated subsidiaries be reported in consolidated financial statements?
- LO 2** 2. How are liquidating dividends treated on the books of an investor, assuming the investor uses the cost method? Assuming the investor uses the equity method?
- LO 5** 3. How are dividends declared and paid by a subsidiary during the year eliminated in the consolidated workpapers under each method of accounting for investments?
- LO 2** 4. How is the income reported by the subsidiary reflected on the books of the investor under each of the methods of accounting for investments?
- LO 2** 5. Define: Consolidated net income; consolidated retained earnings.
- LO 5** 6. At the date of an 80% acquisition, a subsidiary had common stock of \$100,000 and retained earnings of \$16,250. Seven years later, at December 31, 2015, the subsidiary's retained earnings had increased to \$461,430. What adjustment will be made on the consolidated workpaper at December 31, 2016, to recognize the parent's share of the cumulative undistributed profits (losses) of its subsidiary? Under which method(s) is this adjustment needed? Why?
- LO 5** 7. On a consolidated workpaper for a parent and its partially owned subsidiary, the noncontrolling interest column accumulates the noncontrolling interests' share of several account balances. What are these accounts?
- LO 5** 8. If a parent company elects to use the partial equity method rather than the cost method to record its investments in subsidiaries, what effect will this choice have on the consolidated financial statements? If the parent company elects the complete equity method?
- LO 6** 9. Describe two methods for treating the preacquisition revenue and expense items of a subsidiary purchased during a fiscal period.
- LO 1** 10. A principal limitation of consolidated financial statements is their lack of separate financial information about the assets, liabilities, revenues, and expenses of the individual companies included in the consolidation. Identify some problems that the reader of consolidated financial statements would encounter as a result of this limitation.
11. In the preparation of a consolidated statement of cash flows, what adjustments are necessary because of the existence of a noncontrolling interest? (*AICPA adapted*)
12. What do potential voting rights refer to, and how do they affect the application of the equity method for investments under IFRS? Under U.S. GAAP? What is the term generally used for equity method investments under IFRS?
- LO 7** **LO 9** 13B. Is the recognition of a deferred tax asset or deferred tax liability when allocating the difference between book value and the value implied by the purchase price affected by whether or not the affiliates file a consolidated income tax return? (See online appendix 4B available at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter))
- 14B. What assumptions must be made about the realization of undistributed subsidiary income when the affiliates file separate income tax returns? Why? (See online appendix 4B available at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter))
- 15B. The FASB elected to require that deferred tax effects relating to unrealized intercompany profits be calculated based on the income tax paid by the selling affiliate rather than on the future tax benefit to the purchasing affiliate. Describe circumstances where the amounts calculated under these approaches would be different. (See online appendix 4B available at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter))
- 16B. Identify two types of temporary differences that may arise in the consolidated financial statements when the affiliates file separate income tax returns. (See online appendix 4B available at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter))

### Business Ethics

On April 5, 2006, the New York State Attorney sued a New York online advertising firm for surreptitiously installing spyware advertising programs on consumers' computers. The Attorney General claimed that consumers believed they were downloading free games or 'browser' enhancements.

The company claimed that the spyware was identified as 'advertising-supported' and that the software is easy to remove and doesn't collect personal data.

Is there an ethical issue for the company? Comment on and justify your position.

## ANALYZING FINANCIAL STATEMENTS

- AFS4-1** In the following table, General Electric's Balance Sheet from its 2005 annual report is shown. There are six columns of numbers. In the first two columns, GE's consolidated balance sheets for 2010 and 2009, respectively, are reported. The middle set of columns (listed under GE) represents GE's unconsolidated balance sheet, which treats all controlled subsidiaries as investments. Finally, the last two columns, listed under GECS (General Electric Credit Services), represent the balance sheet for GE's 100% owned subsidiary, GECS.

## General Electric (GE) 2005 Balance Sheet

| <i>Assets</i>   | <i>Consolidated</i> |                  | <i>GE</i>        |                  | <i>GECS</i>      |                  |
|---|---------------------|------------------|------------------|------------------|------------------|------------------|
|   | <i>2010</i>         | <i>2009</i>      | <i>2010</i>      | <i>2009</i>      | <i>2010</i>      | <i>2009</i>      |
| Cash and equivalents  | \$ 78,958           | \$ 70,488        | \$ 19,241        | \$ 8,654         | \$ 60,272        | \$ 62,584        |
| Investment securities   | 43,938              | 51,343           | 19               | 30               | 43,921           | 51,315           |
| Current receivables   | 18,621              | 16,458           | 10,383           | 9,818            |                  |                  |
| Inventories   | 11,526              | 11,987           | 11,460           | 11,916           | 66               | 71               |
| Financing receivables—net   | 310,055             | 319,247          |                  |                  | 319,277          | 326,941          |
| Other GECS receivables  | 8,951               | 14,056           |                  |                  | 14,299           | 18,631           |
| Property, plant and equipment—net   | 66,214              | 68,970           | 12,444           | 12,495           | 53,770           | 56,475           |
| Investment in GECS  |                     |                  | 68,984           | 70,833           |                  |                  |
| Intangible assets—net   | 74,446              | 76,827           | 44,968           | 45,063           | 29,478           | 31,764           |
| All other assets  | 96,342              | 103,286          | 17,454           | 17,097           | 79,240           | 87,340           |
| Assets of discontinued operations and assets held for sale  | 42,165              | 49,239           | 33,810           | 34,036           | 8,355            | 15,203           |
| <b>Total assets</b>   | <b>\$751,216</b>    | <b>\$781,901</b> | <b>\$218,763</b> | <b>\$209,942</b> | <b>\$608,678</b> | <b>\$650,324</b> |
| <i>Liabilities and Equity</i>   |                     |                  |                  |                  |                  |                  |
| Short-term borrowings   | \$117,959           | \$129,869        | \$ 456           | \$ 504           | \$118,797        | \$130,754        |
| Accounts payable, principally trade accounts  | 14,657              | 19,527           | 11,620           | 10,373           | 7,036            | 13,099           |
| Progress collections and price adjustments accrued  | 11,142              | 12,192           | 11,841           | 12,957           |                  |                  |
| Dividends payable   | 1,563               | 1,141            | 1,563            | 1,141            |                  |                  |
| Other GE current liabilities  | 11,396              | 13,386           | 11,396           | 13,386           |                  |                  |
| Other borrowings  | 67,358              | 37,402           |                  |                  | 67,358           | 37,402           |
| Long-term borrowings  | 293,323             | 336,172          | 9,656            | 11,681           | 284,407          | 325,429          |
| Investment contracts, insurance liabilities, and insurance annuity benefits                                 | 29,582              | 31,641           |                  |                  | 29,993           | 32,009           |
| All other liabilities   | 54,844              | 58,776           | 37,815           | 35,232           | 21,127           | 23,671           |
| Deferred income taxes   | 2,840               | 2,081            | (4,237)          | (4,620)          | 7,077            | 6,701            |
| Liabilities of discontinued operations and liabilities of assets held for sale                              | 16,047              | 6,092            |                  |                  |                  |                  |
|   | 2,307               | 8,486            | 15,619           | 6,200            | 2,735            | 8,378            |
| <b>Total liabilities</b>  | <b>627,018</b>      | <b>656,765</b>   | <b>95,729</b>    | <b>86,854</b>    | <b>538,530</b>   | <b>577,443</b>   |
| Common stock (10,615,376,000 and 10,663,075,000 shares outstanding at year-end 2010 and 2009, respectively) | 702                 | 702              | 702              | 702              | 1                | 1                |
| Accumulated gains (losses)—net  |                     |                  |                  |                  |                  |                  |
| Investment securities   | (636)               | (435)            | (636)            | (435)            | (639)            | (436)            |
| Currency translation adjustments  | (86)                | 3,836            | (86)             | 3,836            | (1,411)          | 1,372            |
| Cash flow hedges  | (1,280)             | (1,734)          | (1,280)          | (1,734)          | (1,281)          | (1,769)          |
| Minimum pension liabilities   | (15,853)            | (16,932)         | (15,853)         | (16,932)         | (380)            | (434)            |
| Other capital   | 36,890              | 37,729           | 36,890           | 37,729           | 27,626           | 27,591           |
| Retained earnings   | 131,137             | 126,363          | 131,137          | 126,363          | 45,068           | 44,508           |
| Less common stock held in treasury  | (31,938)            | (32,238)         | (31,938)         | (32,238)         |                  |                  |
| <b>Total GE shareowner's equity</b>   | <b>118,936</b>      | <b>117,291</b>   | <b>118,936</b>   | <b>117,291</b>   | <b>68,984</b>    | <b>70,833</b>    |
| Noncontrolling interests  | 5,262               | 7,845            | 4,098            | 5,797            | 1,164            | 2,048            |
| <b>Total equity</b>   | <b>124,198</b>      | <b>125,136</b>   | <b>123,034</b>   | <b>123,088</b>   | <b>70,148</b>    | <b>72,881</b>    |
| <b>Total liabilities and equity</b>   | <b>\$751,216</b>    | <b>\$781,901</b> | <b>\$218,763</b> | <b>\$209,942</b> | <b>\$608,678</b> | <b>\$650,324</b> |

**Required:**

- A.** Examine the middle set of columns showing GE's unconsolidated numbers. GE reports \$68,984 as the investment in GECS. Which method does GE use to account for this investment, cost or equity method? Explain your answer.
- B.** Compare the consolidated totals for assets, liabilities, and equity to the totals for GE's numbers unconsolidated. Which totals are different between the consolidated and the unconsolidated

numbers? Explain why some numbers are the same when consolidated and why some numbers are different.

- C. If the acquisition were to result in noncontrolling interest (NCI) under current GAAP, how would that NCI be valued in the consolidated balance sheet?
- NCI percentage times the book value of identifiable net assets
  - NCI percentage times the fair value of identifiable net assets
  - NCI percentage times the book value of tangible net assets
  - NCI percentage times the fair value of tangible net assets
- D. In addition to reporting the consolidated numbers, GE also reports separate information on GE and GECS. What do we learn from this increased disclosure beyond what we might learn if only the consolidated numbers were reported? Suppose that GE reported on GECS using the equity method and did not consolidate the subsidiary. Would this be misleading to the users of the financial statements? Why, or why not?

#### AFS4-2 eBay Acquires Skype

On October 14, 2005, eBay acquired all of the outstanding securities of Skype Technologies S.A. ("Skype"), for a total initial consideration of approximately \$2.6 billion, plus potential performance-based payments of approximately \$1.3 billion (based on the euro-dollar exchange rate at the time of the acquisition and using an income approach to estimating the value of the earnout). The initial consideration of approximately \$2.6 billion was comprised of approximately \$1.3 billion in cash and 32.8 million shares of eBay's common stock. For accounting purposes, the stock portion of the initial consideration was valued at approximately \$1.3 billion based on the average closing price of eBay common stock surrounding the acquisition announcement date of September 12, 2005.

##### Required:

- Prepare the journal entry on eBay's books to record the acquisition.
- Where are the three components of the purchase price reported on the statement of cash flows? Be specific as to category and amount, and include required note disclosures in your answer.

#### AFS4-3 Various Acquisitions

During 2005, eBay acquired 100% of four different companies as follows (assume all companies have a December 31 year-end). Net income amounts are stated in thousands of dollars; assume that the net income is earned uniformly throughout the year 2005.

| <i>Company</i>                    | <i>Acquired on</i> | <i>2005 Annual<br/>Net Income</i> |
|-----------------------------------|--------------------|-----------------------------------|
| Rent.com                          | February 1, 2005   | \$12,000                          |
| International classified websites | April 1, 2005      | 5,000                             |
| Shopping.com                      | September 1, 2005  | 20,000                            |
| Skype                             | October 14, 2005   | 120,000                           |

##### Required:

- How much of the income earned by each of these companies will be recorded in consolidated net income in the year of acquisition?
- In addition to reported earnings for the year of acquisition, GAAP requires certain pro forma earnings disclosures for the consolidated entity. What amount of earnings from each of these acquisitions would be included in proforma earnings disclosures?

## EXERCISES

### EXERCISE 4-1 Parent Company Entries, Liquidating Dividend LO 2

Percy Company purchased 80% of the outstanding voting shares of Song Company at the beginning of 2014 for \$387,000. At the time of purchase, Song Company's total stockholders' equity amounted to \$475,000. Income and dividend distributions for Song Company from 2014 through 2016 are as follows:

|                       | <i>2014</i> | <i>2015</i> | <i>2016</i> |
|-----------------------|-------------|-------------|-------------|
| Net income (loss)     | \$63,500    | \$52,500    | (\$55,000)  |
| Dividend distribution | 25,000      | 50,000      | 35,000      |

**Required:**

Prepare journal entries on the books of Percy Company from the date of purchase through 2016 to account for its investment in Song Company under each of the following assumptions:

- A. Percy Company uses the cost method to record its investment.
- B. Percy Company uses the partial equity method to record its investment.
- C. Percy Company uses the complete equity method to record its investment. The difference between book value of equity acquired and the value implied by the purchase price was attributed solely to an excess of market over book values of depreciable assets, with a remaining life of 10 years.

**EXERCISE 4-2 Workpaper Eliminating Entries, Cost Method LO 5**

Park Company purchased 90% of the stock of Salt Company on January 1, 2014, for \$465,000, an amount equal to \$15,000 in excess of the book value of equity acquired. This excess payment relates to an undervaluation of Salt Company's land. On the date of purchase, Salt Company's retained earnings balance was \$50,000. The remainder of the stockholders' equity consists of no-par common stock. During 2018, Salt Company declared dividends in the amount of \$10,000, and reported net income of \$40,000. The retained earnings balance of Salt Company on December 31, 2017, was \$160,000. Park Company uses the cost method to record its investment.

**Required:**

Prepare in general journal form the workpaper entries that would be made in the preparation of a consolidated statements workpaper on December 31, 2018.

**EXERCISE 4-3 Workpaper Eliminating Entries, Equity Method LO 5**

At the beginning of 2009, Presidio Company purchased 95% of the common stock of Succo Company for \$494,000. On that date, Succo Company's stockholders' equity consisted of the following:

|                           |                  |
|---------------------------|------------------|
| Common stock              | \$300,000        |
| Other contributed capital | 100,000          |
| Retained earnings         | <u>120,000</u>   |
| Total                     | <u>\$520,000</u> |

During 2017, Succo Company reported net income of \$40,000 and distributed dividends in the amount of \$19,000. Succo Company's retained earnings balance at the end of 2016 amounted to \$160,000. Presidio Company uses the equity method.

**Required:**

Prepare in general journal form the workpaper entries necessary in the compilation of consolidated financial statements on December 31, 2017. Explain why the partial and complete equity methods would result in the same entries in this instance.

**EXERCISE 4-4 Workpaper Eliminating Entries, Losses by Subsidiary LO 5**

Poco Company purchased 85% of the outstanding common stock of Serena Company on December 31, 2014, for \$310,000 cash. On that date, Serena Company's stockholders' equity consisted of the following:

|                           |                  |
|---------------------------|------------------|
| Common stock              | \$240,000        |
| Other contributed capital | 55,000           |
| Retained earnings         | <u>50,000</u>    |
|                           | <u>\$345,000</u> |

During 2017, Serena Company distributed a dividend in the amount of \$12,000 and at year-end reported a net loss of \$10,000. During the time that Poco Company has held its investment in Serena Company, Serena Company's retained earnings balance has decreased \$29,500 to a net balance of \$20,500 after closing on December 31, 2017. Serena Company did not declare or distribute any dividends in 2015 or 2016. The difference between book value and the value implied by the purchase price relates to goodwill.

**Required:**

- A. Assume that Poco Company uses the equity method. Prepare in general journal form the entries needed in the preparation of a consolidated statements workpaper on December 31, 2017. Explain why the partial and complete equity methods would result in the same entries in this instance.
- B. Assume that Poco Company uses the cost method. Prepare in general journal form the entries needed in the preparation of a consolidated statements workpaper on December 31, 2017.

**EXERCISE 4-5 Eliminating Entries, Noncontrolling Interest LO2**

On January 1, 2014, Plate Company purchased a 90% interest in the common stock of Set Company for \$650,000, an amount \$20,000 in excess of the book value of equity acquired. The excess relates to the understatement of Set Company's land holdings.

Excerpts from the consolidated retained earnings section of the consolidated statements workpaper for the year ended December 31, 2014, follow:

|   | <i>Set Company</i> | <i>Consolidated Balances</i> |
|---|--------------------|------------------------------|
| 1/1/14 retained earnings                        | 190,000            | 880,000                      |
| Net income from above                           | 132,000            | 420,000                      |
| Dividends declared                              | (50,000)           | (88,000)                     |
| 12/31/14 retained earnings to the balance sheet | <u>272,000</u>     | <u>1,212,000</u>             |

Set Company's stockholders' equity is composed of common stock and retained earnings only.

**Required:**

- A. Prepare the eliminating entries required for the preparation of a consolidated statements workpaper on December 31, 2014, assuming the use of the cost method.
- B. Prepare the eliminating entries required for the preparation of a consolidated statements workpaper on December 31, 2014, assuming the use of the equity method.
- C. Determine the total noncontrolling interest that will be reported on the consolidated balance sheet on December 31, 2014. How does the noncontrolling interest differ between the cost method and the equity method?

**EXERCISE 4-6 Parent Entries and Eliminating Entries, Equity Method, Year of Acquisition LO2 LO5**

On January 1, 2014, Pert Company purchased 85% of the outstanding common stock of Sales Company for \$350,000. On that date, Sales Company's stockholders' equity consisted of common stock, \$100,000; other contributed capital, \$40,000; and retained earnings, \$140,000. Pert Company paid more than the book value of net assets acquired because the recorded cost of Sales Company's land was significantly less than its fair value.

During 2014 Sales Company earned \$148,000 and declared and paid a \$50,000 dividend. Pert Company used the partial equity method to record its investment in Sales Company.

**Required:**

- A. Prepare the investment-related entries on Pert Company's books for 2014.
- B. Prepare the workpaper eliminating entries for a workpaper on December 31, 2014.

**EXERCISE 4-7 Equity Method, Year Subsequent to Acquisition LO2 LO5**

Continue the situation in Exercise 4-6 and assume that during 2015 Sales Company earned \$190,000 and declared and paid a \$50,000 dividend.

**Required:**

- A. Prepare the investment-related entries on Pert Company's books for 2015.
- B. Prepare the workpaper eliminating entries for a workpaper on December 31, 2015.

**EXERCISE 4-8 Interim Purchase of Stock, Cost Method LO6**

On May 1, 2015, Peters Company purchased 80% of the common stock of Smith Company for \$50,000. Additional data concerning these two companies for the years 2015 and 2016 are:

|                           | <i>2015</i>   |              | <i>2016</i>   |              |
|---------------------------|---------------|--------------|---------------|--------------|
|                           | <i>Peters</i> | <i>Smith</i> | <i>Peters</i> | <i>Smith</i> |
| Common stock              | \$100,000     | \$25,000     | \$100,000     | \$25,000     |
| Other contributed capital | 40,000        | 10,000       | 40,000        | 10,000       |
| Retained earnings, 1/1    | 80,000        | 10,000       | 129,000       | 53,000       |
| Net income (loss)         | 64,000        | 45,000       | 37,500        | (5,000)      |
| Cash dividends (11/30)    | 15,000        | 2,000        | 5,000         | —0—          |

Any difference between book value and the value implied by the purchase price relates to Smith Company's land. Peters Company uses the cost method to record its investment.

**Required:**

- A. Prepare the workpaper entries that would be made on a consolidated statements workpaper for the years ended December 31, 2015 and 2016 for Peters Company and its subsidiary, assuming that Smith Company's income is earned evenly throughout the year.
- B. Calculate consolidated net income and consolidated retained earnings for 2015 and 2016.



**EXERCISE 4-9 Interim Purchase, Equity Method LO2 LO6**

On October 1, 2015, Para Company purchased 90% of the outstanding common stock of Star Company for \$210,000. Additional data concerning Star Company for 2015 follows:

|                                     |          |
|-------------------------------------|----------|
| Common stock                        | \$70,000 |
| Other contributed capital           | 30,000   |
| Retained earnings, 1/1              | 70,000   |
| Net income                          | 60,000   |
| Dividends declared and paid (12/15) | 10,000   |

Any difference between book value and the value implied by the purchase price relates to goodwill. Para Company uses the partial equity method to record its investment in Star Company.

**Required:**

- Prepare on Para Company's books journal entries to record the investment-related activities for 2015.
- Prepare workpaper eliminating entries for a workpaper on December 31, 2015. Star Company's net income is earned evenly throughout the year.

**EXERCISE 4-10 Cash Flow from Operations LO7**

A consolidated income statement and selected comparative consolidated balance sheet data for Palano Company and subsidiary follow:

**Palano Company and Subsidiary  
Consolidated Income Statement  
for the Year Ended December 31, 2015**

|   |               |                |
|---|---------------|----------------|
| Sales   |               | \$701,000      |
| Cost of sales   |               | <u>263,000</u> |
| Gross profit  |               | 438,000        |
| Operating expenses:                                     |               |                |
| Depreciation expense                                    | \$ 76,000     |                |
| Selling expenses  | 122,000       |                |
| Administrative expenses                                 | <u>85,000</u> | <u>283,000</u> |
| Consolidated net income                                 |               | 155,000        |
| Less noncontrolling interest in consolidated net income |               | <u>38,750</u>  |
| Controlling interest in consolidated net income         |               | \$116,250      |

|                                 | <i>December 31</i> |             |
|---------------------------------|--------------------|-------------|
|                                 | <u>2014</u>        | <u>2015</u> |
| Accounts receivable             | \$229,000          | \$318,000   |
| Inventory                       | 194,000            | 234,000     |
| Prepaid selling expenses        | 26,000             | 30,000      |
| Accounts payable                | 99,000             | 79,000      |
| Accrued selling expenses        | 96,000             | 84,000      |
| Accrued administrative expenses | 56,000             | 39,000      |

**Required:**

Prepare the cash flow from operating activities section of a consolidated statement of cash flows assuming use of the:

- Direct method.
- Indirect method.

**EXERCISE 4-11 Allocation of Difference between Book Value and the Value Implied by the Purchase Price, Parent Company Entries, Three Methods LO2 LO4 LO5**

On January 1, 2017, Plutonium Corporation acquired 80% of the outstanding stock of Sulfurst Inc. for \$268,000 cash. The following balance sheet shows Sulfurst Inc.'s book values immediately prior to acquisition, as well as the appraised values of its assets and liabilities by Plutonium's experts.

|                                | <i>Sulfurst Inc.'s Book Values</i> | <i>Sulfurst Inc.'s Market Values</i> |
|--------------------------------|------------------------------------|--------------------------------------|
| Current assets                 | \$ 90,000                          | \$ 90,000                            |
| Property, plant & equipment:   |                                    |                                      |
| Land                           | 80,000                             | 100,000                              |
| Building & machinery (net)     | 170,000                            | 170,000                              |
| Total assets                   | <u>\$340,000</u>                   |                                      |
| Total liabilities              | \$100,000                          | \$100,000                            |
| Common stock, \$5 par value    | 100,000                            |                                      |
| Additional paid-in-capital     | 20,000                             |                                      |
| Retained earnings              | 120,000                            |                                      |
| Total liabilities and equities | <u>\$340,000</u>                   |                                      |

**Required:**

- A. Prepare a Computation and Allocation Schedule for the Difference between Book Value and the Value Implied by the Purchase Price.
- B. Prepare the entry to be made on the books of Plutonium Corporation to record its investment in Sulfurst Inc.  
Assume that during the first two years after acquisition of Sulfurst Inc., Sulfurst reports the following changes in its retained earnings:

|                                      |                  |
|--------------------------------------|------------------|
| Retained earnings, January 1, 2017   | \$120,000        |
| Net income, 2017                     | 40,000           |
| Less: dividends, 2017                | (24,000)         |
| Net income, 2018                     | 45,000           |
| Less: dividends, 2018                | (21,600)         |
| Retained earnings, December 31, 2018 | <u>\$159,400</u> |

- C. Prepare journal entries under each of the following methods to record the information above on the books of Plutonium Corporation for the years 2017 and 2018, assuming that all depreciable assets have a remaining life of 20 years.
  - (1) Plutonium uses the cost method to account for its investment in Sulfurst.
  - (2) Plutonium uses the partial equity method to account for its investment in Sulfurst.
  - (3) Plutonium uses the complete equity method to account for its investment in Sulfurst.

**EXERCISE 4-12 Subsidiary Loss LO 5**

The following accounts appeared in the separate financial statements at the end of 2014 for Pressing Inc. and its wholly-owned subsidiary, Stressing Inc. Stressing was acquired in 2009.

|                                  | <i>Pressing Inc.</i> | <i>Stressing Inc.</i> |
|----------------------------------|----------------------|-----------------------|
| Investment in subsidiary         | 660,000              |                       |
| Dividends receivable             | 5,000                |                       |
| Dividends payable                | 20,000               | 5,000                 |
| Common stock                     | 300,000              | 20,000                |
| Additional paid-in-capital       | 500,000              | 380,000               |
| Retained earnings, 12/31/14      | 500,000              | 260,000               |
| Dividends declared               | (75,000)             | (24,000)              |
| Equity in net loss of subsidiary | (55,000)             |                       |
| Retained earnings at 1/1/14      | 380,000              |                       |

**Required:**

1. How can you determine whether Pressing is using the cost or equity method to account for its investment in Stressing?
2. Compute controlling interest in consolidated income.
3. How much income did Pressing Inc. earn from its own independent operations?
4. Compute consolidated retained earnings at 12/31/14.
5. What are consolidated dividends?
6. Compute retained earnings at 1/1/14 for Stressing Inc.
7. Was there any difference between book value and the value implied by the purchase price at acquisition? Prepare workpaper entries needed at the end of 2014.
8. If Pressing used the cost method instead of the equity method, how would Pressing Inc.'s retained earnings change at the end of 2014? Describe in words.
9. If Pressing uses the cost method instead of the equity method, what workpaper entries would be required at the end of 2014? Describe in words.

**EXERCISE 4-13 Cash Flow Statement, Year of Acquisition LO 7**

Badco Inc. purchased a 90% interest in Lazytoo Company for \$600,000 cash on January 1, 2016. Any excess of implied over book value was attributed to depreciable assets with a 15-year remaining life (straight-line depreciation). To help pay for the acquisition, Badco issued \$300,000, 20-year, 12% bonds at par value. Lazytoo's balance sheet on the date of acquisition was as follows:

| <i>Assets</i>      |                  | <i>Liabilities and Equity</i> |                  |
|--------------------|------------------|-------------------------------|------------------|
| Cash               | \$ 10,000        | Accrued payables              | \$ 90,000        |
| Inventory          | 140,000          | Bonds payable                 | 100,000          |
| Fixed assets (net) | 540,000          | Common stock (\$10 par)       | 200,000          |
|                    |                  | Retained earnings             | 300,000          |
| Total assets       | <u>\$690,000</u> | Total liabilities and equity  | <u>\$690,000</u> |

Consolidated net income for 2016 was \$155,889. Badco declared and paid dividends of \$10,000 and Lazytoo declared and paid dividends of \$5,000. There were no purchases or sales of property, plant, and equipment during the year.

At the end of 2016, the following information was also available:

|                            | <i>Badco Company 12/31/15</i> |                    | <i>Consolidated 12/31/16</i> |                    |
|----------------------------|-------------------------------|--------------------|------------------------------|--------------------|
|                            | <i>Debits</i>                 | <i>Credits</i>     | <i>Debits</i>                | <i>Credits</i>     |
| Cash                       | \$ 390,000                    |                    | \$ 63,500                    |                    |
| Inventory                  | 190,000                       |                    | 454,000                      |                    |
| Fixed Assets               | 750,000                       |                    | 1,385,555                    |                    |
| Accrued payables           |                               | 150,000            |                              | 111,000            |
| Bonds payable              |                               | 200,000            |                              | 600,000            |
| Noncontrolling interest    |                               |                    |                              | 73,055             |
| Common Stock, (\$10 par)   |                               | 200,000            |                              | 200,000            |
| Additional paid-in-capital |                               | 550,000            |                              | 550,000            |
| Retained earnings          |                               | 230,000            |                              | 369,000            |
| Total                      | <u>\$1,330,000</u>            | <u>\$1,330,000</u> | <u>\$1,903,055</u>           | <u>\$1,903,055</u> |

**Required:**

Prepare a consolidated statement of cash flows using the indirect method for Badco and its subsidiary for the year ended December 31, 2016.

**EXERCISE 4-14B Entries for Deferred Taxes from Undistributed Income, Cost and Equity (See appendix 4B online at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter))**

On January 1, 2014, Plenty Company purchased a 70% interest in the common stock of Set Company for \$650,000, an amount \$20,000 in excess of the book value of equity acquired. The excess relates to the understatement of Set Company's land holdings.

Excerpts from both company's financial statements for the year ended December 31, 2014, follow:

|                                    | <i>Set Company</i> | <i>Plenty Company</i> |
|------------------------------------|--------------------|-----------------------|
| 1/1/14 retained earnings           | 190,000            | 880,000               |
| Income from independent operations | 132,000            | 420,000               |
| Dividends declared                 | (50,000)           | (88,000)              |

Set Company's stockholders' equity is composed of common stock and retained earnings only. Both companies file separate tax returns, and the expected tax rate is 40%. The capital gains tax rate is 20%, and there is an 80% dividend exclusion rate.

**Required:**

A. Prepare the entry(s) needed at the end of 2014 to report the income tax consequences of undistributed income assuming the use of the cost method, under each of the following assumptions. Indicate whether the entry is recorded on the books of Set, Plenty, or worksheet only.

- (1) Plenty expects the undistributed income will be realized in the form of future dividends.
- (2) Plenty expects the undistributed income will be realized only when the stock is sold, in the form of capital gains.

- B.** Prepare the entry(s) needed at the end of 2014 to report the income tax consequences of undistributed income assuming the use of the partial equity method, under each of the following assumptions. Indicate whether the entry is recorded on the books of Set, Plenty, or worksheet only.
- (1) Plenty expects the undistributed income will be realized in the form of future dividends.
  - (2) Plenty expects the undistributed income will be realized only when the stock is sold, in the form of capital gains.
- C.** Prepare the entry(s) needed at the end of 2014 to report the income tax consequences of undistributed income assuming the use of the complete equity method, under each of the following assumptions. Indicate whether the entry is recorded on the books of Set, Plenty, or worksheet only.
- (1) Plenty expects the undistributed income will be realized in the form of future dividends.
  - (2) Plenty expects the undistributed income will be realized only when the stock is sold, in the form of capital gains.

**ASC EXERCISES:** For all ASC exercises indicate as part of your answer: the Codification topic, subtopic, section, and/or paragraph upon which your answer is based (unless otherwise specified). All ASC questions require access to the FASB Codification.

- ASC4-1** **Presentation** A company reported net income of \$15,000, including an extraordinary loss of \$3,000. Another company owns 40% of this company and uses the equity method to account for the investment. On the investee company's books, does the investee report the net income of \$15,000 as a single amount on its income statement?
- ASC4-2** **Glossary** Is a correction of an error in the financial statements considered an accounting change?
- ASC4-3** **Presentation** A company changed its method of accounting for inventory and determined that it was impractical to determine the cumulative effect for all prior periods. The company decided to use the new method on a prospective basis. Is this acceptable under current GAAP?
- ASC4-4** **Scope** Describe the equity method for accounting for investments. In order to qualify for the equity method, describe the conditions that must be met.
- ASC4-5** **Measurement** Suppose that a company accounts for an investment using the equity method. Describe the appropriate accounting if the combined loss reported by the investee exceeds the investor's balance in the investment account.
- ASC4-6** **Recognition** Can a firm choose a fair value option for reporting some of its investments on the balance sheet? If so, describe the conditions that must be met.

## PROBLEMS

### PROBLEM 4-1 Parent Company Entries, Three Methods LO2

On January 1, 2011, Perelli Company purchased 90,000 of the 100,000 outstanding shares of common stock of Singer Company as a long-term investment. The purchase price of \$4,972,000 was paid in cash. At the purchase date, the balance sheet of Singer Company included the following:

|                              |             |
|------------------------------|-------------|
| Current assets               | \$2,926,550 |
| Long-term assets             | 3,894,530   |
| Other assets                 | 759,690     |
| Current liabilities          | 1,557,542   |
| Common stock, \$20 par value | 2,000,000   |
| Other contributed capital    | 1,891,400   |
| Retained earnings            | 1,621,000   |

Additional data on Singer Company for the four years following the purchase are:

|                            | 2011        | 2012      | 2013        | 2014        |
|----------------------------|-------------|-----------|-------------|-------------|
| Net income (loss)          | \$1,997,800 | \$476,000 | \$(179,600) | \$(323,800) |
| Cash dividends paid, 12/30 | 500,000     | 500,000   | 500,000     | 500,000     |

#### Required:

Prepare journal entries under each of the following methods to record the purchase and all investment-related subsequent events on the books of Perelli Company for the four years, assuming that any excess of purchase price

over equity acquired was attributable solely to an excess of market over book values of depreciable assets (with a remaining life of 15 years). (Assume straight-line depreciation.)

- A. Perelli uses the cost method to account for its investment in Singer.
- B. Perelli uses the partial equity method to account for its investment in Singer.
- C. Perelli uses the complete equity method to account for its investment in Singer.

**PROBLEM 4-2 Determine Method, Consolidated Workpaper, Wholly Owned Subsidiary LO5**

Parry Corporation acquired a 100% interest in Sent Company on January 1, 2011, paying \$140,000. Financial statement data for the two companies for the year ended December 31, 2011 follow:

| <i>Income Statement</i>            | <i>Parry</i> | <i>Sent</i> |
|------------------------------------|--------------|-------------|
| Sales                              | \$476,000    | \$154,500   |
| Cost of goods sold                 | 285,600      | 121,000     |
| Other expense                      | 45,500       | 29,500      |
| Dividend income                    | 3,500        | —0—         |
| <i>Retained Earnings Statement</i> |              |             |
| Balance, 1/1                       | 76,000       | 19,500      |
| Net income                         | 148,400      | 4,000       |
| Dividends declared                 | 17,500       | 3,500       |
| <i>Balance Sheet</i>               |              |             |
| Cash                               | 84,400       | 29,000      |
| Accounts receivable                | 76,000       | 56,500      |
| Inventory                          | 49,500       | 36,500      |
| Investment in Sent Company         | 140,000      | —0—         |
| Land                               | 4,000        | 12,000      |
| Accounts payable                   | 27,000       | 14,000      |
| Common stock                       | 120,000      | 100,000     |
| Retained earnings                  | 206,900      | 20,000      |

**Required:**

- A. What method is being used by Parry to account for its investment in Sent Company? How can you tell?
- B. Prepare a workpaper for the preparation of consolidated financial statements on December 31, 2011. Any difference between the book value of equity acquired and the value implied by the purchase price relates to subsidiary land.

**PROBLEM 4-3 Consolidated Workpaper, Wholly Owned Subsidiary**

Perkins Company acquired 100% of Schultz Company on January 1, 2012, for \$161,500. On December 31, 2012, the companies prepared the following trial balances:

|                               | <i>Perkins</i>   | <i>Schultz</i>   |
|-------------------------------|------------------|------------------|
| Cash                          | \$ 25,000        | \$ 30,000        |
| Inventory                     | 105,000          | 97,500           |
| Investment in Schultz Company | 222,000          | —0—              |
| Land                          | 111,000          | 97,000           |
| Cost of Goods Sold            | 225,000          | 59,500           |
| Other Expense                 | 40,000           | 40,000           |
| Dividends Declared            | 15,000           | 10,000           |
| Total Debits                  | <u>\$743,000</u> | <u>\$334,000</u> |
| Accounts Payable              | \$ 72,500        | \$ 17,500        |
| Capital Stock                 | 160,000          | 75,000           |
| Other Contributed Capital     | 35,000           | 17,500           |
| Retained Earnings, 1/1        | 25,000           | 54,000           |
| Sales                         | 380,000          | 170,000          |
| Equity in Subsidiary Income   | 70,500           | —0—              |
| Total Credits                 | <u>\$743,000</u> | <u>\$334,000</u> |

**Required:**

- A. What method is being used by Perkins to account for its investment in Schultz Company? How can you tell?
- B. Prepare a workpaper for the preparation of consolidated financial statements on December 31, 2012. Any difference between the book value of equity acquired and the value implied by the purchase price relates to goodwill.

**PROBLEM 4-4 Consolidated Workpaper, Partially Owned Subsidiary, Cost Method LO5**

Place Company purchased 92% of the common stock of Shaw, Inc. on January 1, 2012, for \$400,000. Trial balances at the end of 2012 for the companies were:

|                               | <i>Place</i>       | <i>Shaw</i>      |
|-------------------------------|--------------------|------------------|
| Cash                          | \$ 80,350          | \$ 87,000        |
| Accounts and Notes Receivable | 200,000            | 210,000          |
| Inventory, 1/1                | 70,000             | 50,000           |
| Investment in Shaw, Inc.      | 400,000            | —0—              |
| Plant Assets                  | 300,000            | 200,000          |
| Dividends Declared            | 35,000             | 22,000           |
| Purchases                     | 240,000            | 150,000          |
| Selling Expenses              | 28,000             | 20,000           |
| Other Expenses                | 15,000             | 13,000           |
|                               | <u>\$1,368,350</u> | <u>\$752,000</u> |
| Accounts and Notes Payable    | \$ 99,110          | \$ 38,000        |
| Other Liabilities             | 45,000             | 15,000           |
| Common Stock, \$10 par        | 150,000            | 100,000          |
| Other Contributed Capital     | 279,000            | 149,000          |
| Retained Earnings, 1/1        | 225,000            | 170,000          |
| Sales                         | 550,000            | 280,000          |
| Dividend Income               | 20,240             | —0—              |
|                               | <u>\$1,368,350</u> | <u>\$752,000</u> |

Inventory balances on December 31, 2012, were \$25,000 for Place and \$15,000 for Shaw, Inc. Shaw's accounts and notes payable contain a \$15,000 note payable to Place.

**Required:**

Prepare a workpaper for the preparation of consolidated financial statements on December 31, 2012. The difference between book value of equity acquired and the value implied by the purchase price relates to subsidiary land, which is included in plant assets.

**PROBLEM 4-5 Consolidated Workpaper, Partially Owned Subsidiary—Subsequent Years**

On January 1, 2012, Perez Company purchased 90% of the capital stock of Sanchez Company for \$85,000. Sanchez Company had capital stock of \$70,000 and retained earnings of \$12,000 at that time. On December 31, 2016, the trial balances of the two companies were:

|                               | <i>Perez</i>     | <i>Sanchez</i>   |
|-------------------------------|------------------|------------------|
| Cash                          | \$ 13,000        | \$ 14,000        |
| Accounts receivable           | 22,000           | 36,000           |
| Inventory, 1/1                | 14,000           | 8,000            |
| Advance to Sanchez Company    | 8,000            | —0—              |
| Investment in Sanchez Company | 85,000           | —0—              |
| Plant and equipment           | 50,000           | 44,000           |
| Land                          | 17,800           | 6,000            |
| Dividends declared            | 10,000           | 12,000           |
| Purchases                     | 84,000           | 20,000           |
| Other expense                 | 10,000           | 16,000           |
| Total debits                  | <u>\$313,800</u> | <u>\$156,000</u> |
| Accounts payable              | \$ 6,000         | \$ 6,000         |
| Other liabilities             | 37,000           | —0—              |
| Advance from Perez Company    | —0—              | 8,000            |
| Capital stock                 | 100,000          | 70,000           |
| Retained earnings             | 50,000           | 30,000           |
| Sales                         | 110,000          | 42,000           |
| Dividend income               | 10,800           | —0—              |
| Total credits                 | <u>\$313,800</u> | <u>\$156,000</u> |
| Inventory, 12/31              | <u>\$ 40,000</u> | <u>\$ 15,000</u> |

Any difference between book value and the value implied by the purchase price relates to goodwill.

**Required:**

- A. What method is being used by Perez to account for its investment in Sanchez Company? How can you tell?  
 B. Prepare a workpaper for the preparation of consolidated financial statements on 12/31/16.

**PROBLEM 4-6****Consolidated Workpaper, Partially Owned Subsidiary—Subsequent Years LO 5**

On January 1, 2011, Plank Company purchased 80% of the outstanding capital stock of Scoba Company for \$53,000. At that time, Scoba's stockholders' equity consisted of capital stock, \$55,000; other contributed capital, \$5,000; and retained earnings, \$4,000. On December 31, 2015, the two companies' trial balances were as follows:

|                             | <i>Plank</i>     | <i>Scoba</i>     |
|-----------------------------|------------------|------------------|
| Cash                        | \$ 42,000        | \$ 22,000        |
| Accounts Receivable         | 21,000           | 17,000           |
| Inventory                   | 15,000           | 8,000            |
| Investment in Scoba Company | 69,800           | —0—              |
| Land                        | 52,000           | 48,000           |
| Dividends Declared          | 10,000           | 8,000            |
| Cost of Goods Sold          | 85,400           | 20,000           |
| Other Expense               | 10,000           | 12,000           |
|                             | <u>\$305,200</u> | <u>\$135,000</u> |
| Accounts Payable            | \$ 12,000        | \$ 6,000         |
| Other Liabilities           | 5,000            | 4,000            |
| Capital Stock               | 100,000          | 55,000           |
| Other Contributed Capital   | 20,000           | 5,000            |
| Retained Earnings, 1/1      | 48,800           | 15,000           |
| Sales                       | 105,000          | 50,000           |
| Equity in Subsidiary Income | 14,400           | —0—              |
|                             | <u>\$305,200</u> | <u>\$135,000</u> |

The accounts payable of Scoba Company include \$3,000 payable to Plank Company.

**Required:**

- A. What method is being used by Plank to account for its investment in Scoba Company? How can you tell?  
 B. Prepare a consolidated statements workpaper at December 31, 2015. Any difference between book value and the value implied by the purchase price relates to subsidiary land.

**PROBLEM 4-7****Consolidated Workpaper, Partially Owned Subsidiary—Subsequent Years, Cost Method**

Price Company purchased 90% of the outstanding common stock of Score Company on January 1, 2011, for \$450,000. At that time, Score Company had stockholders' equity consisting of common stock, \$200,000; other contributed capital, \$160,000; and retained earnings, \$90,000. On December 31, 2015, trial balances for Price Company and Score Company were as follows:

|                              | <i>Price</i>       | <i>Score</i>       |
|------------------------------|--------------------|--------------------|
| Cash                         | \$ 109,000         | \$ 78,000          |
| Accounts Receivable          | 166,000            | 94,000             |
| Note Receivable              | 75,000             | —0—                |
| Inventory                    | 309,000            | 158,000            |
| Investment in Score Company  | 450,000            | —0—                |
| Plant and Equipment          | 940,000            | 420,000            |
| Land                         | 160,000            | 70,000             |
| Dividends Declared           | 70,000             | 50,000             |
| Cost of Goods Sold           | 822,000            | 242,000            |
| Operating Expenses           | 250,500            | 124,000            |
| Total Debits                 | <u>\$3,351,500</u> | <u>\$1,236,000</u> |
| Accounts Payable             | \$ 132,000         | \$ 46,000          |
| Notes Payable                | 300,000            | 120,000            |
| Common Stock                 | 500,000            | 200,000            |
| Other Contributed Capital    | 260,000            | 160,000            |
| Retained Earnings, 1/1       | 687,000            | 210,000            |
| Sales                        | 1,420,000          | 500,000            |
| Dividend and Interest Income | 52,500             | —0—                |
| Total Credits                | <u>\$3,351,500</u> | <u>\$1,236,000</u> |

Price Company's note receivable is receivable from Score Company. Interest of \$7,500 was paid by Score to Price during 2015. Any difference between book value and the value implied by the purchase price relates to goodwill.

**Required:**

Prepare a consolidated statements workpaper on December 31, 2015.

**PROBLEM 4-8 Consolidated Workpapers, Two Consecutive Years, Cost Method LO 5**

On January 1, 2012, Parker Company purchased 95% of the outstanding common stock of Sid Company for \$160,000. At that time, Sid's stockholders' equity consisted of common stock, \$120,000; other contributed capital, \$10,000; and retained earnings, \$23,000. On December 31, 2012, the two companies' trial balances were as follows:

|                           | <i>Parker</i>    | <i>Sid</i>       |
|---------------------------|------------------|------------------|
| Cash                      | \$ 62,000        | \$ 30,000        |
| Accounts Receivable       | 32,000           | 29,000           |
| Inventory                 | 30,000           | 16,000           |
| Investment in Sid Company | 160,000          | —0—              |
| Plant and Equipment       | 105,000          | 82,000           |
| Land                      | 29,000           | 34,000           |
| Dividends Declared        | 20,000           | 20,000           |
| Cost of Goods Sold        | 130,000          | 40,000           |
| Operating Expenses        | 20,000           | 14,000           |
| Total Debits              | <u>\$588,000</u> | <u>\$265,000</u> |
| Accounts Payable          | \$ 19,000        | \$ 12,000        |
| Other Liabilities         | 10,000           | 20,000           |
| Common Stock              | 180,000          | 120,000          |
| Other Contributed Capital | 60,000           | 10,000           |
| Retained Earnings, 1/1    | 40,000           | 23,000           |
| Sales                     | 260,000          | 80,000           |
| Dividend Income           | 19,000           | —0—              |
| Total Credits             | <u>\$588,000</u> | <u>\$265,000</u> |

**Required:**

- A. Prepare a consolidated statements workpaper on December 31, 2012.
- B. Prepare a consolidated statements workpaper on December 31, 2013, assuming trial balances for Parker and Sid on that date were:

|                           | <i>Parker</i>    | <i>Sid</i>       |
|---------------------------|------------------|------------------|
| Cash                      | \$ 67,000        | \$ 16,000        |
| Accounts Receivable       | 56,000           | 32,000           |
| Inventory                 | 38,000           | 48,500           |
| Investment in Sid Company | 160,000          | —0—              |
| Plant and Equipment       | 124,000          | 80,000           |
| Land                      | 29,000           | 34,000           |
| Dividends Declared        | 20,000           | 20,000           |
| Cost of Goods Sold        | 155,000          | 52,000           |
| Operating Expenses        | 30,000           | 18,000           |
| Total Debits              | <u>\$679,000</u> | <u>\$300,500</u> |
| Accounts Payable          | \$ 16,000        | \$ 7,000         |
| Other Liabilities         | 15,000           | 14,500           |
| Common Stock              | 180,000          | 120,000          |
| Other Contributed Capital | 60,000           | 10,000           |
| Retained Earnings, 1/1    | 149,000          | 29,000           |
| Sales                     | 240,000          | 120,000          |
| Dividend Income           | 19,000           | —0—              |
| Total Credits             | <u>\$679,000</u> | <u>\$300,500</u> |



**PROBLEM 4-9 Consolidated Workpaper, Treasury Stock, Cost Method**

December 31, 2014, trial balances for Pledge Company and its subsidiary Stom Company follow:

|  | <i>Pledge</i>      | <i>Stom</i>        |
|--|--------------------|--------------------|
| Cash and Marketable Securities         | \$ 184,600         | \$ 72,000          |
| Receivables (net)                      | 182,000            | 180,000            |
| Inventory                              | 214,000            | 212,000            |
| Investment in Stom Company             | 300,000            | —0—                |
| Plant and Equipment (net)              | 309,000            | 301,000            |
| Land                                   | 85,000             | 75,000             |
| Cost of Goods Sold                     | 460,000            | 185,000            |
| Operating Expenses                     | 225,000            | 65,000             |
| Dividends Declared                     | 50,000             | 30,000             |
| Treasury Stock (10,000 shares at cost) | —0—                | 20,000             |
| Total Debits                           | <u>\$2,009,600</u> | <u>\$1,140,000</u> |
| Accounts Payable                       | \$ 96,000          | \$ 79,000          |
| Accrued Expenses                       | 31,000             | 18,000             |
| Notes Payable                          | 100,000            | 200,000            |
| Common Stock, \$1 par value            | 300,000            | 100,000            |
| Other Contributed Capital              | 150,000            | 80,000             |
| Retained Earnings, 1/1                 | 422,000            | 320,000            |
| Sales                                  | 880,000            | 340,000            |
| Dividend and Interest Income           | 30,600             | 3,000              |
| Total Credits                          | <u>\$2,009,600</u> | <u>\$1,140,000</u> |

Pledge Company purchased 72,000 shares of Stom Company's common stock on January 1, 2011, for \$300,000. On that date, Stom Company's stockholders' equity was as follows:

|  |                  |
|--|------------------|
| Common Stock, \$1 par value            | \$100,000        |
| Other Contributed Capital              | 80,000           |
| Retained Earnings                      | 160,000          |
| Treasury Stock (10,000 shares at cost) | <u>(20,000)</u>  |
| Total                                  | <u>\$320,000</u> |

**Additional information:**

1. Receivables of Pledge Company include a \$55,000, 12% note receivable from Stom Company.
2. Interest amounting to \$6,600 has been accrued by each company on the note payable from Stom to Pledge. Stom Company has not yet paid this interest.
3. The difference between book value and the value implied by the purchase price relates to subsidiary land.

**Required:**

Prepare a consolidated statements workpaper for the year ended December 31, 2014.

**PROBLEM 4-10 Consolidated Workpaper, Equity Method LO5**

Poco Company purchased 80% of Solo Company's common stock on January 1, 2012, for \$250,000. On December 31, 2012, the companies prepared the following trial balances:

|                             | <i>Poco</i>        | <i>Solo</i>      |
|-----------------------------|--------------------|------------------|
| Cash                        | \$ 161,500         | \$125,000        |
| Inventory                   | 210,000            | 195,000          |
| Investment in Solo Company  | 402,000            | —0—              |
| Land                        | 75,000             | 150,000          |
| Cost of Goods Sold          | 410,000            | 125,000          |
| Other Expense               | 100,000            | 80,000           |
| Dividends Declared          | 30,000             | 15,000           |
| Total Debits                | <u>\$1,388,500</u> | <u>\$690,000</u> |
| Accounts Payable            | \$ 154,500         | \$ 35,000        |
| Common Stock                | 200,000            | 150,000          |
| Other Contributed Capital   | 60,000             | 35,000           |
| Retained Earnings, 1/1      | 50,000             | 60,000           |
| Sales                       | 760,000            | 410,000          |
| Equity in Subsidiary Income | 164,000            | —0—              |
| Total Credits               | <u>\$1,388,500</u> | <u>\$690,000</u> |

**Required:**

Prepare a consolidated statements workpaper on December 31, 2012. Any difference between book value and the value implied by the purchase price relates to goodwill.

**PROBLEM 4-11 Consolidated Workpaper, Equity Method LO5**

(Note that this is the same problem as Problem 4-7, but assuming the use of the partial equity method.)

Price Company purchased 90% of the outstanding common stock of Score Company on January 1, 2011, for \$450,000. At that time, Score Company had stockholders' equity consisting of common stock, \$200,000; other contributed capital, \$160,000; and retained earnings, \$90,000. On December 31, 2015, trial balances for Price Company and Score Company were as follows:

|                             | <i>Price</i>       | <i>Score</i>       |
|-----------------------------|--------------------|--------------------|
| Cash                        | \$ 109,000         | \$ 78,000          |
| Accounts Receivable         | 166,000            | 94,000             |
| Note Receivable             | 75,000             | —0—                |
| Inventory                   | 309,000            | 158,000            |
| Investment in Score Company | 633,600            | —0—                |
| Plant and Equipment         | 940,000            | 420,000            |
| Land                        | 160,000            | 70,000             |
| Dividends Declared          | 70,000             | 50,000             |
| Cost of Goods Sold          | 822,000            | 242,000            |
| Operating Expenses          | 250,500            | 124,000            |
| Total Debits                | <u>\$3,535,100</u> | <u>\$1,236,000</u> |
| Accounts Payable            | \$ 132,000         | \$ 46,000          |
| Notes Payable               | 300,000            | 120,000            |
| Common Stock                | 500,000            | 200,000            |
| Other Contributed Capital   | 260,000            | 160,000            |
| Retained Earnings, 1/1      | 795,000            | 210,000            |
| Sales                       | 1,420,000          | 500,000            |
| Equity in Subsidiary Income | 120,600            | —0—                |
| Interest Income             | 7,500              | —0—                |
| Total Credits               | <u>\$3,535,100</u> | <u>\$1,236,000</u> |

Price Company's note receivable is receivable from Score Company. Interest of \$7,500 was paid by Score to Price during 2015. Any difference between book value and the value implied by the purchase price relates to goodwill.

**Required:**

Prepare a consolidated statements workpaper on December 31, 2015.

**PROBLEM 4-12 Equity Method, Two Consecutive Years LO5**

On January 1, 2012, Parker Company purchased 90% of the outstanding common stock of Sid Company for \$180,000. At that time, Sid's stockholders' equity consisted of common stock, \$120,000; other contributed capital, \$20,000; and retained earnings, \$25,000. Assume that any difference between book value of equity and the value implied by the purchase price is attributable to land. On December 31, 2012, the two companies' trial balances were as follows:

|                              | <i>Parker</i>    | <i>Sid</i>       |
|------------------------------|------------------|------------------|
| Cash                         | \$ 65,000        | \$ 35,000        |
| Accounts Receivable          | 40,000           | 30,000           |
| Inventory                    | 25,000           | 15,000           |
| Investment in Sid Company    | 184,500          | —0—              |
| Plant and Equipment          | 110,000          | 85,000           |
| Land                         | 48,500           | 45,000           |
| Dividends Declared           | 20,000           | 15,000           |
| Cost of Goods Sold           | 150,000          | 60,000           |
| Operating Expenses           | <u>35,000</u>    | <u>15,000</u>    |
| Total Debits                 | <u>\$678,000</u> | <u>\$300,000</u> |
| Accounts Payable             | \$ 20,000        | \$ 15,000        |
| Other Liabilities            | 15,000           | 25,000           |
| Common Stock, par value \$10 | 200,000          | 120,000          |
| Other Contributed Capital    | 70,000           | 20,000           |
| Retained Earnings, 1/1       | 55,000           | 25,000           |
| Sales                        | 300,000          | 95,000           |
| Equity in Subsidiary Income  | <u>18,000</u>    | <u>—0—</u>       |
| Total Credits                | <u>\$678,000</u> | <u>\$300,000</u> |

**Required:**

- A. Prepare a consolidated statements workpaper on December 31, 2012.
- B. Prepare a consolidated statements workpaper on December 31, 2013, assuming trial balances for Parker and Sid on that date were:

|                              | <i>Parker</i>    | <i>Sid</i>       |
|------------------------------|------------------|------------------|
| Cash                         | \$ 70,000        | \$ 20,000        |
| Accounts Receivable          | 60,000           | 35,000           |
| Inventory                    | 40,000           | 30,000           |
| Investment in Sid Company    | 193,500          | —0—              |
| Plant and Equipment          | 125,000          | 90,000           |
| Land                         | 48,500           | 45,000           |
| Dividends Declared           | 20,000           | 15,000           |
| Cost of Goods Sold           | 160,000          | 65,000           |
| Operating Expenses           | <u>35,000</u>    | <u>20,000</u>    |
| Total Debits                 | <u>\$752,000</u> | <u>\$320,000</u> |
| Accounts Payable             | \$ 16,500        | \$ 16,000        |
| Other Liabilities            | 15,000           | 24,000           |
| Common Stock, par value \$10 | 200,000          | 120,000          |
| Other Contributed Capital    | 70,000           | 20,000           |
| Retained Earnings, 1/1       | 168,000          | 30,000           |
| Sales                        | 260,000          | 110,000          |
| Equity in Subsidiary Income  | <u>22,500</u>    | <u>—0—</u>       |
| Total Credits                | <u>\$752,000</u> | <u>\$320,000</u> |

**PROBLEM 4-13 Consolidated Workpaper, Treasury Stock, Equity Method LO 5**

(Note that this problem is the same as Problem 4-9, but assuming the use of the partial equity method.)  
December 31, 2014, trial balances for Pledge Company and its subsidiary Stom Company follow:

|  | <i>Pledge</i>      | <i>Stom</i>        |
|--|--------------------|--------------------|
| Cash and Marketable Securities         | \$ 184,600         | \$ 72,000          |
| Receivables (net)                      | 182,000            | 180,000            |
| Inventory                              | 214,000            | 212,000            |
| Investment in Stom Company             | 478,400            | —0—                |
| Plant and Equipment (net)              | 309,000            | 301,000            |
| Land                                   | 85,000             | 75,000             |
| Cost of Goods Sold                     | 460,000            | 185,000            |
| Operating Expenses                     | 225,000            | 65,000             |
| Dividends Declared                     | 50,000             | 30,000             |
| Treasury Stock (10,000 shares at cost) | <u>—0—</u>         | <u>20,000</u>      |
| Total Debits                           | <u>\$2,188,000</u> | <u>\$1,140,000</u> |
| Accounts Payable                       | \$ 96,000          | \$ 79,000          |
| Accrued Expenses                       | 31,000             | 18,000             |
| Notes Payable                          | 100,000            | 200,000            |
| Common Stock, \$1 par value            | 300,000            | 100,000            |
| Other Contributed Capital              | 150,000            | 80,000             |
| Retained Earnings, 1/1                 | 550,000            | 320,000            |
| Sales                                  | 880,000            | 340,000            |
| Equity in Subsidiary Income            | 74,400             | —0—                |
| Interest Income                        | <u>6,600</u>       | <u>3,000</u>       |
| Total Credits                          | <u>\$2,188,000</u> | <u>\$1,140,000</u> |

Pledge Company purchased 72,000 shares of Stom Company's common stock on January 1, 2011, for \$300,000. On that date, Stom Company's stockholders' equity was as follows:

|  |                  |
|--|------------------|
| Common Stock, \$1 par value            | \$100,000        |
| Other Contributed Capital              | 80,000           |
| Retained Earnings                      | 160,000          |
| Treasury Stock (10,000 shares at cost) | <u>(20,000)</u>  |
| Total                                  | <u>\$320,000</u> |

**Other information:**

1. Receivables of Pledge Company include a \$55,000, 12% note receivable from Stom Company.
2. Interest amounting to \$6,600 has been accrued by each company on the note payable from Stom to Pledge. Stom Company has not yet paid this interest.
3. The difference between book value and the value implied by the purchase price relates to subsidiary land.

**Required:**

Prepare a consolidated statements workpaper for the year ended December 31, 2014. Note that the percentage purchased is based on outstanding shares of Stom and not issued shares.

**PROBLEM 4-14 Interim Purchase, Cost Method LO 6**

Punca Company purchased 85% of the common stock of Surrano Company on July 1, 2012, for a cash payment of \$590,000. December 31, 2012, trial balances for Punca and Surrano were:

|                                    | <i>Punca</i>       | <i>Surrano</i>     |
|------------------------------------|--------------------|--------------------|
| Current Assets                     | \$ 150,000         | \$ 180,000         |
| Treasury Stock at Cost, 500 shares | —0—                | 48,000             |
| Investment in Surrano Company      | 590,000            | —0—                |
| Property and Equipment             | 1,250,000          | 750,000            |
| Cost of Goods Sold                 | 1,540,000          | 759,000            |
| Other Expenses                     | 415,000            | 250,000            |
| Dividends Declared                 | <u>—0—</u>         | <u>50,000</u>      |
| Total                              | <u>\$3,945,000</u> | <u>\$2,037,000</u> |
| Accounts and Notes Payable         | \$ 277,500         | \$ 150,000         |
| Dividends Payable                  | —0—                | 50,000             |
| Capital Stock, \$5 par value       | 270,000            | 40,000             |
| Other Contributed Capital          | 900,000            | 250,000            |
| Retained Earnings, 1/1             | 355,000            | 241,000            |
| Sales                              | 2,100,000          | 1,300,000          |
| Dividend Income                    | <u>42,500</u>      | <u>6,000</u>       |
| Total                              | <u>\$3,945,000</u> | <u>\$2,037,000</u> |

Surrano Company declared a \$50,000 cash dividend on December 20, 2012, payable on January 10, 2013, to stockholders of record on December 31, 2012. Punca Company recognized the dividend on its declaration date. Any difference between book value and the value implied by the purchase price relates to subsidiary land, included in property and equipment. Income is earned evenly throughout the year.

**Required:**

Prepare a consolidated statements workpaper at December 31, 2012.

**PROBLEM 4-15 Interim Purchase, Equity Method LO 6**

Pillow Company purchased 90% of the common stock of Satin Company on May 1, 2011, for a cash payment of \$474,000. December 31, 2011, trial balances for Pillow and Satin were:

|                                    | <i>Pillow</i>      | <i>Satin</i>       |
|------------------------------------|--------------------|--------------------|
| Current Assets                     | \$ 390,600         | \$ 179,200         |
| Treasury Stock at Cost, 500 shares |                    | 32,000             |
| Investment in Satin Company        | 510,000            | —0—                |
| Property and Equipment             | 1,334,000          | 562,000            |
| Cost of Goods Sold                 | 1,261,000          | 584,000            |
| Other Expenses                     | 484,000            | 242,000            |
| Dividends Declared                 | —0—                | 60,000             |
| Total                              | <u>\$3,979,600</u> | <u>\$1,659,200</u> |
| Accounts and Notes Payable         | \$ 270,240         | \$ 124,000         |
| Dividends Payable                  |                    | 60,000             |
| Capital Stock, \$10 par value      | 1,000,000          | 200,000            |
| Other Contributed Capital          | 364,000            | 90,000             |
| Retained Earnings                  | 315,360            | 209,200            |
| Sales                              | 1,940,000          | 976,000            |
| Equity in Subsidiary Income        | 90,000             | —0—                |
| Total                              | <u>\$3,979,600</u> | <u>\$1,659,200</u> |

Satin Company declared a \$60,000 cash dividend on December 20, 2011, payable on January 10, 2012, to stockholders of record on December 31, 2011. Pillow Company recognized the dividend on its declaration date. Any difference between book value and the value implied by the purchase price relates to subsidiary land, included in property and equipment. Income is earned evenly throughout the year.

**Required:**

Prepare a consolidated statements workpaper at December 31, 2011.

**PROBLEM 4-16 Consolidated Statement of Cash Flows, Indirect Method LO 8**

A consolidated income statement for 2013 and comparative consolidated balance sheets for 2012 and 2013 for P Company and its 80% owned subsidiary follow:

**P COMPANY AND SUBSIDIARY**  
**Consolidated Income Statement**  
**for the Year Ended December 31, 2013**

|  |                   |
|--|-------------------|
| Sales  | \$1,900,000       |
| Cost of goods sold                                       | 1,000,000         |
| Gross margin   | <u>900,000</u>    |
| Expenses   | 300,000           |
| Operating income before tax                              | <u>600,000</u>    |
| Dividend income  | 50,000            |
| Income before tax  | <u>550,000</u>    |
| Income taxes   | 220,000           |
| Consolidated net income                                  | <u>330,000</u>    |
| Less: Noncontrolling interest in consolidated net income | 66,000            |
| Controlling interest in consolidated net income          | <u>\$ 264,000</u> |

**P COMPANY**  
**Consolidated Balance Sheets**  
**December 31, 2012 and 2013**

| <i>Assets</i>                     | <i>2013</i>        | <i>2012</i>        |
|-----------------------------------|--------------------|--------------------|
| Cash                              | \$ 250,000         | \$ 300,000         |
| Accounts receivable               | 360,000            | 250,000            |
| Inventories                       | 210,000            | 190,000            |
| Equipment (net)                   | 950,000            | 500,000            |
| Long-term investments             | 800,000            | 800,000            |
| Goodwill                          | 175,000            | 175,000            |
| Total assets                      | <u>\$2,745,000</u> | <u>\$2,215,000</u> |
| <br><i>Liabilities and Equity</i> |                    |                    |
| Accounts payable                  | \$ 268,000         | \$ 500,000         |
| Accrued payable                   | 260,000            | 200,000            |
| Bonds payable                     | 200,000            | —0—                |
| Premium on bonds payable          | 40,000             | —0—                |
| Noncontrolling interest           | 148,000            | 90,000             |
| Common stock, \$1 par value       | 600,000            | 450,000            |
| Other contributed capital         | 275,000            | 225,000            |
| Retained earnings                 | 954,000            | 750,000            |
| Total equities                    | <u>\$2,745,000</u> | <u>\$2,215,000</u> |

**Other information:**

1. Equipment depreciation was \$95,000.
2. Equipment was purchased during the year for cash, \$545,000.
3. Dividends paid during 2013:
  - a. Declared and paid by S Company, \$40,000.
  - b. Declared and paid by P Company, \$60,000.
4. The bonds payable were issued on December 30, 2013, for \$240,000.
5. Common stock issued during 2013, 150,000 shares.

**Required:**

Prepare a consolidated statement of cash flows for the year ended December 31, 2013, using the indirect method.

**PROBLEM 4-17 Consolidated Statement of Cash Flows: Direct Method LO 7**

The consolidated income statement for the year December 31, 2014, and comparative balance sheets for 2013 and 2014 for Parks Company and its 90% owned subsidiary SCR, Inc. are as follows:

**PARKS COMPANY AND SUBSIDIARY**  
**Consolidated Income Statement**  
**for the Year Ended December 31, 2014**

|  |               |                 |
|--|---------------|-----------------|
| Sales  |               | \$239,000       |
| Cost of goods sold                                 |               | <u>104,000</u>  |
| Gross margin                                       |               | 135,000         |
| Depreciation expense                               | \$27,000      |                 |
| Other operating expenses                           | <u>72,000</u> | <u>99,000</u>   |
| Income from operations                             |               | 36,000          |
| Investment income                                  |               | <u>4,500</u>    |
| Consolidated net income                            |               | 40,500          |
| Noncontrolling interest in consolidated net income |               | <u>3,000</u>    |
| Controlling interest in consolidated net income    |               | <u>\$37,500</u> |

**PARKS COMPANY AND SUBSIDIARY**  
**Consolidated Balance Sheets**  
**December 31, 2013 and 2014**

|  | <i>2014</i>      | <i>2013</i>      |
|--|------------------|------------------|
| Cash   | \$ 36,700        | \$ 16,000        |
| Receivables  | 55,000           | 90,000           |
| Inventory  | 126,000          | 92,000           |
| Property, plant, and equipment (net of depreciation) | 231,000          | 225,000          |
| Long-term investment                                 | 39,000           | 39,000           |
| Goodwill   | 60,000           | 60,000           |
| Total assets   | <u>\$547,700</u> | <u>\$522,000</u> |
| Accounts payable                                     | \$ 67,500        | \$ 88,500        |
| Accrued expenses                                     | 30,000           | 41,000           |
| Bonds payable, due July 1, 2020                      | 100,000          | 150,000          |
| Total liabilities                                    | <u>197,500</u>   | <u>279,500</u>   |
| Noncontrolling interest                              | 32,200           | 30,000           |
| Common stock   | 187,500          | 100,000          |
| Retained earnings                                    | 130,500          | 112,500          |
| Total stockholders' equity                           | <u>350,200</u>   | <u>242,500</u>   |
| Total equities                                       | <u>\$547,700</u> | <u>\$522,000</u> |

SCR, Inc. declared and paid an \$8,000 dividend during 2014.

**Required:**

Prepare a consolidated statement of cash flows using the direct method.

**PROBLEM 4-18 Consolidated Statement of Cash Flows—Interim Acquisition—Cost Method**

On April 1, Year 1, Company P purchased 85% of S Company for total consideration of \$357,000, which included \$30,000 of contingent consideration as measured according to GAAP at fair value. Each company has a December 31 year-end. The cost method is used to account for the investment in S. The income statements, balance sheets, and the statements of cash flows for relevant time periods are reported below along with consolidated numbers. On the acquisition date, land on Company S's books is undervalued by \$40,000. Any remaining excess of purchase price over fair value of net assets is attributed to goodwill. At the end of Year 1, Company S declared, but did not pay, a \$30,000 dividend. The contingent consideration had increased in fair value to \$36,600 as of December 31, Year 1. The financial statements are presented below.

| <i>Income Statement</i>           | <i>Three Months ending</i> |                | <i>For the Year ending</i> |                | <i>Consolidated</i> |
|-----------------------------------|----------------------------|----------------|----------------------------|----------------|---------------------|
|                                   | <i>April 1st, Year 1</i>   |                | <i>December 31, Year 1</i> |                |                     |
|                                   | <i>P Co.</i>               | <i>S Co.</i>   | <i>P Co.</i>               | <i>S Co.</i>   |                     |
| Revenue                           | 315,000                    | 195,000        | 1,260,000                  | 780,000        | 1,845,000           |
| Dividend income                   |                            |                | 25,500                     | —0—            |                     |
| Total Revenue                     | <u>315,000</u>             | <u>195,000</u> | <u>1,285,500</u>           | <u>780,000</u> | <u>1,845,000</u>    |
| Cost of goods sold                | 231,000                    | 113,100        | 924,000                    | 452,400        | 1,263,300           |
| Selling, General & Administration | 48,000                     | 24,000         | 192,000                    | 156,000        | 324,000             |
| Other expenses                    | 14,400                     | 13,500         | 57,600                     | 54,000         | 98,100              |
| Total expenses                    | <u>293,400</u>             | <u>150,600</u> | <u>1,173,600</u>           | <u>662,400</u> | <u>1,685,400</u>    |
| Consolidated Income               |                            |                |                            |                | 159,600             |
| Noncontrolling interest           |                            |                |                            |                | (10,980)            |
| Income to Retained Earning        | <u>21,600</u>              | <u>44,400</u>  | <u>111,900</u>             | <u>117,600</u> | <u>148,620</u>      |
| Beginning Retained earnings       | 213,000                    | 144,600        | 213,000                    | 144,600        | 213,000             |
| Net income                        | 21,600                     | 44,400         | 111,900                    | 117,600        | 148,620             |
| Dividends declared                | —                          | —              | —                          | 30,000         | —0—                 |
| Ending Retained earnings          | <u>234,600</u>             | <u>189,000</u> | <u>324,900</u>             | <u>232,200</u> | <u>361,620</u>      |

| Balance Sheet                | 12/31/Year 0     |                  | April 1, Year 1  |                | 12/31/Year 1       |                  | Consolidated     |                    |
|------------------------------|------------------|------------------|------------------|----------------|--------------------|------------------|------------------|--------------------|
|                              | P Co.            | S Co.            | P Co.            | S Co.          | P Co.              | S Co.            | 12/31/Year 0     | 12/31/Year 1       |
|                              |                  |                  |                  |                |                    |                  |                  |                    |
| Cash                         | \$60,000         | \$9,000          | 16,800           | 6,600          | \$18,000           | \$15,000         | \$60,000         | \$33,000           |
| Accounts Receivable          | 102,000          | 69,000           | 74,400           | 72,600         | 78,300             | 81,000           | 102,000          | 159,300            |
| Dividends Receivable         |                  |                  |                  |                | 25,500             |                  |                  |                    |
| Inventory                    | 132,000          | 73,200           | 137,400          | 69,600         | 139,200            | 78,000           | 132,000          | 217,200            |
| Investment in S Company      |                  |                  | 357,000          |                | 357,000            |                  |                  |                    |
| Goodwill                     |                  |                  |                  |                |                    |                  |                  | 45,800             |
| Property and Equipment       | 510,000          | 270,000          | 510,000          | 279,000        | 561,600            | 311,400          | 510,000          | 913,000            |
| Total                        | <u>\$804,000</u> | <u>\$421,200</u> | <u>1,095,600</u> | <u>427,800</u> | <u>\$1,179,600</u> | <u>\$485,400</u> | <u>\$804,000</u> | <u>\$1,368,300</u> |
| Accounts and Notes Payable   | \$39,000         | \$101,400        | 129,000          | 93,600         | \$116,100          | \$78,000         | \$39,000         | \$194,100          |
| Contingent Consideration     | —                | —                | 30,000           | —              | 36,600             | —                | —                | 36,600             |
| Dividends Payable            | —                | 30,000           | —                | —              | —                  | 30,000           | —                | 4,500              |
| Noncontrolling Interest      |                  |                  |                  |                |                    |                  |                  | 69,480             |
| Capital Stock, \$5 par Value | 132,000          | 24,000           | 162,000          | 24,000         | 162,000            | 24,000           | 132,000          | 162,000            |
| Other Contributed Capital    | 420,000          | 121,200          | 540,000          | 121,200        | 540,000            | 121,200          | 420,000          | 540,000            |
| Retained Earnings            | 213,000          | 144,600          | 234,600          | 189,000        | 324,900            | 232,200          | 213,000          | 361,620            |
| Total                        | <u>\$804,000</u> | <u>\$421,200</u> | <u>1,095,600</u> | <u>427,800</u> | <u>\$1,179,600</u> | <u>\$485,400</u> | <u>\$804,000</u> | <u>\$1,368,300</u> |



**Statement of Cash Flows  
For Year Ending 12/31/Year 1**

|                                       | <b>P Company</b>  | <b>S Company</b>  | <b>Consolidated</b> |
|---------------------------------------|-------------------|-------------------|---------------------|
| Net Income                            | 111,900           | 117,600           | 159,600             |
| Depreciation                          | 40,000            | 45,000            | 73,750              |
| Change in following accounts:         |                   |                   |                     |
| Accounts Receivable                   | 23,700            | (12,000)          | 15,300              |
| Dividends Receivables                 | (25,500)          |                   |                     |
| Inventory                             | (7,200)           | (4,800)           | (15,600)            |
| Accounts and Notes Payable            | 77,100            | (23,400)          | \$61,500            |
| Contingent Consideration              | 6,600             |                   | 6,600               |
| <i>Cash from Operations</i>           | <u>226,600</u>    | <u>122,400</u>    | <u>301,150</u>      |
| <b>Investing</b>                      |                   |                   |                     |
| Purchase Property, Plant & Equipment  | (91,600)          | (86,400)          | (157,750)           |
| Acquisitions                          | <u>(327,000)</u>  |                   | <u>(320,400)</u>    |
| <i>Cash from Investing Activities</i> | <u>(418,600)</u>  | <u>(\$86,400)</u> | <u>(478,150)</u>    |
| <b>Financing</b>                      |                   |                   |                     |
| Issue (retire) Debt or Stock          | 150,000           |                   | 150,000             |
| Cash Dividends Paid                   | —                 | (30,000)          | —                   |
| <i>Cash from Financing Activities</i> | <u>150,000</u>    | <u>(30,000)</u>   | <u>150,000</u>      |
| Change in Cash                        | <u>(\$42,000)</u> | <u>\$6,000</u>    | <u>(\$27,000)</u>   |

**Required:**

1. Prepare the computation and allocation of difference between implied and book value acquired schedule on the date of acquisition.
2. Prepare the consolidated workpaper for year 1.
3. Examine the consolidated statement of cash flows prepared using the indirect format.

Determine how the following amounts were computed and indicate the direction of the change in the account and the effect of the change on cash from operations.

- a. Controlling interest in income, \$148,620
- b. Cash paid for acquisitions, \$320,400
- c. The change in accounts receivable, \$15,300
- d. The change in inventory, (\$15,600)
- e. The change in accounts and notes payable, \$61,500

**PROBLEM 4-19 Consolidated Statement of Cash Flows—Interim Acquisition—Complete Equity Method**

On April 1, Year 1, Company P purchased 85% of S Company for total consideration of \$357,000, which included \$30,000 of contingent consideration as measured according to GAAP at fair value. Each company has a December 31 year-end. The complete equity method is used to account for the investment in S. The income statements, balance sheets, and the statements of cash flows for relevant time periods are reported below along with consolidated numbers. On the acquisition date, land on Company S's books is undervalued by \$40,000. Any remaining excess of purchase price over fair value of net assets is attributed to goodwill. At the end of Year 1, Company S declared, but did not pay, a \$30,000 dividend. The contingent consideration had increased in fair value to \$36,600 as of December 31, Year 1. The financial statements are presented below.

| Balance Sheet                | 12/31/Year 0     |                  | April 1, Year 1  |                | 12/31/Year 1       |                  | Consolidated     |                    |
|------------------------------|------------------|------------------|------------------|----------------|--------------------|------------------|------------------|--------------------|
|                              | P Co.            | S Co.            | P Co.            | S Co.          | P Co.              | S Co.            | 12/31/Year 0     | 12/31/Year 1       |
|                              |                  |                  |                  |                |                    |                  |                  |                    |
| Cash                         | \$60,000         | \$9,000          | 16,800           | 6,600          | \$18,000           | \$15,000         | \$60,000         | \$33,000           |
| Accounts Receivable          | 102,000          | 69,000           | 74,400           | 72,600         | 78,300             | 81,000           | 102,000          | 159,300            |
| Dividends Receivable         |                  |                  |                  |                | 25,500             |                  |                  |                    |
| Inventory                    | 132,000          | 73,200           | 137,400          | 69,600         | 139,200            | 78,000           | 132,000          | 217,200            |
| Investment in S Company      |                  |                  | 357,000          |                | 357,000            |                  |                  |                    |
| Goodwill                     |                  |                  |                  |                |                    |                  |                  | 45,800             |
| Property and Equipment       | 510,000          | 270,000          | 510,000          | 279,000        | 561,600            | 311,400          | 510,000          | 913,000            |
| Total                        | <u>\$804,000</u> | <u>\$421,200</u> | <u>1,095,600</u> | <u>427,800</u> | <u>\$1,216,320</u> | <u>\$485,400</u> | <u>\$804,000</u> | <u>\$1,368,300</u> |
| Accounts and Notes Payable   | \$39,000         | \$101,400        | 129,000          | 93,600         | \$116,100          | \$78,000         | \$39,000         | \$194,100          |
| Contingent Consideration     | —                | —                | 30,000           | —              | 36,600             | —                | —                | 36,600             |
| Dividends Payable            | —                | 30,000           | —                | —              | —                  | 30,000           | —                | 4,500              |
| Noncontrolling Interest      |                  |                  |                  |                |                    |                  |                  | 69,480             |
| Capital Stock, \$5 par Value | 132,000          | 24,000           | 162,000          | 24,000         | 162,000            | 24,000           | 132,000          | 162,000            |
| Other Contributed Capital    | 420,000          | 121,200          | 540,000          | 121,200        | 540,000            | 121,200          | 420,000          | 540,000            |
| Retained Earnings            | 213,000          | 144,600          | 234,600          | 189,000        | 361,620            | 232,200          | 213,000          | 361,620            |
| Total                        | <u>\$804,000</u> | <u>\$421,200</u> | <u>1,095,600</u> | <u>427,800</u> | <u>\$1,216,320</u> | <u>\$485,400</u> | <u>\$804,000</u> | <u>\$1,368,300</u> |

| Income Statement                  | Three Months ending<br>April 1st, Year 1 |         | For the Year ending<br>December 31, Year 1 |         |           |
|-----------------------------------|--|---------|--|---------|-----------|
|                                   | P Co.                                    |         | S Co.                                      | P Co.   | S Co.     |
| Revenue                           | 315,000                                  | 195,000 | 1,260,000                                  | 780,000 | 1,845,000 |
| Equity Income                     |  |         | 62,220                                     | —0—     |           |
| Total Revenue                     | 315,000                                  | 195,000 | 1,322,220                                  | 780,000 | 1,845,000 |
| Cost of Goods Sold                | 231,000                                  | 113,100 | 924,000                                    | 452,400 | 1,263,300 |
| Selling, General & Administration | 48,000                                   | 24,000  | 192,000                                    | 156,000 | 324,000   |
| Other Expenses                    | 14,400                                   | 13,500  | 57,600                                     | 54,000  | 98,100    |
| Total Expenses                    | 293,400                                  | 150,600 | 1,173,600                                  | 662,400 | 1,685,400 |
| Consolidated Income               |  |         |  |         | 159,600   |
| Noncontrolling Interest           |  |         |  |         | (10,980)  |
| Income to Retained Earnings       | 21,600                                   | 44,400  | 148,620                                    | 117,600 | 148,620   |
| Beginning Retained Earnings 1/1   | 213,000                                  | 144,600 | 213,000                                    | 144,600 | 213,000   |
| Net Income (from above)           | 21,600                                   | 44,400  | 148,620                                    | 117,600 | 148,620   |
| Dividends Declared                | —  | —       | —  | 30,000  | —0—       |
| Ending Retained Earnings          | 234,600                                  | 189,000 | 361,620                                    | 232,200 | 361,620   |

**Statement of Cash Flows  
For Year Ending 12/31/Year 1**

|                                      | P Company  | S Company  | Consolidated |
|--------------------------------------|------------|------------|--------------|
| Net Income                           | 111,900    | 117,600    | 159,600      |
| Depreciation                         | 40,000     | 45,000     | 73,750       |
| Change in Following Accounts:        |            |            |              |
| Accounts Receivable                  | 23,700     | (12,000)   | 15,300       |
| Dividends Receivables                | (25,500)   |            |              |
| Inventory                            | (7,200)    | (4,800)    | (15,600)     |
| Accounts and Notes Payable           | 77,100     | (23,400)   | \$61,500     |
| Contingent Consideration             | 6,600      |            | 6,600        |
| Cash from Operations                 | 226,600    | 122,400    | 301,150      |
| <b>Investing</b>                     |            |            |              |
| Purchase Property, Plant & Equipment | (91,600)   | (86,400)   | (157,750)    |
| Acquisitions                         | (327,000)  |            | (320,400)    |
| Cash from Investing Activities       | (418,600)  | (\$86,400) | (478,150)    |
| <b>Financing</b>                     |            |            |              |
| Issue (retire) Debt or Stock         | 150,000    |            | 150,000      |
| Cash Dividends Paid                  | —          | (30,000)   | —            |
| Cash from Financing Activities       | 150,000    | (30,000)   | 150,000      |
| Change in cash                       | (\$42,000) | \$6,000    | (\$27,000)   |

**Required:**

- Prepare the computation and allocation of difference between implied and book value acquired schedule on the date of acquisition.
- Prepare the consolidated workpaper for year 1.
- Examine the consolidated statement of cash flows prepared using the indirect format. Determine how the following amounts were computed and indicate the direction of the change in the account and the effect of the change on cash from operations.
  - Controlling interest in income, \$148,620
  - Cash paid for acquisitions, \$320,400
  - The change in accounts receivable, \$15,300
  - The change in inventory, (\$15,600)
  - The change in accounts and notes payable, \$61,500

**PROBLEM 4-20 Interim Acquisition, Contingent Consideration, Cost Method**

Pcost Company purchased 85% of the common stock of Scost Company on April 1, Year 1. The fair value of the consideration transferred consisted of a cash payment of \$545,000 and contingent consideration as described in the earnout agreement below. Under the agreement, Pcost Company agrees to pay an earn-out (contingent consideration) to the stockholders of Scost as part of the consideration for their shares. The Company has the option of paying any earn-out in cash and/or shares of its common stock and has estimated the fair value of the contingent consideration to be \$50,000. Acquisition-related costs of \$20,000 are included in other expenses. Scost will become a reportable segment for consolidated purposes. No control premium was included in the offer price.

Both companies have a December 31 year-end. Trial balances for Pcost and Scost on April 1, Year 1 were:

|                                    | <i>At April 1, Year 1</i> |                     |
|------------------------------------|---------------------------|---------------------|
|                                    | <u><i>Pcost</i></u>       | <u><i>Scost</i></u> |
| Cash                               | \$ 28,000                 | \$ 11,000           |
| Accounts Receivables               | 124,000                   | 121,000             |
| Inventory                          | 229,000                   | 116,000             |
| Treasury Stock at Cost, 500 Shares | —0—                       | 48,000              |
| Investment in Scost Company        | 595,000                   | —0—                 |
| Property and Equipment (net)       | 850,000                   | 465,000             |
| Cost of Goods Sold                 | 385,000                   | 188,500             |
| Selling, General, & Administration | 80,000                    | 40,000              |
| Other Expenses                     | 24,000                    | 22,500              |
| Dividends Declared                 | —0—                       | —0—                 |
| Total                              | <u>\$2,315,000</u>        | <u>\$1,012,000</u>  |
| Accounts Payable                   | \$ 215,000                | \$ 156,000          |
| Contingent Consideration           | 50,000                    |                     |
| Dividends Payable                  | —0—                       | —0—                 |
| Common Stock, \$5 par value        | 270,000                   | 40,000              |
| Other Contributed Capital          | 900,000                   | 250,000             |
| Retained Earnings, 1/1             | 355,000                   | 241,000             |
| Sales                              | 525,000                   | 325,000             |
| Dividend Income                    | —0—                       | —0—                 |
| Total                              | <u>\$2,315,000</u>        | <u>\$1,012,000</u>  |

On the acquisition date, the book values and fair values of Scost's assets and liabilities were equal with the following exceptions.

|                        | <u><i>Book Value</i></u> | <u><i>Fair Value</i></u> |
|------------------------|--------------------------|--------------------------|
| Inventory              | 116,000                  | 146,000                  |
| Property and Equipment | 465,000                  | 507,000                  |

The increase in Property and Equipment will be depreciated over seven years. All fair value estimates will be considered final (no measurement period adjustments).

**Earnout (Contingent Consideration) Agreement—Pcost and Scost Company April 1, Year 1**

The agreed-upon earn-out has three components. If the yearly revenue of Scost exceeds a target level at the end of years 1, 2, and 3, Pcost will pay the shareholders of Scost an amount equal to 50% of the excess, up to \$85,000 per year for a maximum earn-out payment of \$255,000 in total.

The initial target revenue level for year 1 is \$1,300,000 and increases in amount by 5% per year. Target levels in years 2 and 3 will be \$1,365,000 and \$1,433,250. Pcost estimates the fair value of the earn-out using the present value of expected payments and its incremental borrowing rate adjusted for risk of 20%. The fair value of the three earn-outs was estimated to be \$50,000 on the date of acquisition, computed as follows:

**Fair Value of Contingent Consideration**

|                             | <i>Year 1</i>    | <i>Year 2</i>    | <i>Year 3</i>    | <i>Total</i> |
|-----------------------------|------------------|------------------|------------------|--------------|
| Estimated Revenues of Scost | \$1,300,000      | \$1,415,600      | \$1,541,250      |              |
| Target level Revenues       | <u>1,300,000</u> | <u>1,365,000</u> | <u>4,433,250</u> |              |
| Estimated excess            | 0                | 50,600           | 108,000          |              |
| Reduced by 50%              | <u>0.50</u>      | <u>0.50</u>      | <u>0.50</u>      |              |
| Potential payout            | 0                | 25,300           | 54,000           |              |
| Present value factor        | <u>0.876</u>     | <u>0.719</u>     | <u>0.589</u>     |              |
| Fair value of earn-out      | 0                | 18,180           | 31,820           | \$50,000     |

Changes in fair value and interest charges are included in “other expense (income)” on the income statement.

**Required:**

1. Prepare a consolidated balance sheet on the date of acquisition. You can assume that Scost closes its books on this date to facilitate consolidation.
2. Suppose that a control premium was included in the 85% interest acquired by Scost, and that a level 3 estimation of the valuation of Scost shares amounted to \$79 per share (Pcost’s purchase price of \$595,000 implies a purchase price of \$87.50 per share). Prepare the journal entry needed to eliminate the investment account on the date of acquisition. Highlight the changes from part 1.

**PROBLEM 4-21 Interim Acquisition, Contingent Consideration, Complete Equity Method**

Pequity Company purchased 85% of the common stock of Sequity Company on April 1, Year 1. The fair value of the consideration transferred consisted of a cash payment of \$545,000 and contingent consideration as described in the earnout agreement below. Under the agreement, Pequity Company agrees to pay an earn-out (contingent consideration) to the stockholders of Sequity as part of the consideration for their shares. The Company has the option of paying any earn-out in cash and/or shares of its common stock and has estimated the fair value of the contingent consideration to be \$50,000. Acquisition-related costs of \$20,000 are included in other expenses. Sequity will become a reportable segment for consolidated purposes. No control premium was included in the offer price.

Both companies have a December 31 year-end. Trial balances for Pequity and Sequity on April 1, Year 1 were:

|                                    | <i>At April 1, Year 1</i> |                       |
|------------------------------------|---------------------------|-----------------------|
|                                    | <u><i>Pequity</i></u>     | <u><i>Sequity</i></u> |
| Cash                               | \$ 28,000                 | \$ 11,000             |
| Accounts Receivables               | 124,000                   | 121,000               |
| Inventory                          | 229,000                   | 116,000               |
| Treasury Stock at Cost, 500 Shares | —0—                       | 48,000                |
| Investment in Sequity Company      | 595,000                   | —0—                   |
| Property and Equipment (net)       | 850,000                   | 465,000               |
| Cost of Goods Sold                 | 385,000                   | 188,500               |
| Selling, General, & Administration | 80,000                    | 40,000                |
| Other Expenses                     | 24,000                    | 22,500                |
| Dividends Declared                 | —0—                       | —0—                   |
| Total                              | <u>\$2,315,000</u>        | <u>\$1,012,000</u>    |
| Accounts Payable                   | \$ 215,000                | \$ 156,000            |
| Contingent Consideration           | 50,000                    |                       |
| Dividends Payable                  | —0—                       | —0—                   |
| Common Stock, \$5 par Value        | 270,000                   | 40,000                |
| Other Contributed Capital          | 900,000                   | 250,000               |
| Retained Earnings, 1/1             | 355,000                   | 241,000               |
| Sales                              | 525,000                   | 325,000               |
| Dividend Income                    | —0—                       | —0—                   |
| Total                              | <u>\$2,315,000</u>        | <u>\$1,012,000</u>    |

On the acquisition date, the book values and fair values of Sequity's assets and liabilities were equal with the following exceptions.

|                        | <u>Book Value</u> | <u>Fair Value</u> |
|------------------------|-------------------|-------------------|
| Inventory              | 116,000           | 146,000           |
| Property and Equipment | 465,000           | 507,000           |

The increase in Property and Equipment will be depreciated over seven years. All fair value estimates were considered final (no measurement period adjustments).

**Earnout (Contingent Consideration) Agreement—Pequity and Sequity Company April 1, Year 1**

The agreed-upon earn-out has three components. If the yearly revenue of Sequity exceeds a target level at the end of years 1, 2, and 3, Pequity will pay the shareholders of Sequity an amount equal to 50% of the excess, up to \$85,000 per year for a maximum earn-out payment of \$255,000 in total.

The initial target revenue level for year 1 is \$1,300,000 and increases in amount by 5% per year. Target levels in years 2 and 3 will be \$1,365,000 and \$1,433,250. Pequity estimates the fair value of the earn-out using the present value of expected payments and its incremental borrowing rate adjusted for risk of 20%. The fair value of the three earn-outs was estimated to be \$50,000 on the date of acquisition, computed as follows:

**Fair Value of Contingent Consideration**

|                               | <u>Year 1</u>    | <u>Year 2</u>    | <u>Year 3</u>    | <u>Total</u> |
|-------------------------------|------------------|------------------|------------------|--------------|
| Estimated Revenues of Sequity | \$1,300,000      | \$1,415,600      | \$1,541,250      |              |
| Target level Revenues         | <u>1,300,000</u> | <u>1,365,000</u> | <u>4,433,250</u> |              |
| Estimated Excess              | 0                | 50,600           | 108,000          |              |
| Reduced by 50%                | <u>0.50</u>      | <u>0.50</u>      | <u>0.50</u>      |              |
| Potential Payout              | 0                | 25,300           | 54,000           |              |
| Present Value Factor          | <u>0.876</u>     | <u>0.719</u>     | <u>0.589</u>     |              |
| Fair value of Earn-Out        | <u>0</u>         | <u>18,180</u>    | <u>31,820</u>    | \$50,000     |

Changes in fair value and interest charges are included in "other expense (income)" on the income statement.

**Required:**

1. Prepare a consolidated balance sheet on the date of acquisition. You can assume that Sequity closes its books on this date to facilitate consolidation.
2. Suppose that a control premium was included in the 85% interest acquired by Sequity, and that a level 3 estimation of the valuation of Sequity shares amounted to \$79 per share (Pequity's purchase price of \$595,000 implies a price of \$87.50 per share). Prepare the journal entry needed to eliminate the investment account on the date of acquisition. Highlight the changes from part 1.



# Chapter 4

## APPENDIX 4A – ALTERNATIVE WORKPAPER FORMAT (ONLINE)

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A variety of workpaper formats may be used in the preparation of consolidated financial statements. They may be classified generally into two categories, the three-division workpaper format used in this text, and the trial balance format. In the three-divisional format the account balances of the individual firms are first arranged into financial statement format. In contrast, in the trial balance format, columns are provided for the trial balances, the elimination entries, and normally, each financial statement to be prepared, except for the statement of cash flows.

The consolidated balances derived in a workpaper are the same regardless of the format selected. The statement preparer with a sound understanding of consolidation principles should be able to adapt quite easily to alternative workpaper formats. However, the reader may want to develop a familiarity with the trial balance format, since this format may be used by some companies.

To illustrate the trial balance workpaper format, and at the same time to verify that the results are the same as they would be if the three-divisional format were used, the same facts used in the preparation of Illustration 4-5 are assumed in Illustration 4-20.

The steps in the preparation of the workpaper are: (1) The trial balances of the individual affiliates are entered in the first two columns. In this case, the debit account balances are separated from the credit account balances. Or the accounts can be listed as they appear in the ledger. A debit column and a credit column may be provided for each firm or one column may be used and the credit balances identified by parentheses. (2) The account balances are analyzed, and the required adjustments and eliminations are entered in the next two vertical columns. (3) The net adjusted balances are extended to the appropriate columns. Separate columns are provided to accumulate the account balances needed for the preparation of the consolidated income statement, retained earnings statement, and balance sheet. In addition, an optional column is provided for the identification of the noncontrolling interest. (4) Once the accounts are extended, the consolidated net income is computed from the income statement column and allocated between the noncontrolling and controlling interests. (5) The consolidated retained earnings balance and total noncontrolling interest in equity can now be computed. The amounts are extended to the final column and should balance the liabilities and equities with the total assets. The reader will observe that these procedures are similar to the preparation of an eight-column worksheet developed to facilitate the preparation of financial statements for an individual firm.

A comparison of the elimination entries in Illustration 4-20 with those of Illustration 4-5 will reveal that the entries are the same, regardless of the form of workpaper used to accumulate the consolidated balances.

| Cost Method  |                | ILLUSTRATION 4-20   |                |                |                                     |   |                            |                                  |
|--|----------------|---|----------------|----------------|-------------------------------------|---|----------------------------|----------------------------------|
| 80% Owned Subsidiary                               |                | Consolidated Statements Workpaper Based on Illustration 4-5   |                |                |                                     |   |                            |                                  |
| Trial Balance Format                               |                | P Company and Subsidiary for the Year Ended December 31, 2016 |                |                |                                     |   |                            |                                  |
| Debits   | P<br>Company   | S<br>Company  | Eliminations   |                | Consolidated<br>Income<br>Statement | Consolidated<br>Retained<br>Earnings<br>Statement | Noncontrolling<br>Interest | Consolidated<br>Balance<br>Sheet |
|  |                |   | Dr.            | Cr.            |                                     |   |                            |                                  |
| Cash   | 74,000         | 41,000  |                |                |                                     |   |                            | 115,000                          |
| Accounts Receivable                                | 71,000         | 33,000  |                |                |                                     |   |                            | 104,000                          |
| Inventory 1/1                                      | 67,000         | 43,000  |                |                | 110,000                             |   |                            |                                  |
| Investment in<br>S Company                         | 165,000        |   | (1) 16,000     | (2) 181,000    |                                     |   |                            | —0—                              |
| Difference between<br>implied and book<br>value    |                |   | (2) 16,250     | (3) 16,250     |                                     |   |                            |                                  |
| Other Assets                                       | 280,000        | 202,000   | (3) 16,250     |                |                                     |   |                            | 498,250                          |
| Dividends Declared                                 |                |   |                |                |                                     |   |                            |                                  |
| P Company  | 30,000         |   |                |                |                                     | (30,000)  |                            |                                  |
| S Company  |                | 10,000  |                | (4) 8,000      |                                     |   | (2,000)                    |                                  |
| Purchases  | 215,000        | 90,000  |                |                | 305,000                             |   |                            |                                  |
| Other Expense                                      | 80,000         | 56,000  |                |                | 136,000                             |   |                            |                                  |
| Total  | <u>982,000</u> | <u>475,000</u>  |                |                |                                     |   |                            |                                  |
| Inventory 12/31<br>(Asset)                         | <u>82,000</u>  | <u>39,000</u>   |                |                |                                     |   |                            | 121,000                          |
| Total Assets                                       |                |   |                |                |                                     |   |                            | <u>838,250</u>                   |
| <i>Credits</i>                                     |                |   |                |                |                                     |   |                            |                                  |
| Liabilities  | 131,000        | 75,000  |                |                |                                     |   |                            | 206,000                          |
| Capital Stock                                      |                |   |                |                |                                     |   |                            |                                  |
| P Company  | 240,000        |   |                |                |                                     |   |                            | 240,000                          |
| S Company  |                | 150,000   | (2) 150,000    |                |                                     |   |                            |                                  |
| 1/1 Retained Earnings                              |                |   |                |                |                                     |   |                            |                                  |
| P Company  | 253,000        |   |                | (1) 16,000     |                                     | 269,000   |                            |                                  |
| S Company  |                | 60,000  | (2) 60,000     |                |                                     |   |                            |                                  |
| Sales  | 350,000        | 190,000   |                |                | (540,000)                           |   |                            |                                  |
| Dividend Income                                    | 8,000          |   | (4) 8,000      |                | —0—                                 |   |                            |                                  |
| Totals   | <u>982,000</u> | <u>475,000</u>  |                |                |                                     |   |                            |                                  |
| Inventory 12/31<br>(COGS)                          | <u>82,000</u>  | <u>39,000</u>   |                |                | (121,000)                           |   |                            |                                  |
| Consolidated Net<br>Income                         |                |   |                |                | 110,000                             |   |                            |                                  |
| Noncontrolling Interest<br>in Income .2(\$40,000)] |                |   |                |                | (8,000)                             |   | 8,000                      |                                  |
| Controlling Interest<br>in Net Income              |                |   |                |                | <u>102,000</u>                      | <u>102,000</u>                                    |                            |                                  |
| Consolidated Retained<br>Earnings                  |                |   |                |                |                                     | <u>341,000</u>                                    |                            | 341,000                          |
| 1/1 Noncontrolling<br>Interest in Net Assets       |                |   |                | (1) 45,250     |                                     |   | 45,250                     |                                  |
| 12/31 Noncontrolling<br>Interest in Net Assets     |                |   |                |                |                                     |   | <u>51,250</u>              | <u>51,250</u>                    |
| Total Liabilities<br>and Equity                    |                |   | <u>266,500</u> | <u>266,500</u> |                                     |   |                            | <u>838,250</u>                   |

(1) To establish reciprocity as of 1/1/2016 [(\$60,000 - \$40,000) × .80].

(2) To eliminate the investment account and create noncontrolling interest account.

(3) To allocate the difference between implied and book value to land.

(4) To eliminate intercompany dividends.



## APPENDIX 4B – DEFERRED TAX CONSEQUENCES WHEN AFFILIATES FILE SEPARATE INCOME TAX RETURNS—UNDISTRIBUTED INCOME

When a parent company owns at least 80% of a domestic subsidiary, the companies generally elect to file a consolidated income tax return. If they do not elect to file a joint return or parent company owns less than 80%, the companies file separate tax returns. In these cases, the parent includes the amount of dividends received from the investment on its own tax return. In the main body of this text, we have assumed that the affiliates (80% or more ownership levels) file a consolidated income tax return. Deferred tax issues are discussed in the appendices.

What happens when the companies do not file consolidated tax returns and file separate tax returns? Deferred tax consequences can arise since differences usually exist between the time income is reported in the consolidated financial statements and the time such income is included in the taxable income of the separate affiliates. Two major topics require attention in addressing the treatment of deferred income tax consequences when the affiliates each file separate income tax returns:

1. Undistributed subsidiary income (Appendix B of Chapter 4).
2. Elimination of unrealized intercompany profit (discussed in the appendices to Chapters 6 and 7).

### Consolidated Tax Returns—Affiliated Companies (80% or More Ownership Levels)

When affiliated companies elect to file one consolidated return, the tax expense amount is computed on the consolidated workpapers rather than on the individual books of the parent and subsidiary. The amount of tax expense attributed to each company is computed from combined income and allocated back to each company's books.

When consolidated income tax returns are filed, temporary differences generally do not arise in the preparation of consolidated financial statements. For example, unrealized intercompany profit is generally treated the same way in calculating both consolidated taxable income and consolidated net income on the consolidated income statement. Thus, no timing differences arise because of the elimination of unrealized intercompany profit.

### Separate Tax Returns—Deferred Tax Consequences Arising Because of Undistributed Subsidiary Income

When separate tax returns are filed, the parent company will include dividends received from the subsidiary in its taxable income, while the subsidiary's reported income is included in **consolidated net income**. Thus the difference between the subsidiary's income and dividends paid represents a temporary difference because eventually this undistributed amount will be realized through future dividends or upon sale of the subsidiary. Deferred taxes must be recorded on the books of the parent or in the consolidating workpaper for the economic entity in the amount of undistributed income to the **consolidated entity**. Whether the deferred taxes are recorded by the parent company or are only recorded in the workpaper consolidated entries depends on how the parent accounts for its investment in the subsidiary—cost versus equity. Both methods are illustrated in the following sections of this appendix.

The measurement of the deferred tax consequences of the undistributed income of a subsidiary depends on assumptions as to the nature of the transaction(s) that result in the future taxation of the undistributed income. If the parent company's equity in the undistributed income is expected to be realized in the form of a taxable dividend, the deferred tax amount is computed considering all available tax credits and exclusions. Federal income tax rules permit a portion of the dividends received from a domestic

subsidiary to be excluded from taxable income. Under current federal income tax rules, the following amount of dividends can be excluded from taxable income for a given level of ownership:

| <i>Ownership Percentage<br/>in Subsidiary</i> | <i>Amount of Dividends Excluded<br/>from Taxable Income</i> |
|---|---|
| 80% or more                                   | 100% of Dividends Excluded                                  |
| 20% up to 80%                                 | 80% of Dividends Excluded                                   |
| Less than 20%                                 | 70% of Dividends Excluded                                   |

Thus, when the undistributed income of the subsidiary is expected to be received in the form of future dividend distributions, the dividends-received exclusion must be considered. On the other hand, if the undistributed earnings of the subsidiary is not expected to be realized until the subsidiary is sold, the dividends-received exclusion is not used in computing deferred taxes. In this case, the capital gains tax rate is used to compute deferred taxes.

*APB (Accounting Principles Board) Opinion No. 23* allowed firms to demonstrate that undistributed subsidiary earnings are permanently reinvested and no timing differences are created. This indefinite reversal rule was eliminated by *SFAS No. 109*, which requires deferred taxes to be recorded for undistributed income.

## The Cost Method—Separate Tax Returns

Assume that the parent uses the cost method to account for the investment and that both the parent and the subsidiary file separate tax returns. This means each company records a tax provision based on the items reported on its individual books. Tax consequences relating to undistributed income are not recorded on the books of the parent company when the investment in the subsidiary is recorded using the cost method. This is because dividends are recognized as income on the parent's income statement and tax return. Therefore, no timing differences occur. However, for consolidation purposes, equity income is recognized on the income statement, while dividends are included on the tax return, creating a timing difference for consolidation purposes. Thus, **workpaper** entries are necessary each year to report the income tax consequences of past and current undistributed income.



To illustrate, assume that P Company owns 75% of the voting stock of S Company. The stock was acquired on January 1, 2016, when S Company's retained earnings amounted to \$150,000. In the year of acquisition (2016), S Company reported net income of \$90,000 and paid dividends of \$30,000. Since P Company is filing a separate tax return, P Company reports \$22,500 of dividend income (75% of S Company's dividends of \$30,000) as income on its tax return. However, on the consolidated income statement, 75% of S Company's income, or \$67,500, is reported as income. Assume that the undistributed income of \$45,000 (75% of \$90,000 less \$30,000) is expected to be paid as a future dividend and is expected to be included on the tax return in some future years. Because the \$45,000 will become future income, deferred taxes must be computed using this amount after considering the dividend exclusion rules (80% of dividends are excluded for 75% ownership).<sup>4</sup> The tax rate is assumed to be 40%, and the capital gains rate is assumed to be 25% in this example.

<sup>4</sup> Note that P Company pays taxes of \$1,800 on the \$22,500 of dividends received from S Company ( $40\% \times 20\%$  not excluded  $\times$  \$22,500). Therefore, combining the taxes paid on the dividend income of \$1,800 and the tax expense of \$3,600 recognized on the undistributed income totals a tax amount of \$5,400. This equals the amount of taxes that would be owed if the entire amount of S Company's income was paid in dividends during the year ( $\$90,000 \times 75\% \times 20\% \times 40\%$ ).

The following workpaper entry is needed at the end of 2016:

| <b>Workpaper Entry—Cost Method—Year of Acquisition (2016)</b>          |       |       |
|--|-------|-------|
| <b>Undistributed Income Expected to Be Received as Future Dividend</b> |       |       |
| Tax Expense*   | 3,600 |       |
| Deferred Tax Liability   |       | 3,600 |

*\*Undistributed Income Expected to Be Received as Future Dividends*

|   |          |
|---|----------|
| P Company's share of undistributed income expected to be received as a future dividend (75% × \$60,000) | \$45,000 |
| Percent of future dividends that are taxed  | 20%      |
| Future dividends that will be taxed   | \$ 9,000 |
| Income tax rate   | 40%      |
| Deferred tax liability  | \$ 3,600 |

At the end of the next year (2017), suppose that S Company's ending retained earnings is \$320,000. Total undistributed earnings since acquisition are \$170,000, or \$320,000 less \$150,000. P Company's share of undistributed earnings is \$127,500 (or 75% of \$170,000), including \$45,000 from year 2016 and \$82,500 from year 2017. Therefore, the amount of total deferred tax liability at the end of the second year can be computed as follows:

| <i>Undistributed Income Expected to Be Received as Future Dividends</i>        |                  |                  |                  |
|--|------------------|------------------|------------------|
|  | <i>Year 2016</i> | <i>Year 2017</i> | <i>Total</i>     |
| P Company's share of undistributed income expected to be received as dividends | \$45,000         | \$82,500         | \$127,500        |
| Percent of future dividends that are taxed                                     | 20%              | 20%              | 20%              |
| Future dividends that will be taxed  | \$ 9,000         | \$16,500         | \$ 25,500        |
| Tax rate   | 40%              | 40%              | 40%              |
| Deferred tax liability   | <u>\$ 3,600</u>  | <u>\$ 6,600</u>  | <u>\$ 10,200</u> |

The workpaper entry for the subsequent year is as follows:

| <b>Workpaper Entry—Cost Method—Year Subsequent to Acquisition (2017)</b> |       |        |
|--|-------|--------|
| <b>Undistributed Income Expected to Be Received as Future Dividend</b>   |       |        |
| Beginning Retained Earnings—P Company (prior year deferred taxes)        | 3,600 |        |
| Tax Expense (current year deferred taxes)                                | 6,600 |        |
| Deferred Tax Liability   |       | 10,200 |

The debit to the beginning balance of P Company's retained earnings for each subsequent year reflects the sum of the debits from the *prior year's* deferred tax workpaper entry to tax expense and beginning retained earnings, if any. This is the estimated tax on P Company's share of the undistributed income of S Company from the date of acquisition to the beginning of the current year. If tax rates change, the adjustment to the deferred tax liability flows through the current deferred tax expense. Thus, the debit to beginning retained earnings is still the same as the credit made to the deferred tax liability in the prior year's workpaper.

## Undistributed Income Is Expected to Be Realized When the Subsidiary Is Sold

If the undistributed income is not expected to be received as a future dividend but is expected to be realized when the investment is sold, the undistributed income is taxed at the capital gains rate as shown below:

| <i>Undistributed Income Expected to Be Received as Future Capital Gain</i>                        |                  |                  |                  |
|---|------------------|------------------|------------------|
|   | <i>Year 2016</i> | <i>Year 2017</i> | <i>Total</i>     |
| P Company's share of undistributed income expected to be realized in the future as a capital gain | \$45,000         | \$82,500         | \$127,500        |
| Capital Gains Tax rate  | 25%              | 25%              | 25%              |
| Deferred tax liability  | <u>\$11,250</u>  | <u>\$20,625</u>  | <u>\$ 31,875</u> |

Note that the 80% dividend exclusion is ignored. In addition, the appropriate tax rate to use is the capital gains tax rate.

The workpaper entries at the end of 2016 and 2017 to report the income tax consequences are as follows:

**Workpaper Entry—Cost Method—Year of Acquisition and Year Subsequent to Acquisition (2016 and 2017)**

**Undistributed Income Expected to Be Received as Gain upon Sale of Subsidiary**

**Year 2016**

|                        |        |        |
|------------------------|--------|--------|
| Tax Expense            | 11,250 |        |
| Deferred Tax Liability |        | 11,250 |

**Year 2017**

|  |        |        |
|--|--------|--------|
| Beginning Retained Earnings 1/1—P Company (prior year) | 11,250 |        |
| Tax Expense (current year deferred taxes)              | 20,625 |        |
| Deferred Tax Liability                                 |        | 31,875 |

A similar workpaper entry is needed every year.

## The Partial and Complete Equity Methods—Separate Tax Returns

If the equity method is used to account for the investment, there is a timing difference between books and tax on the books of the parent. Equity income is reported on the parent's income statement while dividends are included on the tax return. Therefore, deferred taxes on the parent's books must reflect the amount of undistributed income in the subsidiary. Generally, the parent will only make deferred tax entries if less than 80% of the subsidiary is owned since there is a 100% dividend exclusion for higher ownership percentages (regardless of whether the undistributed income is expected to be realized as a dividend or as a capital gain).

Consider the following example. P Company owns 75% of the voting stock of S Company. The stock was acquired on January 1, 2016, when S Company's retained earnings amounted to \$150,000. In the year of acquisition (2016), S Company reported net income of \$90,000 and paid dividends of \$30,000. Since P Company is filing a separate tax return, P Company's income earned from the investment reported on the tax return is not the equity income but the amount of dividends received, \$22,500 (75% of S Company's dividends of \$30,000).

However, on the consolidated income statement, 75% of S Company's income, or \$67,500, is reported as equity income. Assume that the undistributed income of \$45,000 (75% of \$90,000 less \$30,000) is expected to be paid as a future dividend and will be included on the tax return in some future years. Because the \$45,000 is reported as current period equity income and is expected to be included on future tax returns when received either as a dividend or a capital gain, deferred taxes on this timing difference must be computed. If expected as a future dividend, the timing difference is computed after considering any dividend exclusion rules (80% excluded for 75% ownership). The current tax rate is assumed to be 40% and the capital gains tax rate to be 25%.

The entries on P Company's books for equity income and the receipt of dividends are as follows:

**P Company Books—Partial and Complete Equity Methods**

|  |        |        |
|--|--------|--------|
| Investment in S Company  | 67,500 |        |
| Equity in S Company Income   |        | 67,500 |
| To record 75% of S Company income (\$90,000).                          |        |        |
| Cash   | 22,500 |        |
| Investment in S Company  |        | 22,500 |
| To record the receipt of 75% of S Company's dividends paid (\$30,000). |        |        |

Because P Company prepares its own tax return, the undistributed earnings of \$45,000 (the \$67,500 income less the dividends of \$22,500) represents a timing difference.

The following entry assumes that the undistributed income is expected to be received as a future dividend and only 20% is taxable (80% dividend exclusion). This entry adjusts tax expense and the deferred tax liability on P Company's books:

| <b>P Company Books—Partial and Complete Equity Methods</b>                      |       |       |
|---|-------|-------|
| <b><i>Undistributed Income Expected to Be Received as a Future Dividend</i></b> |       |       |
| Tax expense ( $45,000 \times .2 \times .4$ )                                    | 3,600 |       |
| Deferred Tax Liability  |       | 3,600 |

Note that this entry is an adjustment of P Company's tax expense and not the equity income account. Because of this, no special workpaper entries are needed for deferred taxes if the equity method is used to account for the investment.

If the undistributed income is expected to be realized as a capital gain when the subsidiary is sold, the following entry would be made on P Company's books:

| <b>P Company Books—Partial and Complete Equity Methods</b>                   |        |        |
|--|--------|--------|
| <b><i>Undistributed Income Expected to Be Received as a Capital Gain</i></b> |        |        |
| Tax Expense ( $45,000 \times .25$ )  | 11,250 |        |
| Deferred Tax Liability   |        | 11,250 |

In this case, the 80% dividend exclusion is ignored. Because the entry is made on the books of P Company, again no workpaper entry is needed for deferred taxes in this instance under the equity method.

## Chapter 4 – Review Questions

The review questions accompanying this course are designed to assist you in achieving the course learning objectives. The review section is not graded; do not submit it in place of your qualified assessment. While completing the review questions, it may be helpful to study any unfamiliar terms in the glossary in addition to course content. After completing the review questions, proceed to the review question answers and rationales.

18. Which of the following is accurate regarding the requirements on a parent company for accounting for the subsidiary?
  - a. If the investor owns less than 20%, they are considered to have no significant influence but would need to use the equity method if they owned between 10% and 20%.
  - b. Any ownership percentage greater than 40% is presumed to be effective control unless a single shareholder owns a block in excess of 40%.
  - c. “Significant influence” ranges from 10% to 40% depending on the facts and circumstances.
  - d. The parent company has a certain amount of discretion over how it accounts for its investment in the subsidiary internally unless the parent issues parent-only financial statements for any reason.
  
19. A liquidating dividend:
  - a. Occurs when the investee company repurchases some of its stock from the investor.
  - b. Occurs when the cumulative amount of its dividends declared exceed its cumulative reported earnings after acquisition.
  - c. Is treated as a gain if the amount per share exceeds the original cost per share.
  - d. Is recorded as dividend income on the books of the investor company.
  
20. The computation and allocation difference schedule:
  - a. Will only be calculated at the acquisition date and will remain unchanged over time.
  - b. Will change at each balance sheet date.
  - c. Will reflect the same difference between implied value and book value as at the acquisition date; however, the makeup of that distribution may shift over time.
  - d. Is only necessary when recording the investment at acquisition.

21. Which of the following statements is accurate about preparing the consolidation workpapers?
- It is best to prepare three separate workpapers, one for each financial statement.
  - Elimination entries should be documented in journal entry form, numbered, and “nicknamed” to describe the reason for the entry.
  - Only the controlling interest share of net income from the income statement is transferred to the retained earnings statement.
  - In the years after acquisition, the retained earnings of the subsidiary is eliminated in the balance sheet section of the workpapers.
22. The entry to establish reciprocity or convert from the cost to the equity method usually involves a debit to investment in subsidiary and a credit to:
- Subsidiary end-of-year retained earnings.
  - Parent end-of-year retained earnings.
  - Parent beginning-of-year retained earnings.
  - Subsidiary beginning-of-year retained earnings.
23. Under the cost method:
- Income is recorded by the parent company when it is distributed as dividends.
  - Income is recorded on the books of the parent during the same accounting period that it is reported by the subsidiary.
  - The parent records dividends as a reduction in the investment in subsidiary account.
  - Income will be recognized by the parent whether or not it is distributed by the subsidiary.
24. In periods subsequent to acquisition and in the absence of intercompany profits or other complicating transactions, the noncontrolling interest (as shown on the consolidated balance sheet) can be determined by summing the noncontrolling interest in equity at acquisition and:
- The noncontrolling percentage of the book value of the subsidiary’s net assets.
  - The noncontrolling percentage of the fair value of the subsidiary’s net assets.
  - The noncontrolling percentage of the subsidiary’s year-end retained earnings.
  - The noncontrolling percentage of the change in subsidiary retained earnings from acquisition to the end of the current year.

25. When a company acquires another company in the middle of the year:
- The acquiring company will reflect the income and expense activity prior to the acquisition because in effect, they bought those earnings.
  - The acquiring company will reflect the revenue and expenses of the pre-acquisition period if such period is 3 months or less.
  - The subsidiary will close their books to retained earnings as of the acquisition date and then reflect the post-acquisition results from that day forward.
  - The acquired company will need to maintain the balances of their income statement accounts as of the acquisition date so the revenue and expenses pre-acquisition can be adjusted out of their full annual results.
26. Which of the following statements is accurate regarding the comparison of U.S. GAAP and IFRS accounting for investments in other companies?
- GAAP requires consideration of potential voting rights on currently exercisable or convertible instruments while IFRS does not consider them.
  - IFRS requires the use of the equity method whenever the investor has “significant influence” except as it relates to subsidiaries and joint ventures.
  - IFRS requires use of the equity method for lower levels of ownership than does U.S. GAAP.
  - IFRS considers there to be significant influence at 10% of the voting rights in a corporate investee.
27. Which of the following is accurate regarding IFRS and U.S. GAAP similarities and differences?
- IFRS and the U.S. use the equity method for joint ventures.
  - IFRS uses the proportionate consolidation for joint ventures while the U.S. uses the equity method.
  - In the U.S., the significant influence principle is applied to the determination of account method for limited partnerships.
  - IFRS uses the equity method for limited partnerships where the investment is more than 3-5%.



## **Chapter 5 – Allocation and Depreciation of Differences Between Implied and Book Values**

### **Learning Objectives**

After completing this section of the course, you will be able to:

- Calculate the difference between implied and book values and allocate to the subsidiary's assets and liabilities.
- Identify the FASB's position on accounting for bargain acquisitions.
- Identify how goodwill is measured at the time of the acquisition.
- Recognize differences between the allocation process when a company acquires 100% of the subsidiary and when they acquire less than 100%.
- Record the entry needed to account for the investment under the various methods.
- Recall how to prepare workpapers for the year of acquisition and subsequent years under various methods.
- Allocate the difference between implied value and book value to long-term debt.
- Identify the accounting for the difference between implied value and book value when assets have fair values below book values or liabilities have fair values greater than book values.
- Note the application of push accounting to client situations.

## ALLOCATION AND DEPRECIATION OF DIFFERENCES BETWEEN IMPLIED AND BOOK VALUES

### CHAPTER CONTENTS

- 5.1 COMPUTATION AND ALLOCATION OF THE DIFFERENCE BETWEEN IMPLIED AND BOOK VALUES TO ASSETS AND LIABILITIES OF SUBSIDIARY—ACQUISITION DATE
- 5.2 EFFECT OF DIFFERENCES BETWEEN IMPLIED AND BOOK VALUES ON CONSOLIDATED NET INCOME—YEAR SUBSEQUENT TO ACQUISITION
- 5.3 CONSOLIDATED STATEMENTS WORKPAPER—USING THE COST METHOD
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- 5.9 ADDITIONAL CONSIDERATIONS RELATING TO TREATMENT OF DIFFERENCE BETWEEN IMPLIED AND BOOK VALUES
- 5.10 PUSH DOWN ACCOUNTING
- 5.11 IFRS vs. U.S. GAAP ON RESEARCH & DEVELOPMENT COSTS

guaranteed any compensation; i.e., no break-up fee. In contrast, AT&T Inc. paid \$4 billion to T-Mobile when their deal fell through due to antitrust pressures. Also, the TWC–Comcast proposal does not include a protective “collar” in the event Comcast share price should plummet (such a collar would require Comcast to issue additional shares). Statistics reveal the use of collars in approximately thirteen percent of public company acquisitions (in which stock was the primary consideration) between 2006 and 2014 in the U.S.<sup>1</sup>

When a company pays a large premium to consummate an acquisition, the allocation of that premium to the accounts in the balance sheet becomes a crucial issue under acquisition accounting rules. As they mature, the balance sheet accounts will impact the income statement via depreciation, cost of goods sold, impairment charges, and so on, affecting the patterns and trends in reported earnings for years to come. These effects on earnings provide incentives for firms to use creative means to avoid depressing future earnings. A popular technique used in past years was to charge large amounts to *in-process research and development* expense.

Historically, goodwill was amortized over a period not to exceed 40 years. Current GAAP now treats goodwill as an asset with an indefinite life on the balance sheet, and the account is not adjusted unless an impairment exists. Tests for impairment involve an initial assessment of qualitative factors, see Chapter 2 for details.

The common complaint from past years that acquisition or purchase accounting “drained” future earnings via the amortization of goodwill was replaced with other concerns. Instead of being expensed through the income statement via the amortization process, goodwill now remains on the balance sheet at the value determined as of the acquisition date, except when impairment is deemed to have occurred.

Further, the current standards of the FASB require that *in-process research and development (R&D)* acquired as part of a business combination must be capitalized, rather than expensed. Thus, the dynamics of the games, companies are often accused of playing have shifted, and are continuing to shift, dramatically.



IN  
THE  
NEWS

Europe’s biggest defense contractor, BAE Systems PLC, said it reported a loss of 467 million pounds (\$890 million) in 2004, largely due to a one-time charge reflecting its reduced appraisal of the value of companies it acquired as long as five years ago. BAE said the impairment charges, which totaled 1.04 billion pounds (\$1.98 billion), were related to avionics and defense communications businesses that were acquired in 1999 as part of the Marconi Electronic Systems purchase and in its deal with Italy’s Finmeccanica SpA to create Eurosystems, a defense electronic group. Other goodwill charges related to the Integrated Defense Solutions business in North America and BAE Systems’ naval ships business.<sup>2</sup>

1. What might cause such a large decrease in the valuation of businesses purchased by BAE Systems?
2. What can BAE do in the future to avoid such large impairment charges?

Opinions are mixed, however, as to how informative the goodwill impairment disclosures really are. One critic writes: “Even newly revised accounting standards don’t adequately address the nature of knowledge-intensive enterprises . . . Analysts and management will discount the charge as an accounting rules change and largely ignore it.”<sup>3</sup>

The ultimate impact of the changes in the accounting for R&D, goodwill, and other creative maneuvers has yet to be determined.

<sup>1</sup> *The Wall Street Journal*, “Deal to Test Cable Chief’s Capital Clout,” by Gautham Nagesh, 2/14/2014

<sup>2</sup> *Associated Press*, “BAE Systems Swings to Loss on Back of Large Goodwill Charges,” by Jane Wardell, 2/24/05.

<sup>3</sup> Gartner.com, “AOL’s Charge Shows Accounting Standards Have Dubious Value,” by Nigel Rayner, 1/14/02.


 IN  
THE  
NEWS

The 2006 sale of BlackRock, Inc. by PNC Financial Services Group to Merrill Lynch PNC could generate \$3.2 billion in unrealized pretax gains which owned roughly 34% of BlackRock after the deal, must account for the holding based on BlackRock's book value, not its market value. This rule applies regardless of whether PNC consolidates the holding on its balance sheet, which it does now as a 70% owner, or uses the equity method of accounting, which will be the case after the deal closes. A new rule by FASB, however, allows PNC to choose to value its holding based on market value when using the equity method. If PNC chooses this valuation method, it will see a pretax gain of \$3.2 billion based on BlackRock's current share price. However, using this method presents bookkeeping headaches as the value of the holding would have to be adjusted regularly.<sup>4</sup>

1. What consequences could PNC face by adjusting the value of its holding in BlackRock on a quarterly basis?
2. How would you recommend PNC account for its holding? Discuss advantages and disadvantages of consolidating the financial statements versus reporting the investment using the equity method.

In the preceding chapter, it was often assumed that any difference between implied and book values of the subsidiary's equity was entirely attributable to the under or overvaluation of land, a nonamortizable asset, on the books of the subsidiary. This chapter focuses on a more complex and realistic allocation of the difference to various assets and liabilities in the consolidated balance sheet, and the depreciation or amortization of the difference in the consolidated income statement. In the following pages, we first provide examples of the allocation of the difference between implied and book values *on the acquisition date*. We next extend the examples to deal with the *subsequent* effects on the consolidated financial statements under the three methods of accounting for investments that we reviewed in Chapter 4.

## 5.1 COMPUTATION AND ALLOCATION OF THE DIFFERENCE BETWEEN IMPLIED AND BOOK VALUES TO ASSETS AND LIABILITIES OF SUBSIDIARY—ACQUISITION DATE

### LO 1 Computation and Allocation of Difference (CAD).

When consolidated financial statements are prepared, asset and liability values must be adjusted by allocating the difference between implied and book values to specific recorded or unrecorded tangible and intangible assets and liabilities. In the case of a **wholly owned** subsidiary, the implied value of the subsidiary equals the acquisition price. The following two steps are taken.

### LO 3 Measurement of goodwill.

- a. *Step One:* The difference between the implied value and book value is used first to adjust the individual assets and liabilities to their fair values on the date of acquisition.
- b. *Step Two:* If, after adjusting identifiable assets and liabilities to fair values, a residual amount of difference remains, it is treated as follows:
  1. When the implied value exceeds the aggregate fair values of *identifiable*\* assets less liabilities, the residual amount will be *positive* (a debit balance). A positive residual difference is evidence of an unspecified intangible and is accounted for as goodwill.
  2. When the implied value is below the aggregate fair value of identifiable assets less liabilities, the residual amount will be *negative* (a credit balance). A negative residual difference is evidence of a bargain purchase, with the difference between acquisition cost and fair value designating the amount of the bargain.\*\* When a bargain acquisition occurs, some of the acquired assets have, in the past, been reduced below their fair values (as reflected after step 1). However, under *FASB Statement No. 141R*, "Business Combinations," [ASC 805-30-25-2], the negative (or credit) balance should be recognized as an ordinary gain in the year of acquisition. Under this standard, no assets should be recorded below their fair values.

\* The term identifiable refers to all assets and liabilities (that are recorded under GAAP) except goodwill.

(Continued)

<sup>4</sup> *WSJ*, "PNC's Gain in Merrill-BlackRock Deal May Grow," by David Reilly, 2/22/06, p. C3.

\*\* Note that the following situation is possible and, technically, would be a bargain purchase:  $FV$  (of identifiable Net Assets)  $>$  Implied Value  $>$  BV. Because the fair value is higher than the value implied by the purchase price, the bargain acquisition rules apply, even though the implied value is higher than the book value of the underlying equity. In practice, this situation is less likely to be referred to as a “bargain” than the situation where  $BV > FV >$  Implied Value. Nonetheless it is the comparison between  $FV$  and Implied Value that determines a bargain, regardless of the level of BV (book value).

**Lo 2** Current and past treatment of bargain acquisitions.

A true bargain is not likely to occur except in situations where nonquantitative factors play a role; for example, a closely held company wishes to sell quickly because of the health of a family member.

For *historical* acquisitions only, we next present the **Bargain Rules** under *prior GAAP* (before the 2007 standard): (1) Current assets, long-term investments in marketable securities (other than those accounted for by the equity method), assets to be disposed of by sale, deferred tax assets, prepaid assets relating to pension or other postretirement benefit plans, and assumed liabilities were always recorded at fair market value. (2) Any previously recorded goodwill on the seller’s books was eliminated (and no new goodwill was recorded). (3) Long-lived assets (including in-process research and development and excluding those specified in (1) above) were recorded at fair market value minus an adjustment for the bargain. (4) An extraordinary gain was recorded only in the event that all long-lived assets (other than those specified in (1) above) were reduced to zero (or to the noncontrolling portion, rather than zero, if the subsidiary was not wholly owned).

When needed, the reduction of noncurrent assets (with the exceptions noted above) was made in proportion to their fair values in determining their assigned values. **However, to reiterate, current GAAP eliminates the above rules and requires an ordinary gain to be recognized instead.**

**IN  
THE  
NEWS**

Private equity firms buy companies, restructure them, and then sell

them, often financing their deals with borrowed money. Deal-making reached heady levels in 2006 and 2007, before the financial crisis struck, and then took a nosedive. By 2010, however, private equity had made at least a partial comeback. Industry analysts predicted big firms to start raising money for new buyout funds early in 2011. Blackstone, for instance, was completing a new \$15 billion fund.

Acquisitions leading to the recording of goodwill have been far more common in recent years than bargain acquisitions. The impact of goodwill on future earnings has drawn a great deal of attention, with standard setters ultimately lightening the burden by no longer requiring the amortization of goodwill. Other acquired intangibles with *finite* useful lives, such as franchises, patents, and software, must still be amortized over their estimated useful lives. The examples presented in this chapter focus primarily on depreciable assets and goodwill. Note, however, that other identified intangibles with finite lives would be accounted for in the same manner as depreciable assets, with the term **amortization expense** replacing the term **depreciation expense**.

The FASB requires that R&D incurred in the regular course of business be expensed, and the Board initially interpreted the standard to allow the expensing of certain types of R&D transferred in corporate acquisitions. The Board went on to state that the R&D expense, or write-off, amount would be based on the amount paid by the acquiring firm rather than its historical cost to the acquired firm. By allocating large amounts to R&D in the period of the acquisition, firms have sometimes taken a large one-time hit to earnings to avoid an increased asset base (e.g., for return on asset calculations). This practice became increasingly popular in the late 1990s among high-technology firms, drawing the attention of the SEC and causing the firms to complain that they were being singled out for scrutiny. As stated previously, the current *FASB* position on business combinations requires that in-process R&D acquired should be recorded as an asset and amortized over the period of expected benefit.

## Case 1: Implied Value “in Excess of” Fair Value of Identifiable Net Assets of a Subsidiary

To illustrate the allocation of the difference between implied and book values to individual assets and liabilities of a subsidiary, assume that on January 1, 2015, S Company has capital stock and retained earnings of \$1,500,000 and \$500,000, respectively, and identifiable assets and liabilities as presented in Illustration 5-1.

**ILLUSTRATION 5-1****Identifiable Assets and Liabilities of S Company—January 1, 2015**

|                         | <i>Fair Value</i>  | <i>Book Value</i>  | <i>Difference between Fair Value and Book Value</i> |
|-------------------------|--------------------|--------------------|---|
| Inventory               | \$ 350,000         | \$ 300,000         | \$ 50,000   |
| Other Current Assets    | 450,000            | 450,000            | —0—   |
| Equipment (net)         | 600,000            | 300,000            | 300,000   |
| Land                    | 400,000            | 250,000            | 150,000   |
| Other Noncurrent Assets | 1,000,000          | 1,000,000          | —0—   |
| Liabilities             | (300,000)          | (300,000)          | —0—   |
| Identifiable Net Assets | <u>\$2,500,000</u> | <u>\$2,000,000</u> | <u>\$500,000</u>                                    |

**Adjustment of Assets and Liabilities: Wholly Owned Subsidiaries** Assume further that P Company acquires a 100% interest in S Company on January 1, 2015, for \$2,750,000. The Computation and Allocation Schedule would appear as follows:

**Computation and Allocation of  
Difference between Implied and Book Values**

|   |                  |
|---|------------------|
| Cost (purchase price/100%) = Implied Value  | \$2,750,000      |
| Book value of equity                        | <u>2,000,000</u> |
| Difference between implied and book value   | 750,000          |
| Adjust to fair value                        |                  |
| Inventory (assume FIFO)                     | (50,000)         |
| Equipment (with remaining life of 10 years) | (300,000)        |
| Land  | <u>(150,000)</u> |
| Balance                                     | 250,000          |
| Record goodwill                             | <u>250,000</u>   |
| Balance                                     | <u>\$ 0</u>      |

The consolidated statements workpaper entry to eliminate the investment balance on January 1, 2015, will result in a debit to Difference between Implied and Book Value in the amount of \$750,000 as follows:

|   |           |           |
|---|-----------|-----------|
| Capital Stock—S Company                   | 1,500,000 |           |
| Retained Earnings—S Company               | 500,000   |           |
| Difference between Implied and Book Value | 750,000   |           |
| Investment in S Company                   |           | 2,750,000 |

Referring to the Computation and Allocation (CAD) Schedule, the workpaper entry to allocate the difference between implied and book value to specific consolidated assets takes the following form:

|   |         |         |
|---|---------|---------|
| Inventory                                 | 50,000  |         |
| Equipment (net)                           | 300,000 |         |
| Land                                      | 150,000 |         |
| Goodwill                                  | 250,000 |         |
| Difference between Implied and Book Value |         | 750,000 |

The amount of the difference between implied and book values that is not allocated to specific identifiable assets and liabilities of the subsidiary is recognized as goodwill. As defined earlier, goodwill is the excess of implied value over the *fair value* of the identifiable net assets of the subsidiary on the acquisition date [ $\$2,750,000 - \$2,500,000 = \$250,000$ ].

**LO 4** Allocation of difference in a partially owned subsidiary.

**Adjustment of Assets and Liabilities: Less than Wholly Owned Subsidiaries** When P Company exchanges \$2,750,000 for a 100% interest in S Company, the implication is that the fair value of the net assets, *including unspecified intangible assets*, of S Company is \$2,750,000. As illustrated earlier, if the recorded book value of those net assets is

\$2,000,000, adjustments totaling \$750,000 are made to specific assets and liabilities, including goodwill, in the consolidated financial statements, serving to recognize the total implied fair value of the subsidiary assets and liabilities.

Assume now that rather than acquiring a 100% interest for \$2,750,000, P Company pays \$2,200,000 for an 80% interest in S Company. The fair value of the net assets, including unspecified intangible assets, of S Company implied by this transaction is still \$2,750,000 ( $\$2,200,000 / .80$ ), and the implication remains that the net assets, including unspecified intangible assets, of S Company are understated by \$750,000. In the case of a less than wholly owned subsidiary, prior GAAP and practice have restricted the write-up of the net assets of S Company in the consolidated financial statements to the extent of P's acquisition percentage. Current GAAP, however, differ markedly, and require that here, too, the consolidated net assets should be reflected at their entire fair value.

To illustrate the existence of a noncontrolling interest in the context of, first, a **positive** difference between implied and book value and, later, a **negative** difference, refer again to Illustration 5-1.

Assume first that P Company acquires an 80% interest in S Company for \$2,200,000. The Computation and Allocation (CAD) Schedule is prepared in Illustration 5-2. The implied value is  $\$2,200,000 / 80\% = \$2,750,000$ .<sup>5</sup>

In this case, goodwill is equal to the excess of implied value over the fair value of the identifiable net assets of the subsidiary [ $\$2,750,000 - \$2,500,000 = \$250,000$ ]. The following entries made to eliminate the investment, to recognize the noncontrolling interest (NCI) in equity, and to allocate the difference between implied and book values are worksheet-only entries:

**RELATED CONCEPTS**

The characteristic of comparability suggests that the inventory be written up for the entire difference of \$50,000 (see Illustrations 5-1 and 5-2), even if the percentage acquired is less than 100%. Otherwise the NCI remains at book value while the controlling share is adjusted to fair value.

|   |           |           |
|---|-----------|-----------|
| Retained Earnings—S Company               | 500,000   |           |
| Capital Stock—S Company                   | 1,500,000 |           |
| Difference between Implied and Book Value | 750,000   |           |
| Investment in S Company                   |           | 2,200,000 |
| Noncontrolling Interest in Equity         |           | 550,000   |

Referring to the Computation and Allocation Schedule, the worksheet entry to allocate the difference between implied and book value is:

|   |         |         |
|---|---------|---------|
| Inventory                                 | 50,000  |         |
| Equipment (net)                           | 300,000 |         |
| Land                                      | 150,000 |         |
| Goodwill                                  | 250,000 |         |
| Difference between Implied and Book Value |         | 750,000 |

**ILLUSTRATION 5-2**

**Computation and Allocation of the Difference between Implied and Book Value Excess of Implied over Fair Value**

|   | Parent Share       | Noncontrolling Share | Entire Value     |
|---|--------------------|----------------------|------------------|
| Purchase Price and Implied Value            | <b>\$2,200,000</b> | <b>\$550,000</b>     | \$2,750,000      |
| Book Value of Equity Acquired               | <u>1,600,000</u>   | <u>400,000</u>       | <u>2,000,000</u> |
| Difference between Implied and Book Value   | \$ 600,000         | 150,000              | <b>750,000</b>   |
| Adjust to Fair Value                        |                    |                      |                  |
| Inventory, FIFO Method                      | \$ (40,000)        | \$(10,000)           | \$ (50,000)      |
| Equipment—net, 10-year life                 | (240,000)          | (60,000)             | (300,000)        |
| Land  | <u>(120,000)</u>   | <u>(30,000)</u>      | <u>(150,000)</u> |
| Balance (Excess of Implied over Fair Value) | \$ 200,000         | \$ 50,000            | \$ 250,000       |
| Goodwill                                    | <u>(200,000)</u>   | <u>(50,000)</u>      | <u>(250,000)</u> |
| Balance                                     | <u>\$ —0—</u>      | <u>\$ —0—</u>        | <u>\$ —0—</u>    |

<sup>5</sup> This calculation assumes that the amount paid by P Company does not reflect a control premium or other reason to value the noncontrolling interest differently from the controlling interest.

These amounts are all found in the right-hand column of the CAD Schedule.

As pointed out in Chapter 3, when the acquisition is for less than 100% of the subsidiary, the fair value of both the controlling interest and the noncontrolling interest must be determined. The fair value of the controlling interest is generally assumed to equal the amount paid by the acquirer. Determination of the fair value of the noncontrolling interest is not always this straightforward. For instance, as noted in FASB ASC paragraphs 805-20-30-7 and 8, the per-share amount paid by the acquirer could include a “control premium.” If the acquirer is able to measure the fair value of the noncontrolling interest on the basis of active market prices for the shares not obtained by the acquirer at the acquisition date, this will provide the basis for valuing the noncontrolling interest. If not, other valuation techniques must be applied.

To illustrate, suppose an investor acquires 80% of another company for \$70 per share and the remaining shares actively trade at \$65 per share immediately following the acquisition. This would imply a control premium of \$5 per share, and it would be appropriate to value the noncontrolling shares at \$65 rather than \$70 per share.

However, throughout this textbook, we assume the value of the controlling and noncontrolling shares to be equal unless explicitly stated otherwise. Thus, the fair value of the noncontrolling interest can be inferred from the value implied by the acquisition price. This approach is illustrated next.

## Case 2: Acquisition Cost “Less Than” Fair Value of Identifiable Net Assets of a Subsidiary

**Less than Wholly Owned Subsidiaries** Refer to Illustration 5-1 and assume that P Company acquires an 80% interest in S Company for \$1,900,000. The implied value of S is  $\$1,900,000/80\% = \$2,375,000$ . The difference between *implied* and *book value* is \$375,000 [ $\$2,375,000 - \$2,000,000$ ]. However, the *fair value* of the identifiable net assets of the subsidiary (\$2,500,000) exceeds the implied value of \$2,375,000 by \$125,000. The Computation and Allocation Schedule is started as usual, but a negative balance requires the recording of a gain after adjusting the identifiable assets and liabilities to their fair values. The excess of fair value over implied value represents the initial difference between implied and book values of \$375,000 minus the adjustments to net assets of \$500,000, or \$125,000. The excess is allocated between the noncontrolling and controlling interests in the consolidated entity. The noncontrolling share of this excess (\$25,000) serves to adjust the noncontrolling interest in equity to fair value, while the parent’s share (\$100,000) is recorded as a gain to the acquirer. As in all CAD schedules in the text, the items in bold represent workpaper entry amounts.

**Lo 4** CAD Schedule for less than wholly owned subsidiary.

### Computation and Allocation of Difference Schedule

|  | Parent Share          | Noncontrolling Share | Entire Value            |
|--|-----------------------|----------------------|-------------------------|
| Purchase price and implied value                         | <b>\$1,900,000</b>    | <b>475,000</b>       | 2,375,000               |
| Less: Book value of equity acquired                      | <u>1,600,000</u>      | <u>400,000</u>       | <u>2,000,000*</u>       |
| Difference between implied and book value                | 300,000               | 75,000               | <b>375,000</b>          |
| Adjust to Fair Value                                     |                       |                      |                         |
| Inventory  | (40,000)              | (10,000)             | <b>(50,000)</b>         |
| Equipment  | (240,000)             | (60,000)             | <b>(300,000)</b>        |
| Land   | <u>(120,000)</u>      | <u>(30,000)</u>      | <u><b>(150,000)</b></u> |
| Balance (excess of FV over implied value)                | (100,000)             | (25,000)             | (125,000)               |
| P’s gain   | <u><b>100,000</b></u> |                      |                         |
| Increase noncontrolling interest to fair value of assets |                       | <u><b>25,000</b></u> |                         |
| Total allocated bargain                                  |                       |                      | <u>125,000</u>          |
| Balance  | <u><u>—0—</u></u>     | <u><u>—0—</u></u>    | <u><u>—0—</u></u>       |

\*In the workpaper, this is decomposed into Capital Stock and Retained Earnings.



Note that the amounts in bold in parentheses in the Computation and Allocation Schedule require debits in the workpaper entry (to increase assets/decrease liabilities).

The workpaper entries to eliminate the investment account and to allocate the difference between implied and book values may be summarized in general journal form as follows:

|  |           |           |
|--|-----------|-----------|
| Retained Earnings—S Company                    | 500,000   |           |
| Capital Stock—S Company                        | 1,500,000 |           |
| Difference between Implied and Book Value      | 375,000   |           |
| Investment in S Company                        |           | 1,900,000 |
| Noncontrolling Interest in Equity (NCI)        |           | 475,000   |
| Inventory                                      | 50,000    |           |
| Equipment (net)                                | 300,000   |           |
| Land   | 150,000   |           |
| Gain on Acquisition (income statement account) |           | 100,000   |
| Noncontrolling Interest in Equity              |           | 25,000    |
| Difference between Implied and Book Value      |           | 375,000   |

**Implied Value Less than Book Value Less than Fair Value of Identifiable Net Assets**

It is possible for the value implied by the parent’s acquisition cost to be less than the book value as well as the fair value of the net assets of the subsidiary. In that case, the difference between implied and book value initially will be credited in the investment elimination workpaper entry. The analysis of the allocation of this credit balance, however, takes the same form as that just illustrated; that is, we begin by adjusting assets upward first and then determine the necessary gain recognition. For example, refer to Illustration 5-1 and assume that P Company acquired an 80% interest in S Company on January 1, 2015, for \$1,500,000. See Illustration 5-3.

The workpaper entries to eliminate the investment account and to allocate the difference between implied and book values are presented next in general journal form.

**ILLUSTRATION 5-3**

**Computation & Allocation of the Difference between Implied and Book Value (Book Value of Interest Acquired Exceeds Implied Value)**

|   | Parent Share        | Noncontrolling Share | Entire Value       |
|---|---------------------|----------------------|--------------------|
| Purchase Price and Implied Value          | <b>\$1,500,000</b>  | <b>375,000</b>       | 1,875,000          |
| Book Value of Equity                      | 1,600,000           | 400,000              | <b>2,000,000</b>   |
| Difference between Implied and Book Value | \$ (100,000)        | \$ (25,000)          | \$(125,000)        |
| Adjust to Fair Value                      |                     |                      |                    |
| Inventory                                 | \$ (40,000)         | \$ (10,000)          | \$ (50,000)        |
| Equipment (net)                           | (240,000)           | (60,000)             | <b>(300,000)</b>   |
| Land                                      | (120,000)           | (30,000)             | <b>(150,000)</b>   |
| Balance (Excess of FV over implied value) | <u>\$ (500,000)</u> | <u>\$(125,000)</u>   | <u>\$(625,000)</u> |
| Gain on Acquisition                       | <b>500,000</b>      |                      |                    |
| Increase Noncontrolling Interest to FV    |                     | <b>\$ 125,000</b>    |                    |
| Total Allocated Bargain                   |                     |                      | <u>\$ 625,000</u>  |
| Balance                                   | <u>\$ —0—</u>       | <u>\$ —0—</u>        | <u>\$ —0—</u>      |

|   |           |           |
|---|-----------|-----------|
| Capital Stock—S Company                                   | 1,500,000 |           |
| Retained Earnings—S Company                               | 500,000   |           |
| Difference between Implied and Book Value                 |           | 125,000   |
| Investment in S Company                                   |           | 1,500,000 |
| Noncontrolling Interest in Equity (NCI) (.2)(\$1,875,000) |           | 375,000   |
| Difference between Implied and Book Value                 | 125,000   |           |
| Inventory   | 50,000    |           |
| Equipment (net)   | 300,000   |           |
| Land  | 150,000   |           |
| Gain on Acquisition (income statement account)            |           | 500,000   |
| Noncontrolling Interest in Equity                         |           | 125,000   |

## 5.2 EFFECT OF DIFFERENCES BETWEEN IMPLIED AND BOOK VALUES ON CONSOLIDATED NET INCOME—YEAR SUBSEQUENT TO ACQUISITION

Depreciation and amortization in the consolidated income statement should be based on the values allocated to depreciable and amortizable assets in the consolidated balance sheet. When any portion of the difference between implied and book values is allocated to such assets, recorded income must be adjusted in determining consolidated net income in current and future periods. ***This adjustment is needed to reflect the difference between the amount of amortization and/or depreciation recorded by the subsidiary and the appropriate amount based on consolidated carrying values.***

To illustrate, assume that on January 1, 2015, P Company acquires an 80% interest in S Company for \$2,200,000, at which time S Company has net assets of \$2,000,000 as presented in Illustration 5-1. As previously shown in Illustration 5-2, the implied value of S is \$2,200,000/80%, or \$2,750,000. The difference between implied and book values in the amount of \$750,000 is allocated as follows:

|   |                  |
|---|------------------|
| Inventory                                 | \$ 50,000        |
| Equipment (net)                           | 300,000          |
| Land                                      | 150,000          |
| Goodwill                                  | 250,000          |
| Difference between Implied and Book Value | <u>\$750,000</u> |

A comparison of the recorded and consolidated carrying values of the assets and liabilities of S Company on January 1, 2015, is presented in Illustration 5-4.

Assume now that all the inventory is sold during 2015 and that the equipment has a remaining life of 10 years from January 1, 2015. Adjustments in the computation of consolidated net income that result from the allocation, amortization, and depreciation of the differences between implied and book values are summarized in Illustration 5-5.

As a result of the sale of the inventory in 2015, S Company will include \$300,000 in cost of goods sold, whereas from a consolidated point of view the cost of goods sold should be \$350,000 (inventory from Illustration 5-4). Hence, the recorded cost of goods sold must be increased by \$50,000 in determining consolidated net income in 2015. This adjustment to cost of goods sold is necessary only in the year(s) the inventory is sold.

S Company will record on its books \$30,000 (\$300,000/10 years) in depreciation of the equipment each year. Consolidated annual depreciation, however, should be \$60,000 (\$600,000/10 years). Accordingly, depreciation expense must be increased each year by \$30,000 in determining consolidated net income. Note that this amount may be computed directly from the Calculation and Allocation Schedule simply by dividing the adjustment to Equipment (\$300,000) by the remaining life (10 years).

### ILLUSTRATION 5-4

#### Comparison of Consolidated and Recorded Carrying Values of Net Assets of S Company, January 1, 2015

|  | <i>Carrying Value in S<br/>Company's Books<br/>(Illustration 5-1)</i> | <i>Allocation of Difference<br/>between Implied and<br/>Book Value</i> | <i>Consolidated<br/>Carrying<br/>Value</i> |
|--|---|--|--|
| Inventory  | \$ 300,000  | \$ 50,000  | \$ 350,000                                 |
| Equipment (net)                                  | 300,000   | 300,000  | 600,000                                    |
| Land   | 250,000   | 150,000  | 400,000                                    |
| Goodwill (excess of implied<br>over fair values) | —0—   | 250,000  | 250,000                                    |
| Other Assets and Liabilities<br>(net)            | <u>1,150,000</u>  | <u>—0—</u>   | <u>1,150,000</u>                           |
| Net Assets                                       | <u>\$2,000,000</u>  | <u>\$750,000</u>   | <u>\$2,750,000</u>                         |

## ILLUSTRATION 5-5

**Adjustments in Determination of Consolidated Net Income Resulting from Allocation, Amortization, and Depreciation of the Difference between Implied and Book Value**

|                    | Difference between<br>Implied and Book<br>Value | Annual Adjustment in Determining<br>Consolidated Net Income |                 |             |
|--------------------|---|---|-----------------|-------------|
|                    |   | 2015  | 2016–2024       | 2025–2035   |
| Inventory          | \$ 50,000                                       | \$50,000  | \$ —0—          | \$ —0—      |
| Equipment<br>(net) | 300,000   | 30,000  | 30,000          | —0—         |
| Land               | 150,000   | —0—   | —0—             | —0—         |
| Goodwill           | 250,000   | —0—   | —0—             | —0—         |
| Total              | <u>\$750,000</u>                                | <u>\$80,000</u>   | <u>\$30,000</u> | <u>\$ —</u> |

Note: Inventory is expensed in 2015 assuming the FIFO method and equipment is depreciated over 10 years.

Goodwill arising in the acquisition is not recorded by S Company. *It remains in the consolidated balance sheet indefinitely, and it is adjusted only in the event of impairment.* In the event of impairment, an adjustment to recorded income would be needed to determine consolidated net income. The allocation of a portion of the difference between implied and book values to land does not require an adjustment to recorded income in determining consolidated net income until it is sold, since land is not a depreciable (or amortizable) asset.

The worksheet entries needed to ensure that all balance sheet and income statement accounts reflect the correct consolidated balances differ depending on which method the parent company uses to account for its investment: complete equity, partial equity, or cost. The correct consolidated balances will not differ, but the means of arriving at them will. Thus, after the worksheet entries are made, the resulting balances should be identical under the three methods.

Much of the consolidating process is the same for all three methods, but important differences exist. Each of the following stand-alone sections presents the entire process, including an impairment loss on goodwill in one year. For those who are interested in focusing on only one or two of the three methods, the other sections may be omitted without loss of continuity. To facilitate this choice, icons in the margin of the pages are used to distinguish between the cost and equity methods when needed. To distinguish between partial and complete equity, separate icons are used. First, however, it is worth noting that *only three basic accounts are reported differently in the books of the parent*. A brief review of the entries made by the parent under the three methods (see opening of Chapter 4) reveals two of these accounts: the *investment account* itself and the *income recognized from the subsidiary* (dividend income or equity in subsidiary income). Since the amount of income recognized from the subsidiary is added into the retained earnings of the parent each year, it follows that the third important account that differs among these methods is the *retained earnings of the parent*. To further facilitate an understanding of the differences among the methods, or to aid in skipping redundant sections, we present the cost method first and then we present the sections of the text that *differ* depending on the method choice in blue for the equity methods.

Under all three methods, the worksheet entries will separate current year effects from the effects of the previous years because the current year income statement accounts are open and need to be reported separately and correctly. Hence, worksheet entries to retained earnings (and to the noncontrolling interest in net assets) will always adjust the balance at the *beginning* of the current year (or the date of acquisition, if it is the first year) under the cost and partial equity methods. Under the complete equity method, beginning retained earnings of the parent is the same as beginning consolidated retained

earnings and therefore needs no adjustment (the noncontrolling interest in equity still requires adjustment). Illustrations 5-6 through 5-8 present three years of entries for a parent company and for a consolidating worksheet under all three methods. In the following sections, we explain these entries in detail.

### 5.3 CONSOLIDATED STATEMENTS WORKPAPER—USING THE COST METHOD

In the preparation of consolidated financial statements, the recorded balances of individual assets, liabilities, and expense accounts must be adjusted to reflect the allocation, amortization, and depreciation of the differences between implied and book values, as well as any impairment of goodwill. These adjustments are accomplished through the use of *workpaper entries* in the preparation of the consolidated statements workpaper.

#### ILLUSTRATION 5-6

##### Cost Method Three Year Summary

| Entries on P's Books |  | Year 2015 |           | Year 2016 |        | Year 2017 |        |
|----------------------|--|-----------|-----------|-----------|--------|-----------|--------|
| Investment in S      |  | 2,200,000 |           |           |        |           |        |
| Cash                 |  |           | 2,200,000 |           |        |           |        |
| Cash                 |  | 16,000    |           | 48,000    |        | 60,000    |        |
| Dividend Income      |  |           | 16,000    |           | 48,000 |           | 60,000 |

| Entries on the Worksheet                  |  | Year 2015 |           | Year 2016 |           | Year 2017 |           |
|---|--|-----------|-----------|-----------|-----------|-----------|-----------|
| Dividend Income                           |  | 16,000    |           | 48,000    |           | 60,000    |           |
| Dividends Declared                        |  |           | 16,000    |           | 48,000    |           | 60,000    |
| Investment in S                           |  |           |           | 84,000    |           | 148,000   |           |
| Beginning Retained Earnings—P             |  |           |           | 84,000    |           | 148,000   |           |
| Beginning Retained Earnings—S             |  | 500,000   |           | 605,000   |           | 685,000   |           |
| Common Stock—S                            |  | 1,500,000 |           | 1,500,000 |           | 1,500,000 |           |
| Difference between Implied and Book Value |  | 750,000   |           | 750,000   |           | 750,000   |           |
| Investment in S                           |  |           | 2,200,000 |           | 2,284,000 |           | 2,348,000 |
| Noncontrolling Interest                   |  |           | 550,000   |           | 571,000   |           | 587,000   |
| Cost of Goods Sold                        |  | 50,000    |           |           |           |           |           |
| Beginning Retained Earnings—P             |  |           |           | 40,000    |           | 40,000    |           |
| Noncontrolling Interest                   |  |           |           | 10,000    |           | 10,000    |           |
| Equipment                                 |  | 300,000   |           | 300,000   |           | 300,000   |           |
| Land                                      |  | 150,000   |           | 150,000   |           | 150,000   |           |
| Goodwill                                  |  | 250,000   |           | 250,000   |           | 250,000   |           |
| Difference between Implied and Book value |  |           | 750,000   |           | 750,000   |           | 750,000   |
| Beginning Retained Earnings—P             |  | —         |           | 24,000    |           | 48,000    |           |
| Depreciation Expense                      |  | 30,000    |           | 30,000    |           | 30,000    |           |
| Noncontrolling Interest                   |  | —         |           | 6,000     |           | 12,000    |           |
| Equipment (net)                           |  |           | 30,000    |           | 60,000    |           | 90,000    |
| Beginning Retained Earnings—P             |  | —         |           |           |           | 16,000    |           |
| Loss on Impairment—Goodwill               |  | —         |           | 20,000    |           | 4,000     |           |
| Noncontrolling Interest                   |  | —         |           |           |           |           |           |
| Goodwill                                  |  |           | —         |           | 20,000    |           | 20,000    |

**ILLUSTRATION 5-7**

**Partial Equity Method  
Three Year Summary**

| <b>Entries on P's Books</b> |  | <u>Year 2015</u> |           | <u>Year 2016</u> |         | <u>Year 2017</u> |         |
|-----------------------------|--|------------------|-----------|------------------|---------|------------------|---------|
| Investment in S             |  | 2,200,000        |           |                  |         |                  |         |
| Cash                        |  |                  | 2,200,000 |                  |         |                  |         |
| Cash                        |  | 16,000           |           | 48,000           |         | 60,000           |         |
| Investment in S             |  |                  | 16,000    |                  | 48,000  |                  | 60,000  |
| Investment in S             |  | 100,000          |           | 112,000          |         | 160,000          |         |
| Equity in S Income          |  |                  | 100,000   |                  | 112,000 |                  | 160,000 |

| <b>Entries on the Worksheet</b>           |  | <u>Year 2015</u> |           | <u>Year 2016</u> |           | <u>Year 2017</u> |           |
|---|--|------------------|-----------|------------------|-----------|------------------|-----------|
| Investment in S                           |  | 16,000           |           | 48,000           |           | 60,000           |           |
| Dividends Declared                        |  |                  | 16,000    |                  | 48,000    |                  | 60,000    |
| Equity in S Income                        |  | 100,000          |           | 112,000          |           | 160,000          |           |
| Investment in S                           |  |                  | 100,000   |                  | 112,000   |                  | 160,000   |
| Beginning Retained Earnings—S             |  | 500,000          |           | 605,000          |           | 685,000          |           |
| Common stock—S                            |  | 1,500,000        |           | 1,500,000        |           | 1,500,000        |           |
| Difference between Implied and Book Value |  | 750,000          |           | 750,000          |           | 750,000          |           |
| Investment in S                           |  |                  | 2,200,000 |                  | 2,284,000 |                  | 2,348,000 |
| Noncontrolling Interest                   |  |                  | 550,000   |                  | 571,000   |                  | 587,000   |
| Cost of Goods Sold                        |  | 50,000           |           |                  |           |                  |           |
| Beginning Retained Earnings               |  |                  |           | 40,000           |           | 40,000           |           |
| Noncontrolling Interest                   |  |                  |           | 10,000           |           | 10,000           |           |
| Equipment                                 |  | 300,000          |           | 300,000          |           | 300,000          |           |
| Land                                      |  | 150,000          |           | 150,000          |           | 150,000          |           |
| Goodwill                                  |  | 250,000          |           | 250,000          |           | 250,000          |           |
| Difference between Implied and Book Value |  |                  | 750,000   |                  | 750,000   |                  | 750,000   |
| Beginning Retained Earnings—P             |  | —                |           | 24,000           |           | 48,000           |           |
| Depreciation Expense                      |  | 30,000           |           | 30,000           |           | 30,000           |           |
| Noncontrolling Interest                   |  | —                |           | 6,000            |           | 12,000           |           |
| Equipment (net)                           |  |                  | 30,000    |                  | 60,000    |                  | 90,000    |
| Beginning retained Earnings—P             |  | —                |           |                  |           | 16,000           |           |
| Loss on impairment—Goodwill               |  | —                |           | 20,000           |           | 4,000            |           |
| Noncontrolling Interest                   |  | —                |           |                  |           |                  |           |
| Goodwill                                  |  | —                |           | 20,000           |           | 20,000           |           |

**TEST YOUR KNOWLEDGE**



**NOTE:** Solutions to *Test Your Knowledge* questions are found at the end of each chapter before the end-of-chapter questions.

**Multiple Choice**

1. In the event of a bargain acquisition (after carefully considering the fair valuation of all subsidiary assets and liabilities), FASB requires the following accounting:
  - a. an ordinary gain is reported in the financial statements of the consolidated entity.
  - b. an ordinary loss is reported in the financial statements of the consolidated entity.
  - c. negative goodwill is reported on the balance sheet.
  - d. assets are written down to zero value, if needed.

To illustrate, assume the following:

1. P Company acquires an 80% interest in S Company on January 1, 2015, for \$2,200,000, at which time S Company has capital stock of \$1,500,000 and retained earnings of \$500,000. P Company uses the cost method to record its investment in S Company.
2. The allocation of the difference between implied and book values in the amount of \$750,000  $[(\$2,200,000/80\%) - \$2,000,000]$ , as previously presented in Illustration 5-5, includes \$50,000 to Inventory, \$300,000 to Equipment (10-year life), \$150,000 to Land, and \$250,000 to Goodwill.
3. In 2015, S Company reported net income of \$125,000 and declared and paid dividends of \$20,000. During the annual review of its goodwill, the determination is made that the goodwill is currently worth \$255,000.

### ILLUSTRATION 5-8

#### Complete Equity Method Three Year Summary

| Entries on P's Books |  | Year 2015 |           | Year 2016 |         | Year 2017 |         |
|----------------------|--|-----------|-----------|-----------|---------|-----------|---------|
| Investment in S      |  | 2,200,000 |           |           |         |           |         |
| Cash                 |  |           | 2,200,000 |           |         |           |         |
| Cash                 |  | 16,000    |           | 48,000    |         | 60,000    |         |
| Investment in S      |  |           | 16,000    |           | 48,000  |           | 60,000  |
| Investment in S      |  | 100,000   |           | 112,000   |         | 160,000   |         |
| Equity in S Income   |  |           | 100,000   |           | 112,000 |           | 160,000 |
| Equity in S Income   |  | 64,000    |           | 40,000    |         | 24,000    |         |
| Investment in S      |  |           | 64,000    |           | 40,000  |           | 24,000  |

| Entries on the Worksheet                  |  | Year 2015 |           | Year 2016 |           | Year 2017 |           |
|---|--|-----------|-----------|-----------|-----------|-----------|-----------|
| Investment in S                           |  | 16,000    |           | 48,000    |           | 60,000    |           |
| Dividends declared                        |  |           | 16,000    |           | 48,000    |           | 60,000    |
| Equity in S income                        |  | 36,000    |           | 72,000    |           | 136,000   |           |
| Investment in S                           |  |           | 36,000    |           | 72,000    |           | 136,000   |
| Beginning retained earnings—S             |  | 500,000   |           | 605,000   |           | 685,000   |           |
| Common stock—S                            |  | 1,500,000 |           | 1,500,000 |           | 1,500,000 |           |
| Difference between implied and book value |  | 750,000   |           | 750,000   |           | 750,000   |           |
| Investment in S                           |  |           | 2,200,000 |           | 2,284,000 |           | 2,348,000 |
| Noncontrolling interest                   |  |           | 550,000   |           | 571,000   |           | 587,000   |
| Cost of goods sold                        |  | 50,000    |           |           |           |           |           |
| Investment in S                           |  |           |           | 40,000    |           | 40,000    |           |
| Noncontrolling interest                   |  |           |           | 10,000    |           | 10,000    |           |
| Equipment                                 |  | 300,000   |           | 300,000   |           | 300,000   |           |
| Land                                      |  | 150,000   |           | 150,000   |           | 150,000   |           |
| Goodwill                                  |  | 250,000   |           | 250,000   |           | 250,000   |           |
| Difference between implied and book value |  |           | 750,000   |           | 750,000   |           | 750,000   |
| Investment in S                           |  | —         |           | 24,000    |           | 48,000    |           |
| Depreciation expense                      |  | 30,000    |           | 30,000    |           | 30,000    |           |
| Noncontrolling interest                   |  | —         |           | 6,000     |           | 12,000    |           |
| Equipment (net)                           |  |           | 30,000    |           | 60,000    |           | 90,000    |
| Investment in S                           |  | —         |           |           |           | 16,000    |           |
| Loss on impairment—goodwill               |  | —         |           | 20,000    |           | 4,000     |           |
| Noncontrolling interest                   |  | —         |           |           |           |           |           |
| Goodwill                                  |  |           |           |           | 20,000    |           | 20,000    |



COST

4. In 2016, S Company reported net income of \$140,000 and declared and paid dividends of \$60,000. During the annual review of its goodwill, the determination is made that the goodwill is currently worth \$230,000 (after performing the two step process described in Chapter 2).
5. In 2017, S Company reported net income of \$200,000 and declared and paid dividends of \$75,000. During the annual review of its goodwill, the determination is made that the goodwill is currently worth \$250,000.

### Year of Acquisition

**LO 5** Recording investment on books of Parent.

**Entries on Books of P Company—2015 (Year of Acquisition)** Entries recorded on the books of the P Company under the cost method to reflect the acquisition of its interest in S Company and the receipt of dividends in 2015 are as follows:

|   |           |           |
|---|-----------|-----------|
| Investment in S Company   | 2,200,000 |           |
| Cash  |           | 2,200,000 |
| To record purchase of an 80% interest in S Company.             |           |           |
| Cash  | 16,000    |           |
| Dividend Income   |           | 16,000    |
| To record receipt of dividends from S Company (.80 × \$20,000). |           |           |

**Workpaper Entries—2015 (Year of Acquisition)** The consolidated statements workpaper for the year ended December 31, 2015, is presented in Illustration 5-9. An analysis of the workpaper elimination entries in Illustration 5-9 is presented here:

|                                      |        |        |
|--------------------------------------|--------|--------|
| (1) Dividend Income                  | 16,000 |        |
| Dividends Declared                   |        | 16,000 |
| To eliminate intercompany dividends. |        |        |

**LO 6** Workpaper entries (cost method).

|   |           |           |
|---|-----------|-----------|
| (2) Beginning Retained Earnings—S Company   | 500,000   |           |
| Capital Stock—S Company   | 1,500,000 |           |
| Difference between Implied and Book Value   | 750,000   |           |
| Investment in S Company   |           | 2,200,000 |
| Noncontrolling Interest in Equity   |           | 550,000   |
| To eliminate the investment account against the equity accounts of S Company using equity balances at the <b>beginning of the current year</b> , and recognize the Noncontrolling Interest in Equity. |           |           |

|  |         |         |
|--|---------|---------|
| (3a) Cost of Goods Sold (beginning inventory)  | 50,000  |         |
| Equipment (net) (10-year remaining life)   | 300,000 |         |
| Land   | 150,000 |         |
| Goodwill   | 250,000 |         |
| Difference between Implied and Book Value  |         | 750,000 |
| To allocate the amount of difference between implied and book value at date of acquisition to specific assets and liabilities, see Illustration 5-2. |         |         |



COST

By the end of the first year, under a *FIFO* (*first-in, first-out*) cost flow assumption, the inventory that necessitated the \$50,000 adjustment would have been sold. Recall that at the date of acquisition, this adjustment was to Inventory. At the end of the first year, however, the entry is to Cost of Goods Sold (or to Beginning Inventory, as a subcomponent of the Cost of Goods Sold). Since S Company will not have included the additional \$50,000 allocated to inventory in its reported *Cost of Goods Sold* (*COGS*), consolidated Cost of Goods Sold must be increased by this workpaper entry. If the inventory were still on hand on December 31, 2015 (for example, if a LIFO flow were assumed), the \$50,000 would be allocated to ending inventory in the balance sheet rather than to Cost of Goods Sold.

This entry to Cost of Goods Sold is appropriate only in the year of acquisition. In subsequent years, consolidated Cost of Goods Sold will have been reflected in the 2015

| Cost Method                                  |                  | ILLUSTRATION 5-9                  |                  |                  |                         |                       |
|--|------------------|-----------------------------------|------------------|------------------|-------------------------|-----------------------|
| 80% Owned Subsidiary                         |                  | Consolidated Statements Workpaper |                  |                  |                         |                       |
| Year of Acquisition                          |                  | P Company and Subsidiary          |                  |                  |                         |                       |
|  |                  | for Year Ended December 31, 2015  |                  |                  |                         |                       |
| Income Statement                             | P                | S                                 | Eliminations     |                  | Noncontrolling Interest | Consolidated Balances |
|  | Company          | Company                           | Dr.              | Cr.              |                         |                       |
| Sales  | 3,100,000        | 2,200,000                         |                  |                  |                         | 5,300,000             |
| Dividend Income                              | 16,000           |                                   | (1)              | 16,000           |                         |                       |
| Total Revenue                                | <u>3,116,000</u> | <u>2,200,000</u>                  |                  |                  |                         | <u>5,300,000</u>      |
| Cost of Goods Sold                           | 1,700,000        | 1,360,000                         | (3a)             | 50,000           |                         | 3,110,000             |
| Depreciation—Equipment                       | 120,000          | 30,000                            | (3b)             | 30,000           |                         | 180,000               |
| Other Expenses                               | 998,000          | 685,000                           |                  |                  |                         | 1,683,000             |
| Total Cost and Expense                       | <u>2,818,000</u> | <u>2,075,000</u>                  |                  |                  |                         | <u>4,973,000</u>      |
| Net/Consolidated Income                      | 298,000          | 125,000                           |                  |                  |                         | 327,000               |
| Noncontrolling Interest in Income            |                  |                                   |                  |                  | 9,000*                  | 9,000                 |
| Net Income to Retained Earnings              | <u>298,000</u>   | <u>125,000</u>                    | <u>96,000</u>    | <u>—0—</u>       | <u>9,000</u>            | <u>318,000</u>        |
| <i>Retained Earnings Statement</i>           |                  |                                   |                  |                  |                         |                       |
| 1/1 Retained Earnings                        |                  |                                   |                  |                  |                         |                       |
| P Company                                    | 1,650,000        |                                   |                  |                  |                         | 1,650,000             |
| S Company                                    |                  | 500,000                           | (2)              | 500,000          |                         |                       |
| Net Income from above                        | 298,000          | 125,000                           | 96,000           | —0—              | 9,000                   | 318,000               |
| Dividends Declared                           |                  |                                   |                  |                  |                         |                       |
| P Company                                    | (150,000)        |                                   |                  |                  |                         | (150,000)             |
| S Company                                    |                  | (20,000)                          |                  | (1) 16,000       | (4,000)                 |                       |
| 12/31 Retained Earnings to Balance Sheet     | <u>1,798,000</u> | <u>605,000</u>                    | <u>596,000</u>   | <u>16,000</u>    | <u>5,000</u>            | <u>1,818,000</u>      |
| <i>Balance Sheet</i>                         |                  |                                   |                  |                  |                         |                       |
| Investment in S Company                      | 2,200,000        |                                   |                  | (2) 2,200,000    |                         |                       |
| Difference between Implied and Book Value    |                  |                                   | (2)              | 750,000          | (3a) 750,000            |                       |
| Land   | 1,250,000        | 250,000                           | (3a)             | 150,000          |                         | 1,650,000             |
| Equipment (net)                              | 1,080,000        | 270,000                           | (3a)             | 300,000          | (3b) 30,000             | 1,620,000             |
| Other Assets (net)                           | 2,402,000        | 1,885,000                         |                  |                  |                         | 4,287,000             |
| Goodwill (excess of implied over fair value) |                  |                                   | (3a)             | 250,000          |                         | 250,000               |
| Total Assets                                 | <u>6,932,000</u> | <u>2,405,000</u>                  |                  |                  |                         | <u>7,807,000</u>      |
| Liabilities                                  | 2,134,000        | 300,000                           |                  |                  |                         | 2,434,000             |
| Capital Stock                                |                  |                                   |                  |                  |                         |                       |
| P Company                                    | 3,000,000        |                                   |                  |                  |                         | 3,000,000             |
| S Company                                    |                  | 1,500,000                         | (2)              | 1,500,000        |                         |                       |
| Retained Earnings from above                 | 1,798,000        | 605,000                           | 596,000          | 16,000           | 5,000                   | 1,818,000             |
| 1/1 Noncontrolling Interest in Net Assets    |                  |                                   |                  | (2) 550,000      | 550,000                 |                       |
| 12/31 Noncontrolling Interest in Net Assets  |                  |                                   |                  |                  | <u>555,000</u>          | <u>555,000</u>        |
| Total Liabilities and Equity                 | <u>6,932,000</u> | <u>2,405,000</u>                  | <u>3,546,000</u> | <u>3,546,000</u> |                         | <u>7,807,000</u>      |

(\*)  $20\% \times [\$125,000 - \$50,000 \text{ COGS} - \$30,000 \text{ Depreciation}] = \$9,000$ .

(1) To eliminate intercompany dividends.

(2) To eliminate investment account and create noncontrolling interest account.

(3a) To allocate differences between implied and book value.

(3b) To depreciate the difference between implied and book value assigned to equipment (300,000/10).



consolidated net income and hence consolidated retained earnings at the end of 2015. Thus, the adjustment (\$50,000 debit) in future years will be to Beginning Retained Earnings-P Company (80%) and to the Noncontrolling Interest in Equity (20%).

|   |        |        |
|---|--------|--------|
| (3b) Depreciation Expense (\$300,000/10 years)  | 30,000 |        |
| Equipment (net) <sup>6</sup>  |        | 30,000 |
| To depreciate the amount of difference between implied and book value allocated to equipment, see Illustration 5-5. |        |        |

As previously noted, depreciation in the consolidated income statement should be based on the value assigned to the equipment in the consolidated balance sheet. Since the depreciation recorded by S Company is based on the book value of the equipment in its records, consolidated depreciation must be increased by a workpaper entry.

The amount of the difference between implied and book values not allocated to specific identifiable assets or liabilities is treated in the consolidated financial statements as goodwill. Companies are not currently required to amortize goodwill. Instead it is adjusted only when impaired. In the year 2015, goodwill is assessed to be worth \$255,000, which is more than its carrying value of \$250,000. Thus, no impairment entry is needed.

It is possible, of course, to combine the workpaper entries relating to the allocation and depreciation of the differences between implied and book values into one entry. In Illustration 5-9, for example, workpaper entries (3a) and (3b) could be presented in one combined entry as follows:

|  |         |         |
|--|---------|---------|
| (3) Cost of Goods Sold (Beginning Inventory) | 50,000  |         |
| Depreciation Expense                         | 30,000  |         |
| Equipment (net) (\$300,000 – \$30,000)       | 270,000 |         |
| Land   | 150,000 |         |
| Goodwill                                     | 250,000 |         |
| Difference between Implied and Book Value    |         | 750,000 |



COST

In Illustration 5-9, the calculation of Noncontrolling Interest is also affected by the depreciation of the differences between implied and book values. Since the difference between implied and book values is distributed between the controlling and noncontrolling interests, 20% of the charges to COGS and depreciation expense reduce the noncontrolling interest (NCI) in consolidated earnings. Thus, the noncontrolling interest in earnings is computed as 20% of: [S earnings of \$125,000 – \$50,000 additional COGS – \$30,000 excess depreciation], or \$9,000. The other 80% reduces the controlling interest in consolidated net income.

## Year Subsequent to Acquisition

**Lo 5** P company entries after acquisition.

**Entries on Books of P Company—2016 (Year Subsequent to Acquisition)** In 2016, P Company will record dividend income as follows:

|  |        |        |
|--|--------|--------|
| Cash   | 48,000 |        |
| Dividend Income  |        | 48,000 |
| To record receipt of dividends from S Company (.8 × \$60,000). |        |        |

Under the Cost Method, the parent company makes no entry for the reported income of the subsidiary.

**Workpaper Entries—2016 (Year Subsequent to Acquisition)** The consolidated statements workpaper for the year ended December 31, 2016, is presented in Illustration 5-10.

<sup>6</sup>The credit to this entry could alternatively be accumulated depreciation.

## Cost Method

## ILLUSTRATION 5-10

80% Owned Subsidiary

## Consolidated Statements Workpaper

Subsequent to

## P Company and Subsidiary

Year of Acquisition

for Year Ended December 31, 2016

| <i>Income Statement</i>                        | <i>P<br/>Company</i> | <i>S<br/>Company</i> | <i>Eliminations</i> |                  | <i>Noncontrolling<br/>Interest</i> | <i>Consolidated<br/>Balances</i> |                  |
|--|----------------------|----------------------|---------------------|------------------|------------------------------------|----------------------------------|------------------|
|  |                      |                      | <i>Dr.</i>          | <i>Cr.</i>       |                                    |                                  |                  |
| Sales  | 3,534,000            | 2,020,000            |                     |                  |                                    | 5,554,000                        |                  |
| Dividend Income                                | 48,000               |                      | (2)                 | 48,000           |                                    |                                  |                  |
| Total Revenue                                  | <u>3,582,000</u>     | <u>2,020,000</u>     |                     |                  |                                    | <u>5,554,000</u>                 |                  |
| Cost of Goods Sold                             | 2,040,000            | 1,200,000            |                     |                  |                                    | 3,240,000                        |                  |
| Depreciation—Equipment                         | 120,000              | 30,000               | (4b)                | 30,000           |                                    | 180,000                          |                  |
| Other Expenses                                 | 993,000              | 650,000              | (4c)                | 20,000           |                                    | 1,663,000                        |                  |
| Total Cost and Expense                         | <u>3,153,000</u>     | <u>1,880,000</u>     |                     |                  |                                    | <u>5,083,000</u>                 |                  |
| Net/Consolidated Income                        | 429,000              | 140,000              |                     |                  |                                    | 471,000                          |                  |
| Noncontrolling Interest in Income              |                      |                      |                     |                  | 18,000*                            | 18,000                           |                  |
| Net Income to Retained Earnings                | <u>429,000</u>       | <u>140,000</u>       | <u>98,000</u>       | <u>—0—</u>       | <u>18,000</u>                      | <u>453,000</u>                   |                  |
| <i>Retained Earnings Statement</i>             |                      |                      |                     |                  |                                    |                                  |                  |
| <i>1/1 Retained Earnings</i>                   |                      |                      |                     |                  |                                    |                                  |                  |
| P Company                                      | 1,798,000            |                      | (4a)                | 40,000           | (1)                                | 84,000                           | 1,818,000        |
| S Company                                      |                      | 605,000              | (4b)                | 24,000           |                                    |                                  |                  |
| Net Income from above                          | 429,000              | 140,000              | (4c)                | 98,000           | —0—                                | 18,000                           | 453,000          |
| Dividends Declared                             |                      |                      |                     |                  |                                    |                                  |                  |
| P Company                                      | (150,000)            |                      |                     |                  |                                    |                                  | (150,000)        |
| S Company                                      |                      | (60,000)             |                     | (2)              | 48,000                             | (12,000)                         |                  |
| 12/31 Retained Earnings to                     |                      |                      |                     |                  |                                    |                                  |                  |
| Balance Sheet                                  | <u>2,077,000</u>     | <u>685,000</u>       | <u>767,000</u>      | <u>132,000</u>   | <u>6,000</u>                       | <u>2,121,000</u>                 |                  |
| <i>Balance Sheet</i>                           |                      |                      |                     |                  |                                    |                                  |                  |
| Investment in S Company                        | 2,200,000            |                      | (1)                 | 84,000           | (3)                                | 2,284,000                        |                  |
| Difference between Implied<br>and Book Value   |                      |                      | (3)                 | 750,000          | (4a)                               | 750,000                          |                  |
| Land   | 2,000,000            | 250,000              | (4a)                | 150,000          |                                    |                                  | 2,400,000        |
| Equipment (net)                                | 960,000              | 240,000              | (4a)                | 300,000          | (4b)                               | 60,000                           | 1,440,000        |
| Other Assets (net)                             | 2,137,000            | 2,200,000            |                     |                  |                                    |                                  | 4,337,000        |
| Goodwill                                       |                      |                      | (4a)                | 250,000          | (4c)                               | 20,000                           | 230,000          |
| Total Assets                                   | <u>7,297,000</u>     | <u>2,690,000</u>     |                     |                  |                                    |                                  | <u>8,407,000</u> |
| Liabilities                                    | 2,220,000            | 505,000              |                     |                  |                                    |                                  | 2,725,000        |
| Capital Stock                                  |                      |                      |                     |                  |                                    |                                  |                  |
| P Company                                      | 3,000,000            |                      |                     |                  |                                    |                                  | 3,000,000        |
| S Company                                      |                      | 1,500,000            | (3)                 | 1,500,000        |                                    |                                  |                  |
| Retained Earnings from above                   | 2,077,000            | 685,000              | 767,000             | 132,000          | 6,000                              | 2,121,000                        |                  |
| 1 / 1 Noncontrolling Interest<br>in Net Assets |                      |                      | (4a)                | 10,000           |                                    |                                  |                  |
|  |                      |                      | (4b)                | 6,000            | (3)                                | 571,000**                        | 555,000          |
| 12/31 Noncontrolling Interest<br>in Net Assets |                      |                      |                     |                  |                                    | <u>561,000</u>                   | <u>561,000</u>   |
| Total Liabilities and Equity                   | <u>7,297,000</u>     | <u>2,690,000</u>     | <u>3,817,000</u>    | <u>3,817,000</u> |                                    | <u>8,407,000</u>                 |                  |

(\*)  $20\% \times (140,000 - 30,000 - 20,000) = 18,000$ .(\*\*)  $\$550,000 + [20\% \times (\$605,000 - \$500,000)] = \$571,000$ .(1) To establish reciprocity/convert to equity as of 1/1/14 [ $.80 \times (\$605,000 - \$500,000)$ ].

(2) To eliminate intercompany dividends.

(3) To eliminate investment account and create Noncontrolling Interest account.

(4a) To assign the difference between implied and book value at the date of acquisition to specific assets and liabilities.

(4b) To depreciate the amount of the difference between implied and book value assigned to equipment.

(4c) To record goodwill impairment.

Workpaper elimination entries in Illustration 5-10 are presented in general journal form as follows:

**LO 6** Workpaper entries after acquisition, subsequent years (cost method).

|     |  |        |        |
|-----|--|--------|--------|
| (1) | Investment in S Company  | 84,000 |        |
|     | Beginning Retained Earnings—P Company  |        | 84,000 |
|     | To convert to equity/establish reciprocity as of 1/1/16 $[(\$605,000 - \$500,000) \times .80]$ . |        |        |

This entry represents the change in retained earnings of S Company from the date of acquisition to the beginning of the current year. This also converts retained earnings to the value that would be recorded if the partial equity method had been used.



COST

|     |   |        |        |
|-----|---|--------|--------|
| (2) | Dividend Income   | 48,000 |        |
|     | Dividends Declared  |        | 48,000 |
|     | To eliminate the intercompany dividends. $(\$60,000 \times 80\%)$ . |        |        |

In the investment elimination entry, the amount debited or credited to the Difference between Implied and Book Values is equal to the amount of the difference between implied and book values on the date of acquisition. The amount does not change subsequent to acquisition and may be obtained from the Computation and Allocation Schedule (Illustration 5-2). Both the entry to Investment in S and Noncontrolling Interest reflect one year of change since acquisition. For example, the Noncontrolling Interest was valued at \$550,000 at acquisition and increased in the first year by  $20\% \times [\$125,000 - \$20,000 \text{ (Dividends Declared)}] = \$21,000$ . The noncontrolling interest must also be adjusted for the noncontrolling share in depreciation expense and Cost of Goods Sold from 2015, but those adjustments will be shown in separate entries below.

|     |  |           |           |
|-----|--|-----------|-----------|
| (3) | Beginning Retained Earnings—S Company  | 605,000   |           |
|     | Capital Stock—S Company  | 1,500,000 |           |
|     | Difference between Implied and Book Value                                    | 750,000   |           |
|     | Investment in S Company $(\$2,200,000 + \$84,000)$                           |           | 2,284,000 |
|     | Noncontrolling Interest $[\$550,000 + 20\% \text{ } (\$125,000 - \$20,000)]$ |           | 571,000   |

Workpaper entry (4) is presented next, first in a combined single entry and then (alternatively) in its components. The authors find the second approach (components) easier to understand, though less space efficient.

|     |  |         |         |
|-----|--|---------|---------|
| (4) | Beginning Retained Earnings—P Company (beginning consolidated retained earnings) $(40,000 + 24,000)$ | 64,000  |         |
|     | Noncontrolling Interest  | 16,000  |         |
|     | Depreciation Expense $(\$300,000/10)$  | 30,000  |         |
|     | Impairment Loss on Goodwill $(\$250,000 - \$230,000)$  | 20,000  |         |
|     | Equipment (net) $(\$300,000 - \$30,000 - \$30,000)$  | 240,000 |         |
|     | Land   | 150,000 |         |
|     | Goodwill   | 230,000 |         |
|     | Difference between Implied and Book Value  |         | 750,000 |
|     | To allocate and depreciate the difference between implied and book values.                           |         |         |



COST

**Beginning consolidated retained earnings and the noncontrolling interest must be adjusted each year for the cumulative amount of depreciation and other deductions that have been made from consolidated net income because of the depreciation of the difference between implied and book values in the consolidated statements workpapers of prior years.** By reducing previously reported consolidated net income, these workpaper adjustments also reduce previously reported consolidated retained earnings and noncontrolling interest. The reduction of beginning consolidated retained earnings and noncontrolling interest is accomplished by debits to the beginning retained earnings of the

parent company and to Noncontrolling Interest in Equity in the consolidated statements workpaper. The \$64,000 debit to beginning retained earnings is equal to the  $80\% \times (\$50,000 \text{ charged to cost of goods sold plus } \$30,000 \text{ charged to depreciation expense})$ . The \$16,000 debit to Noncontrolling Interest in Equity is equal to the  $20\% \times (\$50,000 \text{ charged to cost of goods sold plus } \$30,000 \text{ charged to depreciation expense})$ . Where part of the difference between implied and book values is allocated to depreciable assets, the workpaper adjustments to the beginning retained earnings of the parent company and to noncontrolling interest will become progressively larger each year.

To separate the preceding entry into its more digestible components, begin with the allocation of the difference between implied and book values and then proceed to record excess depreciation and goodwill impairment as follows:

|      |  |         |         |
|------|--|---------|---------|
| (4a) | Beginning Retained Earnings—P Company (previous year's cost of goods sold $\times$ 80%)  | 40,000  |         |
|      | Noncontrolling Interest (20% of previous year's cost of goods sold)  | 10,000  |         |
|      | Equipment  | 300,000 |         |
|      | Land   | 150,000 |         |
|      | Goodwill   | 250,000 |         |
|      | Difference between Implied and Book Value  |         | 750,000 |
|      | To allocate the amount of difference between implied and book values at date of acquisition to specific assets and liabilities (see Illustration 5-2). |         |         |

Entry (4a) is identical to that recorded in the preceding year, with the exception that the entry to Cost of Goods Sold is appropriate only in the year of acquisition. Thus, the adjustment in year 2 (and future years) is split between the controlling and noncontrolling interests in equity (80% to Beginning Retained Earnings of P and 20% to Noncontrolling Interest).

|      |  |        |        |
|------|--|--------|--------|
| (4b) | Depreciation Expense (current year)  | 30,000 |        |
|      | Beginning Retained Earnings—P Company (80% of previous year's depreciation expense)            | 24,000 |        |
|      | Noncontrolling Interest (20% of previous year's depreciation expense)                          | 6,000  |        |
|      | Equipment (net) or Accumulated Depreciation  |        | 60,000 |
|      | To depreciate the amount of difference between implied and book values allocated to equipment. |        |        |

This entry differs from the first-year entry in that the excess depreciation from the year 2015 is now reflected in Beginning Retained Earnings—P Company. Although the adjustment to Equipment (net) was already made in the prior-year workpaper for one year's depreciation adjustment, it was not posted to the books of S Company and hence must be made again. If the following year (2017) were being presented, the debit to Depreciation Expense would remain at 30,000, but the debit to Beginning Retained Earnings would be \$48,000 to reflect two prior years of excess depreciation, Noncontrolling Interest in Equity would be debited for \$12,000, and the credit to Net Equipment would total \$90,000.



Entry (4c) is a new entry that is needed in 2016 because goodwill is assessed to have been impaired. Goodwill is still carried in the workpaper for the consolidated entity at its acquisition value of \$250,000, and this amount exceeds its current estimated value of \$230,000 in 2016. Therefore, a workpaper entry is needed to reduce the carrying value to \$230,000, which entails the recording of an impairment loss of \$20,000. This charge, like the excess depreciation, is distributed to the controlling and noncontrolling interests in the income statement for 2016. The impairment loss may be combined with "other expenses" in the consolidating workpaper. In subsequent years, the charge to earnings (like excess depreciation) will flow 80% to the Beginning Retained Earnings of P and 20% to Noncontrolling Interest in Equity.

|      |   |        |        |
|------|---|--------|--------|
| (4c) | Impairment loss (current year)  | 20,000 |        |
|      | Goodwill  |        | 20,000 |
|      | To reflect the impairment of goodwill recorded in the acquisition of 2015 due to a decline in value as of 2016. |        |        |

Clearly, if entries (4a), (4b), and (4c) are recorded separately, the combined entry (4) is not needed.

The amounts charged to expense each year were calculated in Illustration 5-5. Since inventory was sold in 2015, no part of the difference between implied and book value is allocated to inventory in the years after its sale. The amounts allocated to assets (and liabilities) are the unamortized amounts at the end of the year. Thus, the amounts allocated to depreciable assets in the balance sheet will become progressively smaller each year.

In the consolidated statements worksheet for the third year after acquisition (December 31, 2017), for example, the worksheet elimination entry will be as follows (if combined into one entry):

**At December 31, 2017:**

|     |  |         |         |
|-----|--|---------|---------|
| (4) | Beginning Retained Earnings—P Company (beginning consolidated retained earnings [80%(\$50,000 + \$30,000) from 2015 + 80%(\$30,000 + \$20,000) from 2014]) | 104,000 |         |
|     | Beginning Noncontrolling Interest in Equity [20%(\$50,000 + \$30,000) from 2015 + 20%(\$30,000 + \$20,000) from 2014]                                      | 26,000  |         |
|     | Depreciation Expense (\$300,000/10)  | 30,000  |         |
|     | Equipment (net) (\$300,000 – \$30,000 – \$30,000 – \$30,000)   | 210,000 |         |
|     | Land   | 150,000 |         |
|     | Goodwill   | 230,000 |         |
|     | Difference between Implied and Book Value  |         | 750,000 |



COST

Note in the entry for 2017 that the goodwill remains at the \$230,000 carrying value, even though it is currently valued at \$250,000. Once impairment has been recorded, no recovery is permitted to be recorded in subsequent years under GAAP.

The debit to the beginning retained earnings of the parent company in 2017 (\$64,000 + \$40,000) is equal to the amount by which the controlling interest in consolidated net income and consolidated retained earnings had been reduced because of the depreciation and impairment of the difference between implied and book values. These charges amounted to \$64,000 for the parent's share in the year 2015 (COGS \$40,000 + Depreciation \$24,000) and to \$40,000 for the parent's share in the year 2016 (Goodwill Impairment \$16,000 + Depreciation \$24,000), and were reflected in the consolidated statements worksheets for those years. **However, recall that they were not posted to the ledgers of either P or S Company, thus necessitating the adjustments to Beginning Retained Earnings and Noncontrolling Interest in Equity in subsequent years.** [See Illustration 5-5; also see entries (3a and 3b) in Illustration 5-9 and entries (4b and 4c) in Illustration 5-10]. The calculation of the debit to Noncontrolling Interest is analogous, reflecting the remaining 20% of the charges to consolidated net income. This entry [(4) for 2017] can also be simplified by breaking it into its components.

Illustration 5-6 (on page 196) presents the entries in their separate components for all three years side by side for the cost method.

## 5.4 CONTROLLING AND NONCONTROLLING INTERESTS IN CONSOLIDATED NET INCOME AND RETAINED EARNINGS—USING THE COST METHOD



COST

In the preceding chapter, a t-account approach to the calculation of the controlling and noncontrolling interests in consolidated net income was presented. This approach must now be refined to accommodate the effect of the allocation and depreciation of the difference between implied and book values.

*Consolidated net income is the parent company's income from its independent operations plus (minus) the reported subsidiary income (loss) plus or minus adjustments for the period relating to the depreciation/amortization/impairment of the difference between implied and book values.*

The calculation of *controlling and noncontrolling interests in consolidated net income* for the year ended December 31, 2016, presented in Illustration 5-11, is based on Illustration 5-10. These amounts are, of course, the same as the controlling and noncontrolling interests in consolidated net income shown in the consolidated financial statements workpaper.

**ILLUSTRATION 5-11****Calculation of the Noncontrolling Interest in Consolidated Income—Cost Method for Year Ended December 31, 2016**

| Noncontrolling Interest in Consolidated Income  |  |
|---|--|
| Additional depreciation and amortization of the difference between implied and book value related to: |  |
| Depreciation Expense (\$300,000/10)   | 30,000   |
| Impairment of Goodwill (\$250,000 – \$230,000)  | 20,000   |
|   | Net income reported by S Company   |
|   | 140,000  |
|   | Adjusted Net Income  |
|   | 90,000   |
|   | Noncontrolling Ownership Percentage Interest   |
|   | 20%  |
|   | Noncontrolling Interest in Consolidated Income   |
|   | <u>18,000</u>  |
|   | <b>80% (\$90,000)</b>  |
| Controlling Interest in Consolidated Income   |  |
|   | P Company's net income from its independent operations (\$429,000 reported net income less \$48,000 dividend income from S Company included therein) |
|   | \$381,000  |
|   | P Company's share of the reported income of S Company (.8 × \$90,000)  |
|   | 72,000   |
|   | Controlling Interest in Consolidated Net Income  |
|   | <u>\$453,000</u>   |

*Consolidated retained earnings is the parent company's cost basis retained earnings plus (minus) the parent company's share of the increase (decrease) in reported subsidiary retained earnings from the date of acquisition to the current date plus or minus the cumulative effect of adjustments to date relating to the depreciation/amortization of the difference between implied and book values.*

The calculation of **consolidated retained earnings** on December 31, 2016, presented in Illustration 5-12, is based on Illustration 5-10. This is the same amount of consolidated retained earnings as that shown in the consolidated statements workpaper presented in Illustration 5-10 and may be used as a means of checking the balance.

**ILLUSTRATION 5-12****Analytical Calculation of Consolidated Retained Earnings: Cost Method  
December 31, 2016**

|   |               |               |                    |
|---|---------------|---------------|--------------------|
| P Company's retained earnings on<br>December 31, 2016   |               |               | \$2,077,000        |
| P Company's share of the increase in<br>S Company's retained earnings from date of<br>acquisition to December 31, 2016<br>[.8(\$685,000 – \$500,000)]   |               |               | 148,000            |
| Less cumulative effect to December 31, 2016, of the amortization of the difference between implied and<br>book value (parent's share):  |               |               |                    |
|   | <b>2015</b>   | <b>2016</b>   |                    |
| Inventory (to cost of goods sold)   | \$40,000      | \$—0—         |                    |
| Depreciation from Equipment   | 24,000        | 24,000        |                    |
| Impairment of Goodwill  | <u>—0—</u>    | <u>16,000</u> |                    |
|   | <u>64,000</u> | <u>40,000</u> | (104,000)          |
| Consolidated Retained Earnings on December 31, 2016   |               |               | <u>\$2,121,000</u> |
| Alternatively, consolidated retained earnings can be computed by adding beginning consolidated retained earnings to the controlling interest in net income and subtracting dividends declared by P Company. |               |               |                    |
| Beginning Consolidated Retained Earnings  |               |               | \$1,818,000        |
| Plus: Controlling Interest in Consolidated Net Income   |               |               | 453,000            |
| Less: Dividends Declared by P Company   |               |               | <u>(150,000)</u>   |
| Ending Consolidated Retained Earnings   |               |               | <u>\$2,121,000</u> |
| Similarly, the noncontrolling interest in equity can be computed as follows:  |               |               |                    |
| Beginning Noncontrolling Interest in Equity   |               |               | \$555,000          |
| Plus: Noncontrolling Interest in Consolidated Net Income  |               |               | 18,000             |
| Less: Dividends Declared by S Company to Outsiders  |               |               | <u>(12,000)</u>    |
| Ending Noncontrolling Interest in Equity  |               |               | <u>\$561,000</u>   |

**TEST YOUR KNOWLEDGE****5.2**

**NOTE:** Solutions to *Test Your Knowledge* questions are found at the end of each chapter before the end-of-chapter questions.

**Multiple Choice**

- The difference between implied and book values that is not allocated to specific identifiable assets or liabilities is treated as goodwill, which is:
  - Expensed completely
  - Capitalized and amortized over 20 years
  - Capitalized and amortized over the expected useful life, not to exceed 40 years
  - Capitalized and checked periodically for impairment.

**5.5 CONSOLIDATED STATEMENTS WORKPAPER—USING PARTIAL EQUITY METHOD**

In the preparation of consolidated financial statements, the recorded balances of individual assets, liabilities, and expense accounts must be adjusted to reflect the allocation, depreciation, amortization, and potential impairment of the difference between implied and book values.

Although the equity methods (partial and complete) reflect the effects of certain transactions more fully than the cost method on the books of the parent, the adjustments have not been made to individual underlying asset or income statement accounts. For example, under the partial equity method, the parent records its equity in subsidiary income in its books, but it does not record the underlying revenue and expense accounts that combine to form that total. Also, under this method, the parent does not record excess depreciation, amortization,



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or impairment of identifiable intangibles arising in the acquisition in its investment account. These adjustments must be accomplished through the use of workpaper entries in the preparation of the consolidated statements workpaper. To illustrate, assume the following:

1. P Company acquires an 80% interest in S Company on January 1, 2015, for \$2,200,000, at which time S Company has capital stock of \$1,500,000 and retained earnings of \$500,000. P Company uses the partial equity method to record its investment in S Company.
2. The allocation of the difference between implied and book values in the amount of \$750,000 [ $(\$2,200,000/80\%) - \$2,000,000$ ], as previously presented in Illustration 5-5, includes \$50,000 to Inventory, \$300,000 to Equipment (10-year life), \$150,000 to Land, and \$250,000 to Goodwill.
3. In 2015, S Company reported net income of \$125,000 and declared and paid dividends of \$20,000. During the annual review of its goodwill, the determination is made that the goodwill is currently worth \$255,000.
4. In 2016, S Company reported net income of \$140,000 and declared and paid dividends of \$60,000. During the annual review of its goodwill, the determination is made that the goodwill is currently worth \$230,000 (after performing the two-step process described in Chapter 2).
5. In 2017, S Company reported net income of \$200,000 and declared and paid dividends of \$75,000. During the annual review of its goodwill, the determination is made that the goodwill is currently worth \$250,000.

**Lo 5** Recording investment by Parent, partial equity method.

*Entries on the Books of P Company—2015 (Year of Acquisition)* Entries recorded on the books of P Company under the partial equity method are as follows:



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|  |           |           |
|--|-----------|-----------|
| (1) Investment in S Company                              | 2,200,000 |           |
| Cash   |           | 2,200,000 |
| To record purchase of 80% interest in S Company.         |           |           |
| (2) Cash   | 16,000    |           |
| Investment in S Company                                  |           | 16,000    |
| To record dividends received (.80 × \$20,000).           |           |           |
| (3) Investment in S Company                              | 100,000   |           |
| Equity in Subsidiary Income                              |           | 100,000   |
| To record equity in subsidiary income (.80 × \$125,000). |           |           |

*Entries on the Books of P Company—2016 (Year Subsequent to Acquisition)*

|  |         |         |
|--|---------|---------|
| (4) Cash   | 48,000  |         |
| Investment in S Company                                  |         | 48,000  |
| To record dividends received (.80 × \$60,000).           |         |         |
| (5) Investment in S Company                              | 112,000 |         |
| Equity in Subsidiary Income                              |         | 112,000 |
| To record equity in subsidiary income (.80 × \$140,000). |         |         |

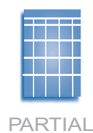
After these entries are posted, the Investment account will appear as follows:

| Investment in S Company |           |               |        |
|-------------------------|-----------|---------------|--------|
| (1) Cost                | 2,200,000 | (2) Dividends | 16,000 |
| (3) Subsidiary Income   | 100,000   | (4) Dividends | 48,000 |
| 12/31/15 Balance        | 2,284,000 |               |        |
| (5) Subsidiary Income   | 112,000   |               |        |
| 12/31/16 Balance        | 2,348,000 |               |        |



**LO 6** Workpaper entries, year of acquisition, partial equity method.

**Workpaper Entries—2015 (Year of Acquisition)** A consolidated statements workpaper under the partial equity method for the year ended December 31, 2015, is presented in Illustration 5-13. Workpaper entries in Illustration 5-13 are presented in general journal form as follows:



|     |   |           |           |
|-----|---|-----------|-----------|
| (1) | Beginning Retained Earnings—S Company   | 500,000   |           |
|     | Capital Stock—S Company   | 1,500,000 |           |
|     | Difference between Implied and Book Value   | 750,000   |           |
|     | Investment in S Company   |           | 2,200,000 |
|     | Noncontrolling Interest in Equity   |           | 550,000   |
|     | To eliminate the investment account against the equity accounts of S Company using equity balances at the <i>beginning of the current year</i> and recognize the noncontrolling interest in equity. |           |           |

|      |  |         |         |
|------|--|---------|---------|
| (2a) | Cost of Goods Sold (beginning inventory)   | 50,000  |         |
|      | Equipment (net) (10 year remaining life)   | 300,000 |         |
|      | Land   | 150,000 |         |
|      | Goodwill   | 250,000 |         |
|      | Difference between Implied and Book Value  |         | 750,000 |
|      | To allocate the amount of difference between implied and book values at date of acquisition to specific assets and liabilities (see Illustration 5-2). |         |         |

By the end of the first year, under a FIFO cost flow assumption, the inventory that necessitated the \$50,000 adjustment would have been sold. Recall that at the date of acquisition, this adjustment was to Inventory. At the end of the first year, however, the entry is to Cost of Goods Sold (or to Beginning Inventory, as a subcomponent of the Cost of Goods Sold). Since S Company will not have included the additional \$50,000 allocated to inventory in its reported Cost of Goods Sold (COGS), consolidated Cost of Goods Sold must be increased by this workpaper entry. If the inventory were still on hand on December 31, 2015 (for example, if a LIFO flow were assumed), the \$50,000 would be allocated to ending inventory in the balance sheet rather than to Cost of Goods Sold.

This entry to Cost of Goods Sold is appropriate only in the year of acquisition. In subsequent years, consolidated Cost of Goods Sold will have been reflected in the 2015 consolidated net income. Thus, the adjustment (\$50,000 debit) in future years will be split between Beginning Retained Earnings—P Company (80%, or \$40,000) and Noncontrolling Interest in Equity (20%, or \$10,000).

|      |   |        |        |
|------|---|--------|--------|
| (2b) | Depreciation Expense (\$300,000/10 years) | 30,000 |        |
|      | Equipment (net)                           |        | 30,000 |

To depreciate the amount of difference between implied and book value allocated to equipment (see Illustration 5-5).

As previously noted, depreciation in the consolidated income statement should be based on the value assigned to the equipment in the consolidated balance sheet. Since the depreciation recorded by S Company is based on the book value of the equipment in its records, consolidated depreciation must be increased by a workpaper entry.

It is possible, of course, to combine the workpaper entries relating to the allocation, amortization, and depreciation of the difference between implied and book value into one entry. In Illustration 5-13, for example, workpaper entries (2a) and (2b) could be presented in one combined entry as follows:

|     |   |         |         |
|-----|---|---------|---------|
| (2) | Cost of Goods Sold (beginning inventory)  | 50,000  |         |
|     | Depreciation Expense                      | 30,000  |         |
|     | Equipment (net) (\$300,000—\$30,000)      | 270,000 |         |
|     | Land                                      | 150,000 |         |
|     | Goodwill                                  | 250,000 |         |
|     | Difference between Implied and Book Value |         | 750,000 |

## Partial Equity Method

## ILLUSTRATION 5-13

80% Owned Subsidiary

## Consolidated Statements Workpaper

Year of Acquisition

## P Company and Subsidiary

for Year Ended December 31, 2015

| Income Statement                                | P<br>Company     | S<br>Company     | Eliminations     |                  | Noncontrolling<br>Interest    | Consolidated<br>Balances |
|---|------------------|------------------|------------------|------------------|-------------------------------|--------------------------|
|   |                  |                  | Dr.              | Cr.              |                               |                          |
| Sales   | 3,100,000        | 2,200,000        |                  |                  |                               | 5,300,000                |
| Equity in Subsidiary Income                     | 100,000          |                  | (3a)             | 100,000          |                               |                          |
| Total Revenue                                   | <u>3,200,000</u> | <u>2,200,000</u> |                  |                  |                               | <u>5,300,000</u>         |
| Cost of Goods Sold                              | 1,700,000        | 1,360,000        | (2a)             | 50,000           |                               | 3,110,000                |
| Depreciation—Equipment                          | 120,000          | 30,000           | (2b)             | 30,000           |                               | 180,000                  |
| Other Expenses                                  | 998,000          | 685,000          |                  |                  |                               | 1,683,000                |
| Total Cost and Expense                          | <u>2,818,000</u> | <u>2,075,000</u> |                  |                  |                               | <u>4,973,000</u>         |
| Net/Consolidated Income                         | 382,000          | 125,000          |                  |                  |                               | 327,000                  |
| Noncontrolling Interest in Income               |                  |                  |                  |                  | 9,000*                        | 9,000                    |
| Net Income to Retained Earnings                 | <u>382,000</u>   | <u>125,000</u>   | <u>180,000</u>   | <u>—0—</u>       | <u>9,000</u>                  | <u>318,000</u>           |
| <i>Retained Earnings Statement</i>              |                  |                  |                  |                  |                               |                          |
| 1/1 Retained Earnings                           |                  |                  |                  |                  |                               |                          |
| P Company                                       | 1,650,000        |                  |                  |                  |                               | 1,650,000                |
| S Company                                       |                  | 500,000          | (1)              | 500,000          |                               |                          |
| Net Income from above                           | 382,000          | 125,000          | 180,000          | —0—              | 9,000                         | 318,000                  |
| Dividends Declared                              |                  |                  |                  |                  |                               |                          |
| P Company                                       | (150,000)        |                  |                  |                  |                               | (150,000)                |
| S Company                                       |                  | (20,000)         |                  | (3b)             | 16,000                        | (4,000)                  |
| 12/31 Retained Earnings to<br>Balance Sheet     | <u>1,882,000</u> | <u>605,000</u>   | <u>680,000</u>   | <u>16,000</u>    | <u>5,000</u>                  | <u>1,818,000</u>         |
| <i>Balance Sheet</i>                            |                  |                  |                  |                  |                               |                          |
| Investment in S Company                         | 2,284,000        |                  | (3b)             | 16,000           | (1) 2,200,000<br>(3a) 100,000 |                          |
| Difference between Implied<br>and Book Value    |                  |                  | (1)              | 750,000          | (2a)                          | 750,000                  |
| Land  | 1,250,000        | 250,000          | (2a)             | 150,000          |                               | 1,650,000                |
| Equipment (net)                                 | 1,080,000        | 270,000          | (2a)             | 300,000          | (2b)                          | 30,000                   |
| Other Assets (net)                              | 2,402,000        | 1,885,000        |                  |                  |                               | 4,287,000                |
| Goodwill (Excess of Implied over<br>Fair Value) |                  |                  | (2a)             | 250,000          |                               | 250,000                  |
| Total Assets                                    | <u>7,016,000</u> | <u>2,405,000</u> |                  |                  |                               | <u>7,807,000</u>         |
| Liabilities                                     | <u>2,134,000</u> | <u>300,000</u>   |                  |                  |                               | <u>2,434,000</u>         |
| Capital Stock                                   |                  |                  |                  |                  |                               |                          |
| P Company                                       | 3,000,000        |                  |                  |                  |                               | 3,000,000                |
| S Company                                       |                  | 1,500,000        | (1)              | 1,500,000        |                               |                          |
| Retained Earnings from above                    | 1,882,000        | 605,000          | 680,000          | 16,000           | 5,000                         | 1,818,000                |
| 1/1 Noncontrolling Interest in<br>Net Assets    |                  |                  |                  |                  | (1)                           | 550,000                  |
| 12/31 Noncontrolling Interest in<br>Net Assets  |                  |                  |                  |                  |                               | <u>555,000</u>           |
| Total Liabilities and Equity                    | <u>7,016,000</u> | <u>2,405,000</u> | <u>3,646,000</u> | <u>3,646,000</u> |                               | <u>7,807,000</u>         |

\*20% × (\$125,000 – \$30,000 – \$50,000) = \$9,000.

(1) To eliminate the investment account against the equity accounts of S Company at the date of acquisition and create noncontrolling interest account.

(2a) To allocate the difference between implied and book value at the date of acquisition to specific assets and liabilities.

(2b) To depreciate the amount of the difference between implied and book value assigned to equipment (\$300,000/10 years).

(3a) To reverse the effect of subsidiary income recognized on the books of the parent.

(3b) To reverse the effects of dividends declared by the subsidiary and received by the parents.

Next, the workpaper entries to reverse the effect of the parent company entries during the year for subsidiary dividends and income may be separated to record the reversal of dividends in one entry and the reversal of income in another, as follows (and as shown in Illustration 5-13):

|   |         |         |
|---|---------|---------|
| (3a) Equity in Subsidiary Income  | 100,000 |         |
| Investment in S Company   |         | 100,000 |
| To reverse the effect of subsidiary income recognized in the books of the parent. |         |         |

|   |        |        |
|---|--------|--------|
| (3b) Investment in S Company  | 16,000 |        |
| Dividends Declared  |        | 16,000 |
| To reverse the effect of dividends declared by the subsidiary and received by the parent. |        |        |

Alternatively, the effects of entries (3a) and (3b) may be combined into one entry.

The calculation of noncontrolling interest in Illustration 5-13 is affected by the amortization/depreciation of the differences between implied and book value (20% accrues to the noncontrolling interest).

**LO 6** Workpaper entries, subsequent year, partial equity.

**Workpaper Entries—2016 (Year Subsequent to Acquisition)—Partial Equity Method**  
Next, a consolidated statements workpaper under the partial equity method for the year ended December 31, 2016, is presented in Illustration 5-14. Workpaper entries in Illustration 5-14 are presented in general journal form below.



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|   |           |           |
|---|-----------|-----------|
| (1) Beginning Retained Earnings—S Company                                 | 605,000   |           |
| Capital Stock—S Company   | 1,500,000 |           |
| Difference between Implied and Book Value                                 | 750,000   |           |
| Investment in S Company (\$2,200,000 + \$84,000)                          |           | 2,284,000 |
| Noncontrolling Interest in Equity [\$550,000 + 20%(\$125,000 - \$20,000)] |           | 571,000   |

For those who have read the cost method discussion, note that *under the partial equity method, there is no need to establish reciprocity*. That feature was unique to the cost method and, in fact, may be viewed as a sort of conversion to the equity method.

In the investment elimination entry, the amount debited or credited to the Difference between Implied and Book Value is equal to the amount of the Difference between Implied and Book Value on the date of acquisition. The amount does not change subsequent to acquisition and may be obtained from the Computation and Allocation Schedule (Illustration 5-2).

Workpaper entry (2) is presented next, first in a combined single entry and then (alternatively) in its components. The authors find the second approach (components) easier to understand, though less compact.

|  |         |         |
|--|---------|---------|
| (2) Beginning Retained Earnings—P Company (Beginning Consolidated Retained Earnings) (40,000 + 24,000) | 64,000  |         |
| Noncontrolling Interest  | 16,000  |         |
| Depreciation Expense (\$300,000/10)  | 30,000  |         |
| Impairment Loss on Goodwill (\$250,000 - \$230,000)  | 20,000  |         |
| Equipment (net) (\$300,000 - \$30,000 - \$30,000)  | 240,000 |         |
| Land   | 150,000 |         |
| Goodwill   | 230,000 |         |
| Difference between Implied and Book Value  |         | 750,000 |
| To allocate and depreciate the difference between implied and book values.                             |         |         |

## Partial Equity Method

## ILLUSTRATION 5-14

80% Owned Subsidiary

## Consolidated Statements Workpaper

Subsequent to

## P Company and Subsidiary

Year of Acquisition

for Year Ended December 31, 2016

| <i>Income Statement</i>                      | <i>P Company</i> | <i>S Company</i> | <i>Eliminations</i>       |                             | <i>Noncontrolling Interest</i> | <i>Consolidated Balances</i> |
|--|------------------|------------------|---------------------------|-----------------------------|--------------------------------|------------------------------|
|  |                  |                  | <i>Dr.</i>                | <i>Cr.</i>                  |                                |                              |
| Sales  | 3,534,000        | 2,020,000        |                           |                             |                                | 5,554,000                    |
| Equity in Subsidiary Income                  | 112,000          |                  | (3)                       | 112,000                     |                                |                              |
| Total Revenue                                | <u>3,646,000</u> | <u>2,020,000</u> |                           |                             |                                | <u>5,554,000</u>             |
| Cost of Goods Sold                           | 2,040,000        | 1,200,000        |                           |                             |                                | 3,240,000                    |
| Depreciation—Equipment                       | 120,000          | 30,000           | (2b)                      | 30,000                      |                                | 180,000                      |
| Other Expenses                               | 993,000          | 650,000          | (2c)                      | 20,000                      |                                | 1,663,000                    |
| Total Cost and Expense                       | <u>3,153,000</u> | <u>1,880,000</u> |                           |                             |                                | <u>5,083,000</u>             |
| Net/Consolidated Income                      | 493,000          | 140,000          |                           |                             |                                | 471,000                      |
| Noncontrolling Interest in Income            |                  |                  |                           |                             | 18,000*                        | 18,000                       |
| Net Income to Retained Earnings              | <u>493,000</u>   | <u>140,000</u>   | <u>162,000</u>            | <u>—0—</u>                  | <u>18,000</u>                  | <u>453,000</u>               |
| <i>Retained Earnings Statement</i>           |                  |                  |                           |                             |                                |                              |
| 1/1 Retained Earnings                        |                  |                  |                           |                             |                                |                              |
| P Company                                    | 1,882,000        |                  | (2a)                      | 40,000                      |                                | 1,818,000                    |
| S Company                                    |                  | 605,000          | (1)                       | 605,000                     |                                |                              |
| Net Income from above                        | 493,000          | 140,000          | 162,000                   | —0—                         | 18,000                         | 453,000                      |
| Dividends Declared                           |                  |                  |                           |                             |                                |                              |
| P Company                                    | (150,000)        |                  |                           |                             |                                | (150,000)                    |
| S Company                                    |                  | (60,000)         |                           | (3)                         | 48,000                         | (12,000)                     |
| 12/31 Retained Earnings to Balance Sheet     | <u>2,225,000</u> | <u>685,000</u>   | <u>831,000</u>            | <u>48,000</u>               | <u>6,000</u>                   | <u>2,121,000</u>             |
| <i>Balance Sheet</i>                         |                  |                  |                           |                             |                                |                              |
| Investment in S Company                      | 2,348,000        |                  |                           | (3) 64,000<br>(1) 2,284,000 |                                |                              |
| Difference between Implied and Book Value    |                  |                  | (1) 750,000               | (2a) 750,000                |                                |                              |
| Land   | 2,000,000        | 250,000          | (2a)                      | 150,000                     |                                | 2,400,000                    |
| Equipment (net)                              | 960,000          | 240,000          | (2a)                      | 300,000                     | (2b) 60,000                    | 1,440,000                    |
| Other Assets (net)                           | 2,137,000        | 2,200,000        |                           |                             |                                | 4,337,000                    |
| Goodwill (Excess of Implied over Fair Value) |                  |                  | (2a)                      | 250,000                     | (2c) 20,000                    | 230,000                      |
| Total Assets                                 | <u>7,445,000</u> | <u>2,690,000</u> |                           |                             |                                | <u>8,407,000</u>             |
| Liabilities                                  | 2,220,000        | 505,000          |                           |                             |                                | 2,725,000                    |
| Capital Stock                                |                  |                  |                           |                             |                                |                              |
| P Company                                    | 3,000,000        |                  |                           |                             |                                | 3,000,000                    |
| S Company                                    |                  | 1,500,000        | (1)                       | 1,500,000                   |                                |                              |
| Retained Earnings from above                 | 2,225,000        | 685,000          | 831,000                   | 48,000                      | 6,000                          | 2,121,000                    |
| 1/1 Noncontrolling Interest in Net Assets    |                  |                  | (2a) 10,000<br>(2b) 6,000 | (1) 571,000**               | 555,000                        |                              |
| 12/31 Noncontrolling Interest in Net Assets  |                  |                  |                           |                             | <u>561,000</u>                 | <u>561,000</u>               |
| Total Liabilities and Equity                 | <u>7,445,000</u> | <u>2,690,000</u> | <u>3,797,000</u>          | <u>3,797,000</u>            |                                | <u>8,407,000</u>             |

\*20% × (\$140,000 - \$30,000 - \$20,000) = \$18,000.

\*\*\$550,000 + [20% × (\$605,000 - \$500,000)] = \$571,000.

(1) To eliminate the investment account and create noncontrolling interest account.

(2a) To allocate the difference between implied and book value at the date of acquisition to specific assets and liabilities.

(2b) To depreciate the amount of the difference between implied and book value assigned to equipment (\$300,000/10 years).

(2c) To record goodwill impairment.

(3) To reverse the effect of parent company entries during the year for subsidiary dividends and income.

To separate the preceding entry into its more digestible components, begin with the allocation of the difference between implied and book value and then proceed to record excess depreciation as follows:

|      |  |         |         |
|------|--|---------|---------|
| (2a) | Beginning Retained Earnings—P Company (80% of previous year's cost of goods sold)  | 40,000  |         |
|      | Noncontrolling Interest (20% of previous year's cost of goods sold)  | 10,000  |         |
|      | Equipment  | 300,000 |         |
|      | Land   | 150,000 |         |
|      | Goodwill   | 250,000 |         |
|      | Difference between Implied and Book Value  |         | 750,000 |
|      | To allocate the amount of difference between implied and book values at date of acquisition to specific assets and liabilities (see Illustration 5-2). |         |         |



Entry (2a) is identical to that recorded in the preceding year, with the exception that the entry to Cost of Goods Sold is appropriate only in the year of acquisition. Thus, the adjustment in year 2 (and future years) is split between the controlling and noncontrolling interests in equity (80% to Beginning Retained Earnings of P Company and 20% to Noncontrolling Interest).

|      |  |        |        |
|------|--|--------|--------|
| (2b) | Depreciation Expense (current year)  | 30,000 |        |
|      | Beginning Retained Earnings—P Company (previous year's depreciation expense $\times$ 80%)      | 24,000 |        |
|      | Noncontrolling Interest (previous year's depreciation expense $\times$ 20%)                    | 6,000  |        |
|      | Equipment (net) or Accumulated Depreciation  |        | 60,000 |
|      | To depreciate the amount of difference between implied and book values allocated to equipment. |        |        |

This entry differs from the first-year entry in that the excess depreciation from the year 2015 is now reflected in Beginning Retained Earnings—P Company and Noncontrolling Interest. Although the adjustment to Equipment was already made in the prior year workpaper for one year's depreciation adjustment, it was not posted to the books of S Company and hence must be made again. If the following year (2017) were being presented, the debit to Depreciation Expense would remain at \$30,000, but the debit to Beginning Retained Earnings would be \$48,000 to reflect two prior years of excess depreciation (with a \$12,000 debit to Noncontrolling Interest and a credit to Equipment of \$90,000 for all three years).

Entry (2c) is a new entry that is needed in 2016 because goodwill is assessed to have been impaired. Goodwill is still carried in the workpaper for the consolidated entity at its acquisition value of \$250,000, and this amount exceeds its current estimated value of \$230,000 in 2016. Therefore, a workpaper entry is needed to reduce the carrying value to \$230,000, which entails the recording of an impairment loss of \$20,000. This charge, like the excess depreciation, is distributed to the controlling and noncontrolling interests in the income statement for 2016. The impairment loss may be combined with "other expenses" in the consolidating workpaper. In subsequent years, the charge to earnings (like excess depreciation) will flow 80% to the Beginning Retained Earnings of P and 20% to Noncontrolling Interest.

## RELATED CONCEPTS

FASB Concept No. 5 suggests that losses be recognized when previously recognized economic benefits are reduced, as is the case with goodwill impairment. This *loss of benefit* approach attempts to *match* or *time* the recording of expenses or losses in the Income Statement.

|      |  |        |        |
|------|--|--------|--------|
| (2c) | Impairment loss (current year)   | 20,000 |        |
|      | Goodwill   |        | 20,000 |
|      | To reflect the impairment of goodwill recorded in the acquisition of 2013 due to a decline in estimated value in 2016. |        |        |

Clearly, if entries (2a), (2b), and (2c) are recorded separately, the combined entry (2) is not needed.

|   |         |        |
|---|---------|--------|
| (3) Equity in Subsidiary Income   | 112,000 |        |
| Dividends Declared  |         | 48,000 |
| Investment in S Company   |         | 64,000 |
| To reverse the effect of parent company entries during the year 2016 for subsidiary dividends and income. |         |        |



PARTIAL

Observe that the consolidated balances in Illustration 5-14 are the same as those in Illustration 5-10 (cost method workpaper). The workpaper entries to eliminate the investment account and to allocate and depreciate the difference between implied and book values are the same regardless of whether the investment is recorded using the cost method or the partial equity method. Only the entries for intercompany dividends and income and for reciprocity differ.

Illustration 5-7 (on page 197) presents the entries in their separate components for all three years (2015 through 2017) side by side for the partial equity method.

### TEST YOUR KNOWLEDGE 5.3

**NOTE:** Solutions to *Test Your Knowledge* questions are found at the end of each chapter before the end-of-chapter questions.

#### Multiple Choice

- Assuming a FIFO cost flow, which account should normally be debited for the inventory adjustment (assuming market value of subsidiary's inventory to be higher than its book value) when allocating the difference between implied and book values at the end of the year of acquisition?
  - Inventory
  - Beginning Retained Earnings—Parent
  - Cost of Goods Sold
  - Depreciation Expense

## 5.6 CONTROLLING AND NONCONTROLLING INTERESTS IN CONSOLIDATED NET INCOME AND RETAINED EARNINGS—USING PARTIAL EQUITY METHOD

The t-account calculation of consolidated net income (as well as the controlling and noncontrolling interests therein) does not differ between the cost and partial equity methods. As stated earlier, *consolidated net income is the parent company's income from its independent operations plus (minus) the reported subsidiary income (loss) plus or minus adjustments for the period relating to the depreciation/amortization of the difference between implied and book value.*



PARTIAL

The calculation of consolidated net income for the year ended December 31, 2016, presented in Illustration 5-15, is based on Illustration 5-14. This, of course, is the same amount of consolidated net income as that calculated in the consolidated statements workpaper presented in Illustration 5-14.

When the parent company uses the partial equity method to account for its investment, the parent company's share of subsidiary income since acquisition is already included in the parent company's reported retained earnings. Consequently, *consolidated retained earnings are calculated as the parent company's recorded partial equity basis retained earnings plus or minus the cumulative effect of the adjustments to date relating to the depreciation/amortization of the difference between implied and book value.*

The analytical calculation of consolidated retained earnings on December 31, 2016, presented in Illustration 5-16, is based on Illustration 5-14. This, too, is the same amount of consolidated retained earnings as that shown in the consolidated statements workpaper presented in Illustration 5-14.

Alternatively, consolidated retained earnings can be computed by adding beginning consolidated retained earnings to the controlling interest in consolidated net income and subtracting dividends declared by Company P.

|   |                    |
|---|--------------------|
| Beginning consolidated retained earnings              | \$1,818,000        |
| Plus: controlling interest in consolidated net income | 453,000            |
| Less: dividends declared by P Company                 | <u>(150,000)</u>   |
| Ending consolidated retained earnings                 | <u>\$2,121,000</u> |

Similarly, the Noncontrolling Interest in Equity can be computed as follows:

|  |                  |
|--|------------------|
| Beginning Noncontrolling Interest in Equity              | \$555,000        |
| Plus: Noncontrolling Interest in Consolidated Net Income | 18,000           |
| Less: Dividends Declared by S Company to Outsiders       | <u>(12,000)</u>  |
| Ending Noncontrolling Interest in Equity                 | <u>\$561,000</u> |

**ILLUSTRATION 5-15**

**T-account Calculation of Controlling and Noncontrolling Interest in Consolidated Income for Year Ended December 31, 2016**

| Noncontrolling Interest in Consolidated Income   |        |  |                  |
|--|--------|--|------------------|
| Additional depreciation and amortization of the difference between implied and book value related to: Depreciation Expense (\$ 300,000/10) | 30,000 | Net income reported by S Company   | 140,000          |
| Impairment of goodwill (\$250,000 – \$230,000)   | 20,000 |  |                  |
|  |        | Adjusted Net Income  | 90,000           |
|  |        | Noncontrolling Ownership percentage interest   | 20%              |
|  |        | Noncontrolling Interest  | <u>18,000</u>    |
|  |        | Consolidated Income  | <u>18,000</u>    |
| <b>Controlling Interest in Consolidated Income</b>   |        |  |                  |
|  |        | P Company’s net income from its independent operations (\$493,000 reported net income less \$112,000 equity in subsidiary income included therein) | \$381,000        |
|  |        | P Company’s share of the reported income of S company (.8 × \$90,000)  | 72,000           |
|  |        | Controlling interest in Consolidated Net Income  | <u>\$453,000</u> |

.8(\$90,000)

**ILLUSTRATION 5-16**

**Analytical Calculation of Consolidated Retained Earnings December 31, 2016**

|   |  |               |             |             |  |                                   |          |        |  |                             |        |        |  |                        |            |               |  |  |               |               |           |
|---|--|---------------|-------------|-------------|--|-----------------------------------|----------|--------|--|-----------------------------|--------|--------|--|------------------------|------------|---------------|--|--|---------------|---------------|-----------|
| P Company’s retained earnings on December 31, 2016  | \$2,225,000  |               |             |             |  |                                   |          |        |  |                             |        |        |  |                        |            |               |  |  |               |               |           |
| Less cumulative effect to December 31, 2016, of the amortization of the difference between implied and book value (parent’s share): |  |               |             |             |  |                                   |          |        |  |                             |        |        |  |                        |            |               |  |  |               |               |           |
|   | <table border="0" style="width: 100%;"> <tr> <td></td> <td style="text-align: center;"><u>2015</u></td> <td style="text-align: center;"><u>2016</u></td> <td></td> </tr> <tr> <td>Inventory (to cost of goods sold)</td> <td style="text-align: right;">\$40,000</td> <td style="text-align: right;">\$ —0—</td> <td></td> </tr> <tr> <td>Depreciation from Equipment</td> <td style="text-align: right;">24,000</td> <td style="text-align: right;">24,000</td> <td></td> </tr> <tr> <td>Impairment of Goodwill</td> <td style="text-align: right;"><u>—0—</u></td> <td style="text-align: right;"><u>16,000</u></td> <td></td> </tr> <tr> <td></td> <td style="text-align: right;"><u>64,000</u></td> <td style="text-align: right;"><u>40,000</u></td> <td style="text-align: right;">(104,000)</td> </tr> </table> |               | <u>2015</u> | <u>2016</u> |  | Inventory (to cost of goods sold) | \$40,000 | \$ —0— |  | Depreciation from Equipment | 24,000 | 24,000 |  | Impairment of Goodwill | <u>—0—</u> | <u>16,000</u> |  |  | <u>64,000</u> | <u>40,000</u> | (104,000) |
|   | <u>2015</u>  | <u>2016</u>   |             |             |  |                                   |          |        |  |                             |        |        |  |                        |            |               |  |  |               |               |           |
| Inventory (to cost of goods sold)   | \$40,000   | \$ —0—        |             |             |  |                                   |          |        |  |                             |        |        |  |                        |            |               |  |  |               |               |           |
| Depreciation from Equipment   | 24,000   | 24,000        |             |             |  |                                   |          |        |  |                             |        |        |  |                        |            |               |  |  |               |               |           |
| Impairment of Goodwill  | <u>—0—</u>   | <u>16,000</u> |             |             |  |                                   |          |        |  |                             |        |        |  |                        |            |               |  |  |               |               |           |
|   | <u>64,000</u>  | <u>40,000</u> | (104,000)   |             |  |                                   |          |        |  |                             |        |        |  |                        |            |               |  |  |               |               |           |
| Consolidated Retained Earnings on December 31, 2016   | <u>\$2,121,000</u>   |               |             |             |  |                                   |          |        |  |                             |        |        |  |                        |            |               |  |  |               |               |           |

## 5.7 CONSOLIDATED STATEMENTS WORKPAPER—USING COMPLETE EQUITY METHOD

In the preparation of consolidated financial statements, the recorded balances of individual assets, liabilities, and expense accounts must be adjusted to reflect the allocation and depreciation of the differences between implied and book values.

When the parent accounts for its investment using the complete equity method, the parent records excess depreciation, amortization, and impairment arising in the acquisition in its investment account. The income statement effects are recorded as adjustments to the amount recognized as “equity in subsidiary income” each year. Even under this method, however, adjustments are needed to record the effects in the proper accounts for the consolidated entity. For example, the account “equity in subsidiary income” will be eliminated in the consolidated financial statements, and the effects need to be shown directly in “depreciation expense.” Similarly, the investment account will be eliminated, and the adjustments for any differences between implied and book values need to be shown directly in the appropriate asset (inventory, land, equipment, goodwill, etc.) and/or liability accounts. These adjustments must be accomplished through the use of *workpaper entries* in the preparation of the consolidated statements workpaper.



COMPLETE

To illustrate, assume the following:

1. P Company acquires an 80% interest in S Company on January 1, 2015, for \$2,200,000, at which time S Company has capital stock of \$1,500,000 and retained earnings of \$500,000. P Company uses the complete equity method to record its investment in S Company.
2. The allocation of the difference between implied and book values in the amount of \$750,000  $[(\$2,200,000/80\%) - \$2,000,000]$ , as previously presented in Illustration 5-5, includes \$50,000 to Inventory, \$300,000 to Equipment (10-year life), \$150,000 to Land, and \$250,000 to Goodwill.
3. In 2015, S Company reported net income of \$125,000 and declared and paid dividends of \$20,000. During the annual review of its goodwill, the determination is made that the goodwill is currently worth \$255,000.
4. In 2016, S Company reported net income of \$140,000 and declared and paid dividends of \$60,000. During the annual review of its goodwill, the determination is made that the goodwill is currently worth \$230,000 (after performing the two-step process described in Chapter 2).
5. In 2017, S Company reported net income of \$200,000 and declared and paid dividends of \$75,000. During the annual review of its goodwill, the determination is made that the goodwill is currently worth \$250,000.

**Lo 5** Recording investment by Parent, complete equity method.

**Entries on Books of P Company—2015 (year of acquisition) and 2016 (subsequent year)** Entries recorded on the books of P Company under the complete equity method are as follows:

| 2015—Year of Acquisition |   |           |           |
|--------------------------|---|-----------|-----------|
| (1)                      | Investment in S Company   | 2,200,000 |           |
|                          | Cash  |           | 2,200,000 |
|                          | To record purchase of 80% interest in S Company.  |           |           |
| (2)                      | Cash  | 16,000    |           |
|                          | Investment in S Company   |           | 16,000    |
|                          | To record dividends received $(.80 \times \$20,000)$ .  |           |           |
| (3)                      | Investment in S Company   | 100,000   |           |
|                          | Equity in Subsidiary Income   |           | 100,000   |
|                          | To record equity in subsidiary income $(.80 \times \$125,000)$ .  |           |           |
| (4)                      | Equity in Subsidiary Income   | 64,000    |           |
|                          | Investment in S Company   |           | 64,000    |
|                          | To adjust equity in subsidiary income for excess depreciation $(80\% \times \$30,000, \text{ or } \$24,000)$ and the higher value placed on inventory and thus on cost of goods sold $(80\% \times \$50,000, \text{ or } \$40,000)$ . No impairment of goodwill in 2015 since its estimated value > carrying value. See Illustration 5-5. |           |           |



Entries (3) and (4) could be collapsed into one combined entry of \$36,000 (\$100,000 minus \$64,000).

| 2016—Year Subsequent to Acquisition |  |         |         |
|-------------------------------------|--|---------|---------|
| (1)                                 | Cash   | 48,000  |         |
|                                     | Investment in S Company  |         | 48,000  |
|                                     | To record dividends received (.80 × \$60,000).   |         |         |
| (2)                                 | Investment in S Company  | 112,000 |         |
|                                     | Equity in Subsidiary Income  |         | 112,000 |
|                                     | To record equity in subsidiary income (.80 × \$140,000).   |         |         |
| (3)                                 | Equity in Subsidiary Income  | 40,000  |         |
|                                     | Investment in S Company  |         | 40,000  |
|                                     | To reduce equity in subsidiary income for excess depreciation (\$30,000 × 80%) plus impairment of goodwill (\$20,000 × 80%). |         |         |



COMPLETE

Again, entries (2) and (3) could be collapsed into one combined entry of \$72,000 (\$112,000 minus \$40,000).

Note also that the inventory adjustment was needed only in the first year under a first-in, first-out (FIFO) cost flow assumption.

After these entries are posted, the Investment account will appear as follows:

| Investment in S Company |                  |  |        |
|-------------------------|------------------|--|--------|
| (1) Cost                | 2,200,000        | (2) Dividends                                      | 16,000 |
| (3) Subsidiary Income   | 100,000          | (4) Excess depreciation, and<br>Cost of Goods Sold | 64,000 |
| <b>12/31/15 Balance</b> | <b>2,220,000</b> | (1) Dividends                                      | 48,000 |
| (2) Subsidiary Income   | 112,000          | (3) Excess depreciation and<br>goodwill impairment | 40,000 |
| <b>12/31/16 Balance</b> | <b>2,244,000</b> |  |        |

**LO 6** Workpaper entries, year of acquisition, complete equity.

**Workpaper Entries—2015 (Year of Acquisition)** A consolidated statements workpaper under the complete equity method for the year ended December 31, 2015, is presented in Illustration 5-17. Workpaper entries in Illustration 5-17 are presented in general journal form as follows:

|     |   |           |           |
|-----|---|-----------|-----------|
| (1) | Beginning Retained Earnings—S Company     | 500,000   |           |
|     | Capital Stock—S Company                   | 1,500,000 |           |
|     | Difference between Implied and Book Value | 750,000   |           |
|     | Investment in S Company                   |           | 2,200,000 |
|     | Noncontrolling Interest in Equity         |           | 550,000   |

To eliminate the investment account against the equity accounts of S Company using equity balances at the *beginning of the current year*, and recognize the noncontrolling interest in equity.

|      |   |         |         |
|------|---|---------|---------|
| (2a) | Cost of Goods Sold (beginning inventory)  | 50,000  |         |
|      | Equipment (net) (10-year remaining life)  | 300,000 |         |
|      | Land                                      | 150,000 |         |
|      | Goodwill                                  | 250,000 |         |
|      | Difference between Implied and Book Value |         | 750,000 |



COMPLETE

By the end of the first year, under a FIFO cost flow assumption, the inventory that necessitated the \$50,000 adjustment would have been sold. Recall that at the date of acquisition, this adjustment was to Inventory. At the end of the first year, however, the entry is to Cost of Goods Sold (or to Beginning Inventory, as a subcomponent of the Cost of Goods Sold). Since S Company will not have included the additional \$50,000 allocated to inventory in its reported Cost of Goods Sold (COGS), consolidated Cost of Goods Sold must be

| Complete Equity Method                       |                  | ILLUSTRATION 5-17                 |                  |                  |                         |                       |
|--|------------------|-----------------------------------|------------------|------------------|-------------------------|-----------------------|
| 80% Owned Subsidiary                         |                  | Consolidated Statements Workpaper |                  |                  |                         |                       |
| Year of Acquisition                          |                  | P Company and Subsidiary          |                  |                  |                         |                       |
| for Year Ended December 31, 2015             |                  |                                   |                  |                  |                         |                       |
| Income Statement                             | P                | S                                 | Eliminations     |                  | Noncontrolling Interest | Consolidated Balances |
|  | Company          | Company                           | Dr.              | Cr.              |                         |                       |
| Sales  | 3,100,000        | 2,200,000                         |                  |                  |                         | 5,300,000             |
| Equity in Subsidiary Income                  | 36,000           |                                   | (3b)             | 100,000          | (3c)                    | 64,000                |
| Total Revenue                                | <u>3,136,000</u> | <u>2,200,000</u>                  |                  |                  |                         | <u>5,300,000</u>      |
| Cost of Goods Sold                           | 1,700,000        | 1,360,000                         | (2a)             | 50,000           |                         | 3,110,000             |
| Depreciation—Equipment                       | 120,000          | 30,000                            | (2b)             | 30,000           |                         | 180,000               |
| Other Expenses                               | 998,000          | 685,000                           |                  |                  |                         | 1,683,000             |
| Total Cost and Expense                       | <u>2,818,000</u> | <u>2,075,000</u>                  |                  |                  |                         | <u>4,973,000</u>      |
| Net/Consolidated Income                      | 318,000          | 125,000                           |                  |                  |                         | 327,000               |
| Noncontrolling Interest in Income            |                  |                                   |                  |                  | 9,000*                  | 9,000                 |
| Net Income to Retained Earnings              | <u>318,000</u>   | <u>125,000</u>                    | <u>180,000</u>   | <u>64,000</u>    | <u>9,000</u>            | <u>318,000</u>        |
| <i>Retained Earnings Statement</i>           |                  |                                   |                  |                  |                         |                       |
| 1/1 Retained Earnings                        |                  |                                   |                  |                  |                         |                       |
| P Company                                    | 1,650,000        |                                   |                  |                  |                         | 1,650,000             |
| S Company                                    |                  | 500,000                           | (1)              | 500,000          |                         |                       |
| Net Income from above                        | 318,000          | 125,000                           | 180,000          | 64,000           | 9,000                   | 318,000               |
| Dividends Declared                           |                  |                                   |                  |                  |                         |                       |
| P Company                                    | (150,000)        |                                   |                  |                  |                         | (150,000)             |
| S Company                                    |                  | (20,000)                          |                  | (3a)             | 16,000                  | (4,000)               |
| 12/31 Retained Earnings to Balance Sheet     | <u>1,818,000</u> | <u>605,000</u>                    | <u>680,000</u>   | <u>80,000</u>    | <u>5,000</u>            | <u>1,818,000</u>      |
| <i>Balance Sheet</i>                         |                  |                                   |                  |                  |                         |                       |
| Investment in S Company                      | 2,220,000        |                                   | (3a)             | 16,000           | (1)                     | 2,200,000             |
|  |                  |                                   | (3c)             | 64,000           | (3b)                    | 100,000               |
| Difference between Implied and Book Value    |                  |                                   | (1)              | 750,000          | (2a)                    | 750,000               |
| Land   | 1,250,000        | 250,000                           | (2a)             | 150,000          |                         | 1,650,000             |
| Equipment (net)                              | 1,080,000        | 270,000                           | (2a)             | 300,000          | (2b)                    | 30,000                |
| Other Assets (net)                           | 2,402,000        | 1,885,000                         |                  |                  |                         | 4,287,000             |
| Goodwill (Excess of Implied over Fair Value) |                  |                                   | (2a)             | 250,000          |                         | 250,000               |
| Total Assets                                 | <u>6,952,000</u> | <u>2,405,000</u>                  |                  |                  |                         | <u>7,807,000</u>      |
| Liabilities                                  | 2,134,000        | 300,000                           |                  |                  |                         | 2,434,000             |
| Capital Stock                                |                  |                                   |                  |                  |                         |                       |
| P Company                                    | 3,000,000        |                                   |                  |                  |                         | 3,000,000             |
| S Company                                    |                  | 1,500,000                         | (1)              | 1,500,000        |                         |                       |
| Retained Earnings from above                 | 1,818,000        | 605,000                           | 680,000          | 80,000           | 5,000                   | 1,818,000             |
| 1/1 Noncontrolling Interest in Net Assets    |                  |                                   |                  |                  | (1)                     | 550,000               |
| 12/31 Noncontrolling Interest in Net Assets  |                  |                                   |                  |                  |                         | <u>555,000</u>        |
| Total Liabilities and Equity                 | <u>6,952,000</u> | <u>2,405,000</u>                  | <u>3,710,000</u> | <u>3,710,000</u> |                         | <u>7,807,000</u>      |

\*20% × (\$125,000 – \$30,000 – \$50,000) = \$9,000.

(1) To eliminate the investment account and create noncontrolling interest account.

(2a) To allocate differences between implied and book value.

(2b) To depreciate the difference between implied and book value assigned to equipment (300,000/10).

(3a) To eliminate equity in subsidiary income.

(3b) To eliminate intercompany dividends.

(3c) To reverse the adjustments to subsidiary income recognized by the parent.

increased by this workpaper entry. If the inventory were still on hand on December 31, 2015 (for example, if a LIFO flow were assumed), the \$50,000 would be allocated to ending inventory in the balance sheet rather than to Cost of Goods Sold.

This entry to Cost of Goods Sold is appropriate only in the year of acquisition. In subsequent years, consolidated COGS will have been reflected in the 2015 consolidated net income and hence consolidated retained earnings at the end of 2015. On the books of P Company, the adjustment is reflected in equity in subsidiary income (and thus in ending retained earnings) and in the investment account. Because the investment account must be eliminated in the consolidating process, the entry to COGS is replaced in future years by entries to Investment in S Company (\$40,000 debit) and to Noncontrolling Interest (\$10,000 debit). These workpaper entries serve to facilitate the elimination of the investment account by reversing an adjustment made by the parent, and to adjust Beginning Noncontrolling Interest in Equity downward for its share (20%) of the charge.

|      |  |        |        |
|------|--|--------|--------|
| (2b) | Depreciation Expense (\$300,000/10 years)  | 30,000 |        |
|      | Equipment (net) <sup>7</sup>   |        | 30,000 |
|      | To depreciate the amount of difference between implied and book value allocated to equipment (see Illustration 5-5). |        |        |



COMPLETE

As previously noted, depreciation in the consolidated income statement should be based on the value assigned to the equipment in the consolidated balance sheet. Since the depreciation recorded by S Company is based on the book value of the equipment in its records, consolidated depreciation must be increased by a workpaper entry.

The amount of the difference between implied and book values not allocated to specific identifiable assets or liabilities is treated in the consolidated financial statements as goodwill. Companies are not currently required to amortize goodwill. Instead it is adjusted only when impaired. In the year 2015, goodwill is assessed to be worth \$255,000, which is more than its carrying value of \$250,000. Thus, no impairment entry is needed.

It is possible, of course, to combine the workpaper entries relating to the allocation and depreciation of the differences between implied and book values into one entry. In Illustration 5-17, for example, workpaper entries (2a) and (2b) could be presented in one combined entry as follows:

|     |   |         |         |
|-----|---|---------|---------|
| (2) | Cost of Goods Sold (Beginning Inventory)  | 50,000  |         |
|     | Depreciation Expense                      | 30,000  |         |
|     | Equipment (net) (\$300,000 – \$30,000)    | 270,000 |         |
|     | Land                                      | 150,000 |         |
|     | Goodwill                                  | 250,000 |         |
|     | Difference between Implied and Book Value |         | 750,000 |

Next we reverse the effect of parent company entries during the year for subsidiary dividends and income. Here entries may also be combined or separated to record the reversal of dividends in one entry, the reversal of reported income in a second entry, and the reversal of adjustments to subsidiary income in a third.

|      |   |         |         |
|------|---|---------|---------|
| (3a) | Investment in S Company   | 16,000  |         |
|      | Dividends Declared  |         | 16,000  |
|      | To reverse the effect of dividends declared by the subsidiary and received by the parent.   |         |         |
| (3b) | Equity in Subsidiary Income   | 100,000 |         |
|      | Investment in S Company   |         | 100,000 |
|      | To reverse the effect of subsidiary reported income recognized in the books of the parent.  |         |         |
| (3c) | Investment in S Company   | 64,000  |         |
|      | Equity in Subsidiary Income   |         | 64,000  |
|      | To reverse the adjustments to subsidiary income recognized by the parent $80\% \times (\$50,000 \text{ cost of goods sold and } \$30,000 \text{ depreciation})$ . |         |         |

<sup>7</sup> The credit to this entry could also be accumulated depreciation.

Alternatively, the effects of entries (3a) through (3c) may be combined into one entry, as follows:

|  |        |        |
|--|--------|--------|
| (3) Equity in Subsidiary Income  | 36,000 |        |
| Dividends Declared   |        | 16,000 |
| Investment in S Company  |        | 20,000 |
| To reverse the effect of parent company entries during the year for subsidiary dividends and income. |        |        |

The calculation of noncontrolling interest in Illustration 5-17 is affected by the amortization/depreciation of the differences between implied and book value.

**Entries on Workpapers—2016 (Year Subsequent to Acquisition)** Next, a consolidated statements workpaper under the complete equity method for the year ended December 31, 2016, is presented in Illustration 5-18. Workpaper entries in Illustration 5-18 are presented in general journal form as follows:



|  |           |           |
|--|-----------|-----------|
| (1) Beginning Retained Earnings—S Company                        | 605,000   |           |
| Capital Stock—S Company  | 1,500,000 |           |
| Difference between Implied and Book Value                        | 750,000   |           |
| Investment in S Company (\$2,200,000 + \$84,000)                 |           | 2,284,000 |
| Noncontrolling Interest [\$550,000 + 20% (\$125,000 – \$20,000)] |           | 571,000   |

|  |         |         |
|--|---------|---------|
| (2) Investment in S Company (adjustments from prior year for 80% depreciation and for 80% COGS: 40,000 + 24,000) | 64,000  |         |
| Noncontrolling Interest (adjustments from prior year for 20% depreciation & COGS)                                | 16,000  |         |
| Depreciation Expense (\$300,000/10)  | 30,000  |         |
| Impairment Loss on Goodwill (\$250,000 – \$230,000)  | 20,000  |         |
| Equipment (net) (\$300,000 – \$30,000 – \$30,000)  | 240,000 |         |
| Land   | 150,000 |         |
| Goodwill   | 230,000 |         |
| Difference between Implied and Book Value  |         | 750,000 |
| To allocate and depreciate the difference between implied and book values.                                       |         |         |

To separate the preceding entry into its more digestible components, begin with the allocation of the difference between implied and book values and then proceed to record excess depreciation and goodwill impairment as follows:

|  |         |         |
|--|---------|---------|
| (2a) Investment in S Company (80% of previous year's cost of goods sold)   | 40,000  |         |
| Noncontrolling Interest (20% of previous year's cost of goods sold)  | 10,000  |         |
| Equipment  | 300,000 |         |
| Land   | 150,000 |         |
| Goodwill   | 250,000 |         |
| Difference between Implied and Book Value  |         | 750,000 |
| To allocate the amount of difference between implied and book values at date of acquisition to specific assets and liabilities (see Illustration 5-2). |         |         |



Entry(2a) is identical to that recorded in the preceding year, with the exception that the entry to Cost of Goods Sold is appropriate only in the year of acquisition. Consolidated COGS will have been reflected in the 2015 consolidated net income and hence consolidated retained earnings (80%) and Noncontrolling Interest (20%) at the end of 2015. On the books of P Company, the adjustment was reflected in equity in subsidiary income in 2015 (and thus in ending retained earnings) and in the investment account. Because the investment account must be eliminated in the consolidating process, the entry to COGS is

## Complete Equity Method

## ILLUSTRATION 5-18

80% Owned Subsidiary

## Consolidated Statements Workpaper

Subsequent to

## P Company and Subsidiary

Year of Acquisition

for Year Ended December 31, 2016

| <i>Income Statement</i>                      | <i>P Company</i> | <i>S Company</i> | <i>Eliminations</i> |                  | <i>Noncontrolling Interest</i> | <i>Consolidated Balances</i> |
|--|------------------|------------------|---------------------|------------------|--------------------------------|------------------------------|
|  |                  |                  | <i>Dr.</i>          | <i>Cr.</i>       |                                |                              |
| Sales  | 3,534,000        | 2,020,000        |                     |                  |                                | 5,554,000                    |
| Equity in Subsidiary Income                  | 72,000           |                  | (3)                 | 72,000           |                                |                              |
| Total Revenue                                | <u>3,606,000</u> | <u>2,020,000</u> |                     |                  |                                | <u>5,554,000</u>             |
| Cost of Goods Sold                           | 2,040,000        | 1,200,000        |                     |                  |                                | 3,240,000                    |
| Depreciation—Equipment                       | 120,000          | 30,000           | (2b)                | 30,000           |                                | 180,000                      |
| Other Expenses                               | 993,000          | 650,000          | (2c)                | 20,000           |                                | 1,663,000                    |
| Total Cost and Expense                       | <u>3,153,000</u> | <u>1,880,000</u> |                     |                  |                                | <u>5,083,000</u>             |
| Net/Consolidated Income                      | 453,000          | 140,000          |                     |                  |                                | 471,000                      |
| Noncontrolling Interest in Income            |                  |                  |                     |                  | 18,000*                        | 18,000                       |
| Net Income to Retained Earnings              | <u>453,000</u>   | <u>140,000</u>   | <u>122,000</u>      | <u>—0—</u>       | <u>18,000</u>                  | <u>453,000</u>               |
| <i>Retained Earnings Statement</i>           |                  |                  |                     |                  |                                |                              |
| 1/1 Retained Earnings                        |                  |                  |                     |                  |                                |                              |
| P Company                                    | 1,818,000        |                  |                     |                  |                                | 1,818,000                    |
| S Company                                    |                  | 605,000          | (1)                 | 605,000          |                                |                              |
| Net Income from above                        | 453,000          | 140,000          | 122,000             | —0—              | 18,000                         | 453,000                      |
| Dividends Declared                           |                  |                  |                     |                  |                                |                              |
| P Company                                    | (150,000)        |                  |                     |                  |                                | (150,000)                    |
| S Company                                    |                  | (60,000)         |                     | (3) 48,000       | (12,000)                       |                              |
| 12/31 Retained Earnings to Balance Sheet     | <u>2,121,000</u> | <u>685,000</u>   | <u>727,000</u>      | <u>48,000</u>    | <u>6,000</u>                   | <u>2,121,000</u>             |
| <i>Balance Sheet</i>                         |                  |                  |                     |                  |                                |                              |
| Investment in S Company                      | 2,244,000        |                  | (2a) 40,000         | (3) 24,000       |                                |                              |
|  |                  |                  | (2b) 24,000         | (1) 2,284,000    |                                |                              |
| Difference between Implied and Book Value    |                  |                  | (1) 750,000         | (2a) 750,000     |                                |                              |
| Land   | 2,000,000        | 250,000          | (2a) 150,000        |                  |                                | 2,400,000                    |
| Equipment (net)                              | 960,000          | 240,000          | (2a) 300,000        | (2b) 60,000      |                                | 1,440,000                    |
| Other Assets (net)                           | 2,137,000        | 2,200,000        |                     |                  |                                | 4,337,000                    |
| Goodwill (Excess of Implied over Fair Value) |                  |                  | (2a) 250,000        | (2c) 20,000      |                                | 230,000                      |
| Total Assets                                 | <u>7,341,000</u> | <u>2,690,000</u> |                     |                  |                                | <u>8,407,000</u>             |
| Liabilities                                  | 2,220,000        | 505,000          |                     |                  |                                | 2,725,000                    |
| Capital Stock                                |                  |                  |                     |                  |                                |                              |
| P Company                                    | 3,000,000        |                  |                     |                  |                                | 3,000,000                    |
| S Company                                    |                  | 1,500,000        | (1) 1,500,000       |                  |                                |                              |
| Retained Earnings from above                 | 2,121,000        | 685,000          | 727,000             | 48,000           | 6,000                          | 2,121,000                    |
| 1/1 Noncontrolling Interest in Net Assets    |                  |                  | (2a) 10,000         |                  |                                |                              |
|  |                  |                  | (2b) 6,000          | (1) 571,000**    | 555,000                        |                              |
| 12/31 Noncontrolling Interest in Net Assets  |                  |                  |                     |                  | <u>561,000</u>                 | <u>561,000</u>               |
| Total Liabilities and Equity                 | <u>7,341,000</u> | <u>2,690,000</u> | <u>3,757,000</u>    | <u>3,757,000</u> |                                | <u>8,407,000</u>             |

\* 20% × (\$140,000 - \$30,000 - \$20,000) = \$18,000.

\*\* \$550,000 + [20% × (\$605,000 - \$500,000)] = \$571,000.

(1) To eliminate investment account and create noncontrolling interest account.

(2a) To allocate the amount of difference between implied and book value at date of acquisition to specific assets and liabilities.

(2b) To depreciate the amount of difference between implied and book value allocated to equipment.

(2c) To record goodwill impairment.

(3) To reverse the effect of parent company entries during the year for subsidiary dividends and income.

replaced here and in future years by an entry (\$40,000 debit) to Investment in S Company, and a \$10,000 debit to Beginning Noncontrolling Interest in Equity.

This component of the entry captures one of the basic differences between the Complete Equity method and the other two methods. Only under the Complete Equity method does the parent's beginning retained earnings exactly match the amount reported as consolidated retained earnings at the end of the previous year. Hence fewer workpaper adjustments to Beginning Retained Earnings—P Company are needed under the Complete Equity method. The \$40,000 adjustment in year 2 (and future years) related to inventory valuation is made to Investment in S Company, serving to facilitate the elimination of the investment account (by reversing an adjustment made by the parent).

|      |  |        |        |
|------|--|--------|--------|
| (2b) | Depreciation Expense (current year)  | 30,000 |        |
|      | Investment in S (80% of previous year's depreciation expense)                                  | 24,000 |        |
|      | Noncontrolling Interest (20% of previous year's depreciation expense)                          | 6,000  |        |
|      | Equipment (net) or Accumulated Depreciation  |        | 60,000 |
|      | To depreciate the amount of difference between implied and book values allocated to equipment. |        |        |

This entry differs from the first-year entry in that the excess depreciation from the year 2015 is now reflected in a lowered balance in the Investment account, and this entry serves to reverse that adjustment (again to facilitate eliminating the Investment account). Although the adjustment to Equipment (net) was already made in the prior-year workpaper for one year's depreciation adjustment, it was not posted to the books of S Company and hence must be made again. If the following year (2017) were being presented, the debit to Depreciation Expense would remain at 30,000, but the debit to Investment in S Company would be \$48,000 to reflect two prior years of excess depreciation, Noncontrolling Interest would be debited for \$12,000, and the credit to Net Equipment would total 90,000.

Entry (2c) is a new entry that is needed in 2016 because goodwill is assessed to have been impaired. Goodwill is still carried in the workpaper for the consolidated entity at its acquisition value of \$250,000, and this amount exceeds its current estimated value of \$230,000 in 2016. Therefore, a workpaper entry is needed to reduce the carrying value to \$230,000, which entails the recording of an impairment loss of \$20,000. This charge, like the excess depreciation, is distributed to the controlling and noncontrolling interests in the income statement for 2016. The impairment loss may be combined with "other expenses" in the consolidating workpaper.

In subsequent years, the charge to earnings (like excess depreciation) will flow 80% to the Investment in S Company and 20% to Noncontrolling Interest.

|      |   |        |        |
|------|---|--------|--------|
| (2c) | Impairment loss (current year)  | 20,000 |        |
|      | Goodwill  |        | 20,000 |
|      | To reflect the impairment of goodwill recorded in the acquisition of 2013 due to a decline in value as of 2014. |        |        |

Clearly, if entries (2a) through (2c) are recorded separately, the combined entry (2) is not needed.

|     |   |        |        |
|-----|---|--------|--------|
| (3) | Equity in Subsidiary Income (after depreciation and goodwill impairment adjustments)                      | 72,000 |        |
|     | Dividends Declared  |        | 48,000 |
|     | Investment in S Company   |        | 24,000 |
|     | To reverse the effect of parent company entries during the year 2014 for subsidiary dividends and income. |        |        |

Observe that the consolidated balances in Illustration 5-18 are the same as those in Illustration 5-10 (cost method workpaper) and in Illustration 5-14 (partial equity workpaper). Illustration 5-8 (on page 198) presents the entries in their separate components for all three years side by side for the complete equity method.

## 5.8 CONTROLLING INTEREST IN CONSOLIDATED NET INCOME AND RETAINED EARNINGS—USING COMPLETE EQUITY METHOD

When the parent uses the complete equity method, its reported income equals the controlling interest in consolidated net income. As with the other methods, the amount of consolidated income is *the parent company's income from its independent operations plus (minus) the subsidiary income (loss) plus or minus adjustments for the period relating to the depreciation/amortization and impairment of the difference between implied and book values of depreciable or amortizable assets (and liabilities)*. Note that *consolidated income*, as opposed to the *controlling interest in consolidated income*, includes both the parent's share and the noncontrolling interest in subsidiary income (loss).



COMPLETE

The amount of consolidated net income for the year ended December 31, 2016, is \$471,000, with \$18,000 allocated to the noncontrolling interest and the remaining \$453,000 to the controlling interest. Observe that the \$453,000 is reported both in the farthest left-hand column of Illustration 5-18 (P Company income) and again in the farthest right-hand column, labeled as "Net Income to Retained Earnings" (controlling interest in consolidated net income).

Similarly, the amount of consolidated retained earnings (\$2,121,000) at the end of 2016 is the same as the ending retained earnings reported by P Company. Again compare the amount in the retained earnings section in the farthest left-hand column of Illustration 5-18 (P Company) to the amount in the farthest right-hand column (consolidated retained earnings). The amounts agree because P Company recognizes all adjustments in the income statement account "equity in subsidiary income" and thus in retained earnings.

IN  
THE  
NEWS

Pursuant to the provisions of Accounting Standards Codification topic 350, "Intangibles—Goodwill and Other" ("ASC 350"), our goodwill was tested for impairment annually (or more frequently if impairment indicators arose). As a result of our annual test on January 31, 2009, all of the goodwill of our continuing operations was impaired, and we recorded a resulting charge of \$40.3 million in the fourth quarter of 2008. This impairment was primarily the result of a decrease in fair value due to the material decline in our market capitalization during the fourth quarter of 2008. The charge is categorized as "Goodwill impairment" on our consolidated statements of operations.<sup>8</sup>

## 5.9 ADDITIONAL CONSIDERATIONS RELATING TO TREATMENT OF DIFFERENCE BETWEEN IMPLIED AND BOOK VALUES

We present additional considerations relating to the treatment of the difference between implied and book value in the following sections. These considerations include allocation of the difference between implied and book values to liabilities and to assets with fair values less than book values; the separate disclosure of accumulated depreciation; premature disposals of long-lived assets by the subsidiary; and depreciable assets used in manufacturing.

### Allocation of Difference between Implied and Book Values to Debt

**Adjustment of Contingent Liabilities and Reserves** Often an acquiring firm re-assesses the adequacy of the acquired firm's accounting for contingent liabilities, purchase commitments, reserves, and so on, prior to its allocation of any difference between implied and book values. If the accounting for these items falls into a gray area of GAAP, the purchaser may decide to allocate some of the difference between implied and book values to adjust or create liability accounts. For example, suppose that the purchaser assesses a contingent liability of the acquired firm to be both probable and reasonably estimable, whereas

<sup>8</sup> Borders Group Inc. 10K, 2011.

the acquired firm had previously disclosed it only in a note because it was deemed reasonably possible (but not probable). By adjusting liabilities upward, the difference to be allocated to assets (and potentially to goodwill) is increased.

Interestingly, although many firms have been criticized for manipulating earnings to avoid recording goodwill, the Walt Disney Company, in its acquisition of Capital/ABC, was accused by some sources of managing earnings via liabilities to record *excessive* goodwill. The *increase in recorded liabilities* in such a case could be viewed as providing a sort of cushion or management tool for future earnings manipulation.

IN  
THE  
NEWS

Disney's accountants created \$2.5 billion in liabilities by asserting that Capital Cities/ABC ignored the timing of anticipated cash flows from future programming that the network agreed to finance (at least in part). This implies that after the merger, if programming costs increased, Disney would have an option of writing these amounts off against these liabilities instead of running them through the income statement.<sup>9</sup>

### Allocation of Difference between Implied and Book Values to Long-Term Debt

**LO 7** Allocating difference to long-term debt.

Notes payable, long-term debt, and other obligations of an acquired company should be valued for consolidation purposes at their fair values. The fair value of liabilities is the price that would be paid to transfer a liability in an orderly transaction between market participants at the measurement date. A fair value measurement assumes both, that the liability is transferred to a market participant at the measurement date and that the nonperformance risk relating to that liability is the same before and after its transfer. The fair value of the liability should reflect the nonperformance risk relating to that liability.<sup>10</sup>

The reporting entity should consider the effect of its credit risk (credit standing) on the fair value of the liability. Valuation techniques used to measure fair value should be consistently applied. Valuation techniques consistent with the market approach or income approach should be used to measure fair value. The market approach is defined as a valuation technique that uses prices and other relevant information generated by market transactions involving identical or comparable liabilities. The income approach is defined as an approach that uses valuation techniques to convert future amounts (for example, cash flows or earnings) to a single present amount (discounted). This is the present value technique.

To increase consistency and comparability in fair value measurements and related disclosures, the fair value hierarchy prioritizes the inputs to valuation techniques used to measure fair value into three broad levels. The fair value hierarchy gives the highest priority to quoted prices (unadjusted) in active markets for identical liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). In some cases, the inputs used to measure fair value might fall in different levels of the fair value hierarchy. The level in the fair value hierarchy within which the fair value measurement in its entirety falls should be determined based on the lowest level input that is significant to the entire fair value measurement. Assessing the significance of a particular input to the fair value measurement in its entirety requires judgment, and consideration of factors specific to the asset or liability.

Assume that S Company has outstanding \$500,000 in 6%, 30-year bonds that were issued at par on January 1, 1990, and that interest on the bonds is paid annually. Assume further that on January 1, 2015, when P Company acquires a 100% interest in S Company, the yield rate on bonds with similar risk is 10%. The present value of S Company's bonds

<sup>9</sup> *Barron's*, "Disney's Real Magic," by Abraham Briloff, 3/23/98, pp. 17–20.

<sup>10</sup> FASB ASC topic 820 [Fair Value Measurement] states, "If a present value technique is used, the estimated future cash flows should not ignore relevant provisions of the debt agreement (for example, the right of the issuer to prepay)."



payable determined at the effective yield rate on the acquisition date for five periods (the time until maturity) is calculated as follows:

|   |                  |
|---|------------------|
| (1) Interest Payments $\$30,000 \times 3.79079 =$       | \$113,724        |
| (2) Principal Payment $\$500,000 \times .62092 =$       | <u>310,460</u>   |
| Present Value of Future Cash Payments Discounted at 10% | <u>\$424,184</u> |

(1) The present value of an annuity of one for five periods discounted at 10% is 3.79079.

(2) The present value of an amount of one received five periods hence discounted at 10% is 0.62092.

From the point of view of the consolidated entity, bonds payable are overstated on January 1, 2015, by \$75,816 ( $\$500,000 - \$424,184$ ) and a corresponding amount of the total difference between implied and book values on the date of acquisition must be allocated to “unamortized discount on bonds payable.” In years after acquisition, interest expense reported by the subsidiary will be understated for consolidation purposes. Thus, workpaper entries must be made to amortize the discount in a manner that will reflect consolidated interest expense as a constant rate on the carrying value of the liability to the consolidated entity. An amortization schedule for this purpose is presented in Illustration 5-19. Consolidated statements workpaper entries necessary in the first five years subsequent to P Company’s acquisition of S Company are summarized in the following table.

#### ILLUSTRATION 5-19

##### Bond Discount Amortization Schedule

| Date       | Interest Expense<br>Recorded by S | Consolidated<br>Interest Expense | Discount<br>Amortization | Consolidated<br>Carrying Value |
|------------|-----------------------------------|----------------------------------|--------------------------|--------------------------------|
| 1/1/2015   | \$ —0—                            | \$ —0—                           | \$ —0—                   | \$424,184                      |
| 12/31/2015 | 30,000                            | 42,418(1)                        | 12,418(2)                | 436,602(3)                     |
| 12/31/2016 | 30,000                            | 43,660(4)                        | 13,660                   | 450,262                        |
| 12/31/2017 | 30,000                            | 45,026                           | 15,026                   | 465,288                        |
| 12/31/2018 | 30,000                            | 46,529                           | 16,529                   | 481,817                        |
| 12/31/2019 | <u>30,000</u>                     | <u>48,183</u>                    | <u>18,183</u>            | 500,000                        |
|            | <u>150,000</u>                    | <u>225,816</u>                   | <u>75,816</u>            |                                |

(1)  $.10 \times \$424,184 = \$42,418$ .

(2)  $\$42,418 - \$30,000 = \$12,418$ .

(3)  $\$424,184 + \$12,418 = \$436,602$ .

(4)  $.10 \times \$436,602 = \$43,660$ .

#### Cost and Partial Equity Methods

| December 31  | 2015   |        | 2016   |        | 2017   |        | 2018   |        | 2019   |        |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|  | Debit  | Credit | Debit  | Credit | Debit  | Credit | Debit  | Credit | Debit  | Credit |
| Unamortized Discount on Bonds Payable                                  | 75,816 |        | 75,816 |        | 75,816 |        | 75,816 |        | 75,816 |        |
| Difference between Implied and Book Value                              |        | 75,816 |        | 75,816 |        | 75,816 |        | 75,816 |        | 75,816 |
| Beginning Retained Earnings—P Company (Consolidated Retained Earnings) | —0—    |        | 12,418 |        | 26,078 |        | 41,104 |        | 57,633 |        |
| Interest Expense   | 12,418 |        | 13,660 |        | 15,026 |        | 16,529 |        | 18,183 |        |
| Unamortized Discount on Bonds Payable                                  |        | 12,418 |        | 26,078 |        | 41,104 |        | 57,633 |        | 75,816 |

### Complete Equity Method

| December 31                               | 2015   |        | 2016   |        | 2017   |        | 2018   |        | 2019   |        |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|   | Debit  | Credit | Debit  | Credit | Debit  | Credit | Debit  | Credit | Debit  | Credit |
| Unamortized Discount on Bonds Payable     | 75,816 |        | 75,816 |        | 75,816 |        | 75,816 |        | 75,816 |        |
| Difference between Implied and Book Value |        | 75,816 |        | 75,816 |        | 75,816 |        | 75,816 |        | 75,816 |
| Investment in S Company                   | —0—    |        | 12,418 |        | 26,078 |        | 41,104 |        | 57,633 |        |
| Interest Expense                          | 12,418 |        | 13,660 |        | 15,026 |        | 16,529 |        | 18,183 |        |
| Unamortized Discount on Bonds Payable     |        | 12,418 |        | 26,078 |        | 41,104 |        | 57,633 |        | 75,816 |

At maturity the bonds will be redeemed at par value (\$500,000), which also will be the carrying value to the consolidated entity. In all subsequent years after redemption, \$75,816 of the difference between implied and book value will be debited to the beginning retained earnings of the parent company in the consolidated statements workpaper in order to reduce beginning consolidated retained earnings for the cumulative amount of additional interest expense recognized in the consolidated financial statements in prior years. If the complete equity method is used, the debit will be to the Investment account, as the parent should have already reflected the adjustment to earnings in its equity in subsidiary income and hence in its retained earnings.

The preceding example was based on the assumption that P Company owned a 100% interest in S Company. If P Company owned an 80% interest rather than a 100% interest in S Company, the amount of the difference between implied and book value allocated to unamortized discount on bonds payable on the date of acquisition is still \$75,816. However, the subsequent year debits would be split between beginning retained earnings of the parent company (80%) and Noncontrolling Interest (20%) under the cost and partial equity methods. Under the complete equity method, the subsequent year debits would be split between the Investment account (80%) and Noncontrolling Interest (20%).

### Allocating the Difference to Assets (Liabilities) with Fair Values Less (Greater) than Book Values

**LO 8** Allocation when the fair value is below book value.

Sometimes the fair value of an asset on the date of acquisition is less than the amount recorded on the books of the subsidiary. In this case, the allocation of the difference between the fair value and the book value of the asset will result in a reduction of the asset. If the asset is depreciable, this difference will be amortized over the life of the asset as a reduction of depreciation expense. Likewise, the fair value of the long-term debt may be greater rather than less than its recorded value on the date of acquisition. In this case, entries are necessary to allocate the difference between the fair value and book value of the debt to unamortized bond premium and to amortize it over the remaining life of the debt as a reduction of interest expense.

To illustrate, assume that P Company paid \$2,240,000 for 80% of the outstanding stock of S Company when S Company had identifiable net assets with a fair value of \$2,600,000 and a book value of \$2,150,000. The fair values and book values of identifiable assets and liabilities are presented in Illustration 5-20. The Computation and Allocation (CAD) Schedule is presented next.

Assume that the \$125,000 allocated to bond premium is amortized over five years using the straight-line method<sup>11</sup> and that the equipment has a remaining life of four years.

**ILLUSTRATION 5-20****Allocation of Difference between Implied and Book Value**

|                                    | <i>Fair Value</i> | <i>Book Value</i> | <i>Difference between<br/>Fair Value and Book Value</i> |
|------------------------------------|-------------------|-------------------|---|
| Securities                         | 550,000           | 400,000           | 150,000   |
| Equipment (net)                    | 1,250,000         | 1,500,000         | (250,000)   |
| Land                               | 1,225,000         | 550,000           | 675,000   |
| Bonds payable                      | (725,000)         | (600,000)         | (125,000)   |
| Other assets and liabilities (net) | 300,000           | 300,000           | —0—   |
| Total                              | <u>2,600,000</u>  | <u>2,150,000</u>  | <u>450,000</u>  |

**Computation and Allocation of Difference Schedule**

|   | <i>Parent Share</i> | <i>Noncontrolling<br/>Share</i> | <i>Entire Value</i> |
|---|---------------------|---------------------------------|---------------------|
| Purchase price and implied value          | <b>\$2,240,000</b>  | <b>560,000</b>                  | 2,800,000           |
| Less: Book value of equity acquired       | 1,720,000           | 430,000                         | <b>2,150,000</b>    |
| Difference between implied and book value | 520,000             | 130,000                         | <b>650,000</b>      |
| Increase Securities                       | (120,000)           | (30,000)                        | <b>(150,000)</b>    |
| Decrease Equipment                        | 200,000             | 50,000                          | <b>250,000</b>      |
| Increase Land                             | (540,000)           | (135,000)                       | <b>(675,000)</b>    |
| Increase Bonds Payable                    | 100,000             | 25,000                          | <b>125,000</b>      |
| Balance                                   | 160,000             | 40,000                          | 200,000             |
| Record Goodwill                           | (160,000)           | (40,000)                        | <b>(200,000)</b>    |
| Balance                                   | <u>—0—</u>          | <u>—0—</u>                      | <u>—0—</u>          |

**End of First Year after Acquisition (Worksheet Entries)** At the end of the first year, the workpaper entries are:

|  |         |         |
|--|---------|---------|
| (1) Securities                             | 150,000 |         |
| Land                                       | 675,000 |         |
| Goodwill                                   | 200,000 |         |
| Equipment (net)                            |         | 250,000 |
| Unamortized Premium on Bonds Payable       |         | 125,000 |
| Difference between Implied and Book Values |         | 650,000 |

To allocate the difference between implied and book value on the date of acquisition.

**Note that the assets accounts increased are recorded by debits and those decreased by credits (Equipment), while a credit records an increase in a liability (increase in Unamortized Premium on Bonds Payable).**

|                      |        |        |
|----------------------|--------|--------|
| (2) Equipment (net)  | 62,500 |        |
| Depreciation expense |        | 62,500 |

To adjust depreciation expense downward (\$250,000/4 years).

|  |        |        |
|--|--------|--------|
| (3) Unamortized premium on bonds payable | 25,000 |        |
| Interest expense                         |        | 25,000 |

To amortize premium on bonds payable (\$125,000/5 years).

<sup>11</sup> The straight-line method is illustrated here as a matter of expediency. Where differences between the straight-line method and the effective interest rate method of amortization are material, the effective interest rate method as shown in Illustration 5-19 should be used.

**End of Second Year after Acquisition (Worksheet Entries)** At the end of the second year the workpaper entries are:

|     |   |  |         |         |
|-----|---|--|---------|---------|
| (1) | Securities                                |  | 150,000 |         |
|     | Land                                      |  | 675,000 |         |
|     | Goodwill                                  |  | 200,000 |         |
|     | Equipment (net)                           |  |         | 250,000 |
|     | Unamortized Premium on Bonds Payable      |  |         | 125,000 |
|     | Difference between Implied and Book Value |  |         | 650,000 |

To allocate the difference between implied and book value on the date of acquisition (this entry is repeated in subsequent years because the year of acquisition entry was recorded only on a workpaper).

| <i>Cost and Partial Equity Methods</i> |                                       |         | <i>Complete Equity Method</i>     |         |        |
|--|---------------------------------------|---------|-----------------------------------|---------|--------|
| (2)                                    | Equipment (net)                       | 125,000 | Equipment (net)                   | 125,000 |        |
|  | Beginning Retained Earnings—Company P | 50,000  | Investment in S Company           |         | 50,000 |
|  | Noncontrolling Interest in Equity     | 12,500  | Noncontrolling Interest in Equity |         | 12,500 |
|  | Depreciation expense                  | 62,500  | Depreciation expense              |         | 62,500 |

To adjust depreciation downward for the current and prior year (\$250,000/4 years)

| <i>Cost and Partial Equity Methods</i> |   |        | <i>Complete Equity Method</i>           |  |        |
|--|---|--------|---|--|--------|
| (3)                                    | Unamortized premium on bond payable     | 50,000 | Unamortized premium on bond payable     |  | 50,000 |
|  | Beginning Retained Earnings—Company P   | 20,000 | Investment in S Company                 |  | 20,000 |
|  | Noncontrolling Interest in Equity (20%) | 5,000  | Noncontrolling Interest in Equity (20%) |  | 5,000  |
|  | Interest expense                        | 25,000 | Interest expense                        |  | 25,000 |

To amortize premium on bond payable for current and prior year (\$125,000/5 years)

In the second year, under the cost or partial equity method, adjustments to the beginning retained earnings of the parent company and Noncontrolling Interest are necessary so that consolidated retained earnings and Noncontrolling Interest at the beginning of the second year will be equal to the consolidated equity balances reported at the end of the first year. The debits and credits are equal to the adjustments to consolidated net income that resulted from the reduction of depreciation expense (\$62,500) and the reduction in interest expense (\$25,000) in the prior year's workpaper. Under the complete equity method, no such adjustment to retained earnings is needed since the parent's retained earnings reflect accurately the consolidated retained earnings each year. Instead, entries are needed to the Investment account to facilitate the elimination of that account (by reversing the adjustments reflected therein), as well as to Noncontrolling Interest in Equity.

## Reporting Accumulated Depreciation in Consolidated Financial Statements as a Separate Balance

**LO 9** Depreciable assets at net and gross values.

In previous illustrations, we have assumed that any particular classification of depreciable assets will be presented in the consolidated financial statements as a single balance net of accumulated depreciation. When accumulated depreciation is reported as a separate balance in the consolidated financial statements, the workpaper entry to allocate and depreciate the difference between implied and book value must be slightly modified. To illustrate, assume that P Company acquires a 90% interest in S Company on January 1, 2015, and that the difference between implied and book value in the amount of \$200,000 is

entirely attributable to equipment with an original life of nine years and a remaining life on January 1, 2015, of five years. Pertinent information regarding the equipment is presented in Illustration 5-21.

In Illustration 5-21, the \$1,200,000 fair value of the equipment (gross) is the replacement cost of the equipment if purchased *new* and is referred to as **replacement cost new**. The \$500,000 in accumulated depreciation in the fair value column is the portion of replacement cost now necessary to bring the net fair market value to \$700,000, which is the fair market value of the subsidiary's *used* equipment. The \$700,000 fair value of the used equipment is sometimes referred to in appraisal reports as the equipment's **sound value**.

If the equipment is to be presented in the consolidated financial statements as one balance net of accumulated depreciation, workpaper elimination entries to allocate and depreciate the difference between implied and book value are similar to those presented in Illustration 5-9 and Illustration 5-10, and are summarized in Illustration 5-22 for three years. However, when equipment and accumulated depreciation are reported as separate balances in the consolidated financial statements, the workpaper elimination entries must be modified as presented in Illustration 5-23. The amount debited to Equipment (gross)

#### ILLUSTRATION 5-21

##### Determination of Amount of Difference between Implied and Book Value Allocated to Equipment and to Accumulated Depreciation January 1, 2015

|   | <i>Fair Value</i> | <i>Book Value</i> | <i>Difference Between<br/>Fair Value and<br/>Book Value</i> |
|---|-------------------|-------------------|---|
| Equipment (gross)   | \$1,200,000       | \$900,000         | \$300,000   |
| Accumulated depreciation  | 500,000           | 400,000           | 100,000   |
| Equipment (net)   | <u>\$ 700,000</u> | <u>\$500,000</u>  | <u>\$200,000</u>  |
| Annual Depreciation<br>(original life nine years,<br>remaining life five years) |                   | <u>\$100,000</u>  | <u>\$ 40,000</u>  |

#### ILLUSTRATION 5-22

##### Summary of Workpaper Entries Equipment Presented Net of Accumulated Depreciation

| <i>Cost or Partial Equity Method</i>  | <i>1/1/2015</i> |               | <i>12/31/2015</i> |               | <i>12/31/2016</i> |               | <i>12/31/2017</i> |               |
|---|-----------------|---------------|-------------------|---------------|-------------------|---------------|-------------------|---------------|
|   | <i>Debit</i>    | <i>Credit</i> | <i>Debit</i>      | <i>Credit</i> | <i>Debit</i>      | <i>Credit</i> | <i>Debit</i>      | <i>Credit</i> |
| Equipment (net)   | 200,000         |               | 200,000           |               | 200,000           |               | 200,000           |               |
| Difference between Implied<br>and Book Value  |                 | 200,000       |                   | 200,000       |                   | 200,000       |                   | 200,000       |
| Depreciation Expense  | —0—             |               | 40,000            |               | 40,000            |               | 40,000            |               |
| Beginning Retained Earnings—<br>Parent Company (Beginning<br>Consolidated Retained<br>Earnings) | —0—             |               | —0—               |               | 36,000            |               | 72,000            |               |
| Noncontrolling Interest<br>Equipment (net)  | —0—             |               | —0—               | 40,000        | 4,000             | 80,000        | 80,000            | 120,000       |
| <i>Complete Equity Method</i>   |                 |               |                   |               |                   |               |                   |               |
| Equipment (net)   | 200,000         |               | 200,000           |               | 200,000           |               | 200,000           |               |
| Difference between Implied<br>and Book Value  |                 | 200,000       |                   | 200,000       |                   | 200,000       |                   | 200,000       |
| Depreciation Expense  | —0—             |               | 40,000            |               | 40,000            |               | 40,000            |               |
| Investment in S Company   | —0—             |               | —0—               |               | 36,000            |               | 72,000            |               |
| Noncontrolling Interest<br>Equipment (net)  | —0—             |               | —0—               | 40,000        | 4,000             | 80,000        | 8,000             | 120,000       |

## ILLUSTRATION 5-23

**Summary of Workpaper Entries  
Accumulated Depreciation Presented as Separate Balance**

| Cost or Partial Equity Method  | 1/1/2015 |         | 12/31/2015 |         | 12/31/2016 |         | 12/31/2017 |         |
|--|----------|---------|------------|---------|------------|---------|------------|---------|
|  | Debit    | Credit  | Debit      | Credit  | Debit      | Credit  | Debit      | Credit  |
| Equipment (gross)  | 300,000  |         | 300,000    |         | 300,000    |         | 300,000    |         |
| Accumulated Depreciation   |          | 100,000 |            | 100,000 |            | 100,000 |            | 100,000 |
| Difference between<br>Implied and Book Value   |          | 200,000 |            | 200,000 |            | 200,000 |            | 200,000 |
| Depreciation Expense   | —0—      |         | 40,000     |         | 40,000     |         | 40,000     |         |
| Beginning Retained<br>Earnings—Parent Company<br>(Beginning Consolidated<br>Retained Earnings) | —0—      |         | —0—        |         | 36,000     |         | 72,000     |         |
| Noncontrolling Interest  | —0—      |         | —0—        |         | 4,000      |         | 8,000      |         |
| Accumulated Depreciation   |          | —0—     |            | 40,000  |            | 80,000  |            | 120,000 |
| <i>Complete Equity Method</i>  |          |         |            |         |            |         |            |         |
| Equipment (gross)  | 300,000  |         | 300,000    |         | 300,000    |         | 300,000    |         |
| Accumulated Depreciation   |          | 100,000 |            | 100,000 |            | 100,000 |            | 100,000 |
| Difference between<br>Implied and Book Value   |          | 200,000 |            | 200,000 |            | 200,000 |            | 200,000 |
| Depreciation Expense   | —0—      |         | 40,000     |         | 40,000     |         | 40,000     |         |
| Investment in S Company  | —0—      |         | —0—        |         | 36,000     |         | 72,000     |         |
| Noncontrolling Interest  | —0—      |         | —0—        |         | 4,000      |         | 8,000      |         |
| Accumulated Depreciation   |          | —0—     |            | 40,000  |            | 80,000  |            | 120,000 |

**IN  
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NEWS**

The Valuation Resource Group (VRG) provides support to FASB by offering

information to the staff about implementation issues related to fair value measurements. The VRG includes financial statement preparers, auditors, users, valuation experts, and industry representatives.<sup>12</sup>

minus the amount credited to Accumulated Depreciation in each of the workpaper entries in Illustration 5-23 is the same as the amount debited to Equipment (net) in the workpaper entries in Illustration 5-22, where equipment is presented in the consolidated financial statements net of accumulated depreciation.

To allocate the \$200,000 difference assigned to Net Equipment between Equipment (gross) and Accumulated Depreciation, we need to know the replacement cost new and the sound (used) value of the equipment as shown in the appraisal report.

### Disposal of Depreciable Assets by Subsidiary

Assume that on January 1, 2017, two years after its acquisition by P Company, S Company sells all the equipment referred to in Illustration 5-21 for \$480,000. On January 1, 2017 (the date of the sale), the carrying value of the equipment on the books of the subsidiary is \$300,000 but \$420,000 from the consolidated point of view. These values are presented in Illustration 5-24. S Company reports a gain of \$180,000 on the disposal of the equipment in its books.

## ILLUSTRATION 5-24

**Calculation of Recorded and Consolidated Gain or Loss  
Disposal of Equipment**

|                          | S Company    | Unamortized Difference | Consolidated |
|--------------------------|--------------|------------------------|--------------|
| Cost                     | \$ 900,000   | \$ 300,000             | \$1,200,000  |
| Accumulated depreciation | 600,000      | 180,000*               | 780,000      |
| Undepreciated base       | 300,000      | 120,000                | 420,000      |
| Proceeds                 | (480,000)    |                        | (480,000)    |
| (Gain) loss on sale      | \$ (180,000) | \$ 120,000             | \$ (60,000)  |

\*\$180,000 equals \$100,000 allocated at acquisition plus \$40,000 from year 2013, plus \$40,000 from year 2014.

<sup>12</sup> “Challenges and Solutions,” *Journal of Accountancy*, November 2011, p. 29.

*S Company's Books*

|                          |         |         |
|--------------------------|---------|---------|
| Cash                     | 480,000 |         |
| Accumulated depreciation | 600,000 |         |
| Gain on sale             |         | 180,000 |
| Equipment                |         | 900,000 |

From the point of view of the consolidated entity, however, there is a gain of \$60,000. Recall that the usual workpaper entry to allocate the difference between implied and book value includes:

|   |         |         |
|---|---------|---------|
| Equipment                                 | 300,000 |         |
| Difference between implied and book value |         | 200,000 |
| Accumulated depreciation                  |         | 100,000 |

The workpaper entry necessary to adjust the amounts in the December 31, 2017, consolidated financial statements is as follows (shown first for the cost or partial equity methods and second for the complete equity method):

**Cost or Partial Equity Method**

|  |         |         |
|--|---------|---------|
| Beginning Retained Earnings—Parent Company (90% × \$80,000)<br>(depreciation expense adjustment for years 2015 and 2016) | 72,000  |         |
| Noncontrolling Interest in Equity (10% × \$80,000)   | 8,000   |         |
| Gain on Disposal of Equipment  | 120,000 |         |
| Difference between Implied and Book Value  |         | 200,000 |

**Complete Equity Method**

|   |         |         |
|---|---------|---------|
| Investment in S Company (90% × \$80,000)<br>(depreciation expense adjustment for years 2015 and 2016) | 72,000  |         |
| Noncontrolling Interest in Equity (10% × \$80,000)  | 8,000   |         |
| Gain on Disposal of Equipment   | 120,000 |         |
| Difference between Implied and Book Value   |         | 200,000 |

In the year of sale, any gain or loss recognized by the subsidiary on the disposal of an asset to which any of the difference between implied and book value has been allocated must be adjusted in the consolidated statements workpaper. The preceding entry serves to reduce the gain recorded by the subsidiary to the correct gain to the consolidated entity. It also debits beginning retained earnings—P Company (or **Investment in S Company if the complete equity method is used**) and Noncontrolling Interest to “catch up” the effects to the equity accounts of the consolidated entity of two prior years of depreciation expense.

**Depreciable Assets Used in Manufacturing**

When the difference between implied and book values is allocated to depreciable assets used in manufacturing, workpaper entries necessary to reflect additional depreciation may be more complex because the current and previous years' additional depreciation may need to be allocated among work in process, finished goods on hand at the end of the year, and cost of goods sold. In practice, such refinements are often ignored on the basis of materiality, and all of current year's additional depreciation is charged to cost of goods sold.

**5.10 PUSH DOWN ACCOUNTING**

**Lo10** Push down of accounting to the subsidiary's books.

**Push down accounting** is the establishment of a new accounting and reporting basis for a subsidiary company in its separate financial statements based on the purchase price paid by the parent company to acquire a controlling interest in the outstanding voting stock of

*the subsidiary company.* This accounting method is required for the subsidiary in some instances such as in the banking industry, an industry that has been overwhelmed by the frequency and extent of merger activity in recent years.

The valuation implied by the price of the stock to the parent company is “pushed down” to the subsidiary and used to restate its assets (including goodwill) and liabilities in its separate financial statements. If *all* the voting stock is purchased, the assets and liabilities of the subsidiary company are restated so that the excess of the restated amounts of the assets (including goodwill) over the restated amounts of the liabilities equals the purchase price of the stock. Push down accounting is based on the notion that the basis of accounting for purchased assets and liabilities should be the same regardless of whether the acquired company continues to exist as a separate subsidiary or is merged into the parent company’s operations. Thus, under push down accounting, the parent company’s cost of acquiring a subsidiary is used to establish a new accounting basis for the assets and liabilities of the subsidiary in the subsidiary’s separate financial statements. Because push down accounting has not been addressed in authoritative pronouncements of the FASB or its predecessors, practice has been inconsistent. Some acquired companies have used a new push down basis, and others, in essentially the same circumstances, have used preacquisition book values.

### Arguments for and against Push Down Accounting

Proponents of push down accounting believe that a new basis of accounting should be required following an acquisition transaction that results in a significant change in the ownership of a company’s outstanding voting stock. In essence, they view the transaction as if the new owners had purchased an existing business and established a new company to continue that business. Consequently, they believe that the parent company’s basis should be imputed to the subsidiary because the new basis provides more relevant information for users of the subsidiary’s separate financial statements. In addition, current GAAP requires that assets acquired, liabilities assumed, and any noncontrolling interest in the acquiree at the acquisition date be measured at fair value. To provide symmetry, the separate financial statements of the subsidiary should be presented in the same manner.

Those who oppose push down accounting believe that, under the historical cost concept, a change in ownership of an entity does not justify a new accounting basis in its financial statements. Because the subsidiary did not purchase assets or assume liabilities as a result of the transaction, the recognition of a new accounting basis based on a change in ownership, rather than on a transaction on the part of the subsidiary, represents a breach in the historical cost concept in accounting. They argue further that implementation problems might arise. For example, noncontrolling stockholders may not have meaningful comparative financial statements. In addition, restatement of the financial statements may create problems in determining or maintaining compliance with various financial restrictions under debt agreements.

Push down accounting is an issue only if the subsidiary is required to issue separate financial statements for any reason, for example, because of the existence of noncontrolling interests or financial arrangements with nonaffiliates. Three important factors that should be considered in determining the appropriateness of push down accounting are:

1. Whether the subsidiary has outstanding debt held by the public.
2. Whether the subsidiary has outstanding, a senior class of capital stock not acquired by the parent company.
3. The level at which a major change in ownership of an entity should be deemed to have occurred, for example, 100%, 90%, 51%.

Public holders of the acquired company’s debt need comparative data to assess the value and risk of their investments. These public holders generally have some expressed (or implied) rights in the subsidiary that may be adversely affected by a new basis of accounting. Similarly, holders of preferred stock, particularly if the stock includes a participation feature, may have their rights altered significantly by a new basis of accounting.



Views on the percentage level of ownership change needed to apply a new basis of accounting vary. Some believe that the purchase of substantially all the voting stock (90% or more) should be the threshold level; others believe that the percentage level of ownership change should be that needed for control; for example, more than 50%. A related problem involves the amounts to be allocated to the individual assets and liabilities, noncontrolling interest, and goodwill in the separate statements of the subsidiary. Some believe that values should be allocated on the basis of the fair value of the subsidiary as a whole imputed from the transaction. Thus, if 80% of the voting stock is acquired for \$32 million, the fair value of the net assets would be imputed to be \$40 million ( $\$32 \text{ million} / .80$ ), and values would be allocated on that basis. This approach will result in the assignment of the same values to assets and liabilities on the books of the subsidiary as that previously illustrated in the workpaper entry to allocate the difference between implied and book value in the consolidated statements workpaper. Others believe that values should be allocated on the basis of the proportional interest acquired. They believe that new values should be reflected on the books of the subsidiary only to the extent of the price paid in the transaction. Thus, if 80% of a company is acquired for \$32 million, the basis of the subsidiary's net assets would be adjusted by the difference between the price paid and the book value of an 80% interest.

## Status of Push Down Accounting

On January 17, 2013, FASB's Emerging Issues Task Force discussed push down accounting and concluded that the strategy for the FASB is to pursue developing a model under which push down accounting could be applied when an acquirer obtains control of a reporting entity. The Task Force decided to consider at a future meeting whether push down accounting should be mandatory. The Task Force decided that pushdown accounting would be required for a public business entity if a change-in-control event causes the entity to become substantially wholly owned by the acquirer. The Task Force also tentatively decided that both public business entities and nonpublic entities would have the option to apply push down accounting in their separate financial statements upon occurrence of a change-in-control event.

*As a general rule, the SEC requires push down accounting when the ownership change is greater than 95% and objects to push down accounting when the ownership change is less than 80%.* In addition, the SEC staff expresses the view that the existence of outstanding public debt, preferred stock, or a significant noncontrolling interest in a subsidiary might impact the parent company's ability to control the form of ownership. In these circumstances, push down accounting, though not required, is an acceptable accounting method.

## Push Down Accounting Illustration

To illustrate the application of push down accounting, we use data presented earlier in this chapter, with some modifications, as follows:

1. P Company acquired an 80% interest in S Company on January 1, 2015, for \$2,200,000, at which time S Company had capital stock of \$1,500,000 and retained earnings of \$500,000. The implied value of S Company is  $\$2,200,000 / 80\% = \$2,750,000$ .
2. The difference between implied and book value (\$750,000) is allocated as presented in Illustration 5-25.

In this example, we assume that values are allocated on the basis of the fair value of the subsidiary as a whole, imputed from the transaction.

**ILLUSTRATION 5-25****Allocation of Difference between Implied and Book Value**

|                          | <i>Cost Basis</i> | <i>Implied (100%)<br/>Push Down Base</i> |
|--------------------------|-------------------|--|
| Inventory (FIFO basis)   | \$ 40,000         | \$ 50,000                                |
| Equipment (10-year life) | 240,000           | 300,000                                  |
| Land                     | 120,000           | 150,000                                  |
| Goodwill                 | <u>200,000</u>    | <u>250,000</u>                           |
| Total                    | <u>\$600,000</u>  | <u>\$750,000</u>                         |

3. In 2015, S Company reported net income of \$45,000.

Note that the net income of S Company (\$45,000) is \$80,000 less than the amount of income reported in Illustration 5-9 because the effect of the depreciation of the difference between implied and book value is recorded on the books of S Company under push down accounting. This difference of \$80,000 consists of:

|   |                 |
|---|-----------------|
| Increase in cost of goods sold                        | \$50,000        |
| Increase in depreciation expense (\$300,000/10 years) | 30,000          |
|   | <u>\$80,000</u> |

4. S Company declared a dividend of \$20,000 on November 15, payable on December 1, 2015.
5. P Company uses the cost method to record its investment in S Company.

***S Company Book Entries—2015***

On January 1, 2015, the date of acquisition, S Company would make the following entry to record the effect of the pushed down values implied by the purchase of 80% of its stock by P Company:

|                     |         |         |
|---------------------|---------|---------|
| Inventory, 1/1      | 50,000  |         |
| Equipment           | 300,000 |         |
| Land                | 150,000 |         |
| Goodwill            | 250,000 |         |
| Revaluation Capital |         | 750,000 |

Assume the following: (1) all beginning inventory was sold during the year; and (2) equipment has a remaining useful life of 10 years from 1/1/2015. Given these assumptions, the \$50,000 excess cost allocated to beginning inventory would be included in cost of goods sold when the goods were sold. Similarly, depreciation expense recorded on S Company's books would be \$30,000 greater if the increase in equipment value had not been recorded.

A workpaper for the preparation of consolidated financial statements on December 31, 2015, under push down accounting is presented in Illustration 5-26. Workpaper elimination entries in general journal form are:

|                                   |           |                  |
|-----------------------------------|-----------|------------------|
| (1) Dividend Income               | 16,000    |                  |
| Dividends Declared—S Company      |           | 16,000           |
| (2) Capital Stock—S Company       | 1,500,000 |                  |
| Retained Earnings 1/1—S Company   | 500,000   |                  |
| Revaluation Capital—S Company     | 750,000   |                  |
| Noncontrolling Interest in Equity |           | 550,000          |
| Investment in S Company           |           | <u>2,200,000</u> |

A comparison of Illustration 5-26 with Illustration 5-4 shows that consolidated net income as well as the controlling interest in consolidated net income and consolidated retained earnings are the same. Thus, when values are assigned on the basis of fair

values of the subsidiary as a whole imputed from the transaction, the use of push down accounting has no effect on the consolidated balances.

Note also that no workpaper entries were necessary in Illustration 5-26 to allocate or depreciate the difference between implied and book value since these adjustments have already been made on S Company's books.

| Cost Method                                 |                  | ILLUSTRATION 5-26                 |                  |                  |                |                  |
|---|------------------|-----------------------------------|------------------|------------------|----------------|------------------|
| 80% Owned Subsidiary                        |                  | Consolidated Statements Workpaper |                  |                  |                |                  |
| Push Down Basis                             |                  | P Company and Subsidiary          |                  |                  |                |                  |
| for Year Ended December 31, 2015            |                  |                                   |                  |                  |                |                  |
|   | P                | S                                 | Eliminations     |                  | Noncontrolling | Consolidated     |
|   | Company          | Company                           | Dr.              | Cr.              | Interest       | Balances         |
| <i>Income Statement</i>                     |                  |                                   |                  |                  |                |                  |
| Sales                                       | 3,100,000        | 2,200,000                         |                  |                  |                | 5,300,000        |
| Dividend Income                             | 16,000           |                                   | (1)              | 16,000           |                |                  |
| Total Revenue                               | <u>3,116,000</u> | <u>2,200,000</u>                  |                  |                  |                | <u>5,300,000</u> |
| Cost of Goods Sold                          | 1,700,000        | 1,410,000                         |                  |                  |                | 3,110,000        |
| Depreciation—Equipment                      | 120,000          | 60,000                            |                  |                  |                | 180,000          |
| Other Expenses                              | 998,000          | 685,000                           |                  |                  |                | 1,683,000        |
| Total Cost and Expense                      | <u>2,818,000</u> | <u>2,155,000</u>                  |                  |                  |                | <u>4,973,000</u> |
| Net/Consolidated Income                     | 298,000          | 45,000                            |                  |                  |                | 327,000          |
| Noncontrolling Interest in Income           |                  |                                   |                  |                  | 9,000*         | 9,000            |
| Net Income to Retained Earnings             | <u>298,000</u>   | <u>45,000</u>                     | <u>16,000</u>    | <u>—0—</u>       | <u>9,000</u>   | <u>318,000</u>   |
| <i>Retained Earnings Statement</i>          |                  |                                   |                  |                  |                |                  |
| 1/1 Retained Earnings                       |                  |                                   |                  |                  |                |                  |
| P Company                                   | 1,650,000        |                                   |                  |                  |                | 1,650,000        |
| S Company                                   |                  | 500,000                           | (2)              | 500,000          |                |                  |
| Net Income from above                       | 298,000          | 45,000                            | 16,000           | —0—              | 9,000          | 318,000          |
| Dividends Declared                          |                  |                                   |                  |                  |                |                  |
| P Company                                   | (150,000)        |                                   |                  |                  |                | (150,000)        |
| S Company                                   |                  | (20,000)                          |                  | (1)              | 16,000         | (4,000)          |
| 12/31 Retained Earnings to Balance Sheet    | <u>1,798,000</u> | <u>525,000</u>                    | <u>516,000</u>   | <u>16,000</u>    | <u>5,000</u>   | <u>1,818,000</u> |
| <i>Balance Sheet</i>                        |                  |                                   |                  |                  |                |                  |
| Investment in S Company                     | 2,200,000        |                                   |                  | (2)              | 2,200,000      |                  |
| Land  | 1,250,000        | 400,000                           |                  |                  |                | 1,650,000        |
| Equipment (net)                             | 1,080,000        | 540,000                           |                  |                  |                | 1,620,000        |
| Other Assets (net)                          | 2,402,000        | 1,885,000                         |                  |                  |                | 4,287,000        |
| Goodwill                                    |                  | 250,000                           |                  |                  |                | 250,000          |
| Total                                       | <u>6,932,000</u> | <u>3,075,000</u>                  |                  |                  |                | <u>7,807,000</u> |
| Liabilities                                 | 2,134,000        | 300,000                           |                  |                  |                | 2,434,000        |
| Capital Stock                               |                  |                                   |                  |                  |                |                  |
| P Company                                   | 3,000,000        |                                   |                  |                  |                | 3,000,000        |
| S Company                                   |                  | 1,500,000                         | (2)              | 1,500,000        |                |                  |
| Revaluation Capital                         |                  | 750,000                           | (2)              | 750,000          |                |                  |
| Retained Earnings from above                | 1,798,000        | 525,000                           | 516,000          | 16,000           | 5,000          | 1,818,000        |
| 1/1 Noncontrolling Interest in Net Assets   |                  |                                   |                  | (2)              | 550,000        | 550,000          |
| 12/31 Noncontrolling Interest in Net Assets |                  |                                   |                  |                  | <u>555,000</u> | <u>555,000</u>   |
| Total                                       | <u>6,932,000</u> | <u>3,075,000</u>                  | <u>2,766,000</u> | <u>2,766,000</u> |                | <u>7,807,000</u> |

(\*) 20% × \$45,000 = \$9,000.

(1) To eliminate intercompany dividends.

(2) To eliminate investment account and create noncontrolling interest account.

## 5.11 IFRS VS U.S. GAAP ON RESEARCH & DEVELOPMENT COSTS

**IFRS** As mentioned previously, Research & Development costs that are in process at the time of an acquisition are capitalized at their estimated fair value and expensed over their expected useful life. U.S. GAAP and IFRS are similar in this regard. However, for Research & Development projects undertaken *apart from an acquisition* or *subsequent to the acquisition*, IFRS distinguish between research costs and development costs while U.S. GAAP generally expense both as incurred.

Under U.S. GAAP, development costs are generally expensed as incurred (as part of R&D expense) unless the costs relate to activities for which there is an alternative future use.

Under IFRS, development costs are capitalized if *all* of the following criteria are demonstrated (research costs are expensed):

1. The technical feasibility of completing the intangible asset,
2. The intention to complete the intangible asset,
3. The ability to use or sell the intangible asset,
4. How the intangible asset will generate future economic benefits (the entity should demonstrate the existence of a market or, if for internal use, the usefulness of the intangible asset),
5. The availability of adequate resources to complete the development,
6. The ability to measure reliably the expenditure attributable to the intangible asset during its development.

### SUMMARY

- 1 *Calculate the difference between implied and book values and allocate to the subsidiary's assets and liabilities.* This difference is used first to adjust the individual assets and liabilities to their fair values on the date of acquisition. If implied value exceeds the aggregate fair values of identifiable net assets, the residual amount will be *positive* (a debit balance), providing evidence of an unspecified intangible to be accounted for as goodwill.
- 2 *Describe FASB's position on accounting for bargain acquisitions.* When the value implied by the acquisition price is below the aggregate fair value of identifiable net assets, the residual amount will be negative (a credit balance), designating a bargain purchase. FASB's current position is that no assets are reduced below fair value; instead, the credit balance should be shown as an ordinary gain in the year of acquisition.
- 3 *Explain how goodwill is measured at the time of the acquisition.* Goodwill is measured as the excess of the value implied by the acquisition price over the fair value of the subsidiary's assets less liabilities.
- 4 *Describe how the allocation process differs if less than 100% of the subsidiary is acquired.* Under the economic entity concept adopted by FASB, the consolidated net assets are written up by the entire difference between the implied fair value and the book value of the subsidiary company's net assets. The increase in the portion owned by the noncontrolling interest is reflected in an increase in the equity of the noncontrolling interest.
- 5 *Record the entries needed on the parent's books to account for the investment under the three methods: the cost, the partial equity, and the complete equity methods.* The most important difference between the cost and equity methods pertains to the period in which the parent recognizes subsidiary income on its books. If the cost method is in use, the parent recognizes its share of subsidiary income only when dividends are declared by the subsidiary. If the partial equity method is in use, the investor recognizes its share of the subsidiary's income when reported by the subsidiary. A debit to cash and a credit to the investment account record the receipt of dividends under the partial equity method. The complete equity method differs from the partial equity method in that the share of subsidiary income recognized by the parent may be adjusted from the amount reported by the subsidiary, e.g., for excess depreciation implied by the difference between market and book values of the underlying assets acquired.
- 6 *Prepare workpapers for the year of acquisition and the year(s) subsequent to the acquisition, assuming that the parent accounts for the investment using the cost, the partial equity, and the complete equity methods.* Under the cost method, dividends declared by the subsidiary are eliminated against dividend income recorded by the parent. The investment account is eliminated against the equity accounts of the subsidiary, with the difference between implied and book value recorded in a separate account. The difference is then allocated to adjust underlying assets and/or liabilities, and to record goodwill in some cases. Additional entries are made to record excess depreciation on assets written up (or to decrease depreciation if written down). Under the equity method, the dividends declared by the subsidiary are eliminated against the investment account, as is the equity in subsidiary income. The investment account is eliminated in the same way as under the cost method. In subsequent years, the cost method requires an initial entry to establish reciprocity (convert to equity). This entry (cost method

only) debits the investment account and credits retained earnings of the parent (for the change in retained earnings of the subsidiary from acquisition to beginning of current year multiplied by the parent's ownership percentage). Only under the complete equity method does the parent's beginning retained earnings exactly match the amount reported as consolidated retained earnings at the end of the previous year. See Illustrations 5-6 through 5-8 for a complete summary of the three methods.

- 7** *Understand the allocation of the difference between implied and book value to long-term debt components.* Notes payable, long-term debt, and other obligations of an acquired company should be valued for consolidation purposes at their fair values. Quoted market prices, if available, are the best evidence of the fair value of the debt. If quoted market prices are unavailable, then management's best estimate of the fair value may be based on fair values of debt with similar characteristics or on valuation techniques such as the present value of estimated future cash flows.
- 8** *Explain how to allocate the difference between implied and book value when some assets have fair values below book values.* In this case, the allocation of the parent company's share of the difference between the fair value and the book

value of the asset will result in a reduction of the asset. If the asset is depreciable, this difference will be amortized over the life of the asset as a reduction of depreciation expense.

- 9** *Distinguish between recording the subsidiary depreciable assets at net versus gross fair values.* When the assets are recorded net, no accumulated depreciation account is used initially. When they are recorded gross, an accumulated depreciation account is needed. To allocate the difference assigned to depreciable assets between the asset account (gross) and the accumulated depreciation account, we must know the replacement cost new and the sound (used) value of the asset as shown in the appraisal report. Alternatively, these amounts may be inferred.
- 10** *Understand the concept of push down accounting.* Push down accounting is the establishment of a new accounting and reporting basis for a subsidiary company in its separate financial statements based on the purchase price paid by the parent company to acquire a controlling interest in the outstanding voting stock of the subsidiary company. This accounting method is required for the subsidiary in some instances, usually when the ownership level is over 95% for publicly held companies.

**TEST YOUR KNOWLEDGE SOLUTIONS**

- 5.1** 1. a.
- 5.2** 1. d.
- 5.3** 1. c

**QUESTIONS**

- LO 1** 1. Distinguish among the following concepts:
- LO 2** (a) Difference between book value and the value implied by the purchase price.
- LO 3** (b) Excess of implied value over fair value.  
(c) Excess of fair value over implied value.  
(d) Excess of book value over fair value.
- LO 1** 2. In what account is the difference between book value and the value implied by the purchase price recorded on the books of the investor? In what account is the "excess of implied over fair value" recorded?
- LO 3**
- LO 4** 3. How do you determine the amount of "the difference between book value and the value implied by the purchase price" to be allocated to a specific asset of a less than wholly owned subsidiary?
- LO 2** 4. The parent company's share of the fair value of the net assets of a subsidiary may exceed acquisition cost. How must this excess be treated in the preparation of consolidated financial statements?
- LO 2** 5. What are the arguments for and against the alternatives for the handling of bargain acquisitions? Why are such acquisitions unlikely to occur with great frequency?
- LO 1** 6. P Company acquired a 100% interest in S Company. On the date of acquisition the fair value of the assets and liabilities of S Company was equal to their book value except for land that had a fair value of \$1,500,000 and a

book value of \$300,000. At what amount should the land of S Company be included in the consolidated balance sheet? At what amount should the land of S Company be included in the consolidated balance sheet if P Company acquired an 80% interest in S Company rather than a 100% interest?

- 7. Corporation A purchased the net assets of Corporation B for \$80,000. On the date of A's purchase, Corporation B had no long-term investments in marketable securities and \$10,000 (book and fair value) of liabilities. The fair values of Corporation B's assets, when acquired, were **LO 2**

|                   |                   |
|-------------------|-------------------|
| Current assets    | \$ 40,000         |
| Noncurrent assets | 60,000            |
| Total             | <u>\$ 100,000</u> |

Under *FASB Statement No. 141R* and *No. 160* [Topics 805 and 810], how should the \$10,000 difference between the fair value of the net assets acquired (\$90,000) and the value implied by the purchase price (\$80,000) be accounted for by Corporation A?

- (a) The \$10,000 difference should be credited to retained earnings.
- (b) The noncurrent assets should be recorded at \$50,000.
- (c) The current assets should be recorded at \$36,000, and the noncurrent assets should be recorded at \$54,000.
- (d) A current gain of \$10,000 should be recognized.

- LO 2** 8. Meredith Company and Kyle Company were combined in a purchase transaction. Meredith was able to acquire Kyle at a bargain price. The sum of the market or appraised values of identifiable assets acquired less the fair value of liabilities assumed exceeded the cost to Meredith. A determination was made that some of the appraised values were overstated and those assets were adjusted accordingly. After reducing the overstated assets downward, there was still a “negative balance.” Proper accounting treatment by Meredith is to report the amount as
- An extraordinary item.
  - Part of current income in the year of combination.
  - A deferred credit.
  - Paid in capital.
- LO 4** 9. What is the effect on the noncontrolling share of consolidated income that results from the recording in the consolidated statements workpaper of differences between book value and the value implied by the purchase price (and their allocation to depreciable property, goodwill, etc.)?

### Business Ethics

#### What is insider trading anyway?

Consider the following:

*Many years ago, a student in a consolidated financial statements class came to me and said that Grand Central (a multi-store grocery and variety chain in Salt Lake City and surrounding towns and cities) was going to be acquired and that I should try to buy the stock and make lots of money. I asked him how he knew and he told me that he worked part-time for Grand Central and heard that Fred Meyer was going to acquire it. I did not know whether the student worked in the accounting department at Grand Central or was a custodian at one of the stores. I thanked him for the information but did not buy the stock. Within a few weeks, the announcement was made that Fred Meyer was acquiring Grand Central and the stock price shot up, almost doubling. It was clear that I had missed an opportunity to make a lot of money . . . I don't know to this day whether or not that would have been insider trading. However, I have never gone home at night and asked my wife if the SEC called. From “Don't go to jail and other good advice for accountants,” by Ron Mano, *Accounting Today*, October 25, 1999.*

*Question:* Do you think this individual would have been guilty of insider trading if he had purchased the stock in Grand Central based on this advice? Why or why not? Are there ever instances where you think it would be wise to miss out on an opportunity to reap benefits simply because the behavior necessitated would have been in a gray ethical area, though not strictly illegal? Defend your position.

## ANALYZING FINANCIAL STATEMENTS

### AFSS-1 eBay acquires Rent.com **LO 1**

On February 23, 2005, eBay acquired Viva Group, Inc., which does business under the name Rent.com, for a cash purchase price of approximately \$435.365 million including net cash and investments of approximately \$18 million. Rent.com is an Internet listing website in the apartment and rental housing industry. The motivation for the acquisition was to help expand eBay's presence into the online real estate market. Also, \$2 million in estimated acquisition-related expenses were incurred. The acquisition was treated as a nontaxable purchase transaction and, accordingly, the purchase price has been allocated to the tangible and intangible assets acquired and liabilities assumed on the basis of their respective estimated fair values on the acquisition date, as follows:

|                                |          |           |
|--------------------------------|----------|-----------|
| Purchase price                 |          | \$435,365 |
| Net tangible assets            | 18,050   |           |
| Identifiable intangible assets | 61,800   |           |
| Deferred tax liabilities       | (24,924) | 54,926    |
| Excess                         |          | 380,439   |

Identifiable intangible assets included:

|                      |          |
|----------------------|----------|
| Customer lists       | \$34,500 |
| Trade name           | 18,000   |
| Developed technology | 8,200    |
| User base            | 1,100    |
| Total                | 61,800   |

The estimated useful economic lives of the identifiable intangible assets acquired in the Rent.com acquisition are six years for the customer list, five years for the trade name, three years for the developed technology, and one year for the user base.

#### Required:

- Record the acquisition of [Rent.com](#) on eBay's books (including the acquisition-related costs). (Assume that the net tangible assets of 18,050 equals the book value of [Rent.com](#).)
- Prepare the journal entry to eliminate the investment account and allocate any difference between fair value and purchase price.

- C. Record any amortization of intangibles assuming that the cost basis is used by eBay (assume a full year of amortization for all intangibles). Where are these entries recorded? Would your answer change if the complete equity method were used?
- D. Is it likely in the first year that earnings per share will be dilutive or accretive?

### AFS5-2 LoJack Corporation LO 1

LoJack is a leading global provider of technology products and services for the tracking and recovery of valuable mobile assets and people at risk of wandering. According to a recent Federal Bureau of Investigation Uniform Crime Report for 2009, a motor vehicle is stolen in the United States every 40 seconds. LoJack's business is sensitive to changing economic conditions and is substantially dependent on new vehicle sales levels in the United States.

LoJack acquired Boomerang, SCI, and Locator Systems (now known as LoJack SafetyNet) and recorded goodwill. LoJack adopted an annual measurement date of November 30 for SCI and LoJack SafetyNet for goodwill impairment testing. The tests for impairment are performed on an interim basis if there are triggering events identified. Triggering events are events or changes in circumstance that would more likely than not reduce the fair value of a reporting unit below its carrying amount. Examples of such events or circumstances include: (a) a significant adverse change in legal factors or in the business climate; (b) an adverse action or assessment by a regulator; (c) unanticipated competition; (d) a loss of key personnel; (e) a more-likely-than-not expectation that a reporting unit or a significant portion of a reporting unit will be sold or otherwise disposed of; (f) the testing for recoverability of a significant asset group within a reporting unit; or (g) recognition of a goodwill impairment loss in the financial statements of a subsidiary that is a component of a reporting unit.

In 2009, based upon a review of external economic factors and internal business performance, a triggering event in the Boomerang reporting unit was identified. As such, Boomerang's goodwill was tested for impairment utilizing a discounted cash flow (DCF) model. As a result of the impairment analysis, a goodwill impairment charge of \$13,627 was recognized at June 30, 2009, thus eliminating the goodwill balance attributable to the Boomerang reporting unit. The impairment is included in Impairment of goodwill and intangible assets on the consolidated statement of operations for the year ended December 31, 2009. In 2008, goodwill impairment of \$36,830 related to Boomerang was recorded.

| (\$000)                                      | 12/31/2010 | 12/31/2009 | 12/31/2008 |
|--|------------|------------|------------|
| Revenue                                      | \$146,635  | \$135,013  | \$198,679  |
| Cost of goods sold                           | 72,961     | 64,096     | 94,517     |
| Gross profit                                 | 73,674     | 70,917     | 104,162    |
| Costs and expenses:                          |            |            |            |
| Product development                          | 6,162      | 6,994      | 7,290      |
| Sales and marketing                          | 29,308     | 31,529     | 44,880     |
| General and administrative                   | 31,479     | 36,435     | 33,592     |
| Legal settlement                             |            | 18,250     |            |
| Depreciation and amortization                | 7,110      | 7,857      | 7,213      |
| Impairment of intangible assets and goodwill |            | 14,038     | 38,090     |
| Total  | 74,059     | 115,103    | 131,065    |
| Operating loss                               | (385)      | (44,186)   | (26,903)   |

- A. Discuss the current FASB position on goodwill impairment. Do you think this is a better or poorer way of addressing changes in goodwill valuation over time than amortization? Why? Include in your answer a discussion of how the two alternatives (impairment and amortization) affect current and future earnings of the consolidated entity.
- B. In the case of LoJack, discuss possible reasons why the company might have used its discretion either to delay or to expedite the recording of the impairment of goodwill for the Boomerang reporting unit. What effect did the impairment have on earnings for the years 2008 and 2009? What effect will it have on ROA for future years?
- C. How would you expect the stock market to respond to the news of the goodwill impairment? Why?

### AFS5-3 Goodwill and Goodwill Impairment Checklist

The 'goodwill' footnote for American Oriental Bioengineering 2011 10K is shown below. When firms make acquisitions, the goodwill recorded in an acquisition must be assigned to a reportable segment. See Chapter 14 for a complete discussion of segmental reporting. Thus a reportable

segment (such as the manufacturing segment in the footnote below) may include several different acquisitions that have been made over time but are aggregated for disclosure purposes. It can be very difficult to track an acquisition over time if several companies are aggregated. Use the goodwill checklist to assess whether the company is disclosing all required information about goodwill according to GAAP.

**Note 11: Goodwill**

The changes in the carrying amount of goodwill for the year ended December 31, 2011, are as follows.

|                                 | <b>Manufacturing<br/>Segment</b> | <b>Distribution<br/>Segment</b> | <b>Total</b>  |
|---------------------------------|----------------------------------|---------------------------------|---------------|
| Balance as of January 1, 2011   | \$ 27,817,108                    | \$ 5,347,013                    | \$ 33,164,121 |
| Impairment losses               | (27,817,108)                     | (5,347,013)                     | (33,164,121)  |
| Balance as of December 31, 2011 | \$ —                             | \$ —                            | \$ —          |

The manufacturing and distribution segments were tested for impairment after the annual forecasting process. Due to an increase in competition in the generic drug market in China under the health care reform, and the governments' downward pressure on prices, the operating profits and cash flows for the manufacturing segment were lower than expected in the fourth quarter of 2011. Based on that trend, the earnings forecasts for the next five years were revised. For the year ended December 31, 2011, a goodwill impairment loss of \$27,817,108 and \$5,347,013 were recognized in the manufacturing reporting units and distribution reporting units respectively. No impairments occurred with respect to the carrying value of goodwill in 2010 and 2009. The fair value of those reporting units was estimated using the expected present value of future cash flows expected at that time.

**Required:**

**Part A: Goodwill Disclosures**

1. Does the company provide a schedule showing the changes in the gross amount and impairment losses at the beginning and end of the year?
2. Does the company show any additional goodwill during the period? How did the firm obtain the goodwill?
3. Does the company report the amount of impairment losses recognized during the period?
4. Are there other changes in the carrying amount of goodwill? Are there any unusual or questionable issues relating to goodwill disclosures? What are they?

**Part B: Goodwill Impairments**

1. Does the company provide a description of the facts and circumstances leading to the impairment, such as the reason for the impairment?
2. Can you determine which acquisition is associated with the goodwill impairment?
3. For the amount of the impairment loss, which method is used to determine the fair value of the associated reporting unit: (a) quoted market prices, (b) prices of comparable businesses, and/or (c) present value or other valuation technique.
4. Is the recognized impairment loss an estimate or a finalized amount)?
  - A. If the impairment loss is an estimate, why is the impairment loss not finalized?
  - B. What is the nature and amount of any significant adjustments made to the initial estimate of the impairment loss?

**EXERCISES**

**EXERCISE 5-1 Allocation of Cost LO 1 LO 3**

On January 1, 2013, Pam Company purchased an 85% interest in Shaw Company for \$540,000. On this date, Shaw Company had common stock of \$400,000 and retained earnings of \$140,000.

An examination of Shaw Company's assets and liabilities revealed that their book value was equal to their fair value except for marketable securities and equipment:

|                       | <i>Book Value</i> | <i>Fair Value</i> |
|-----------------------|-------------------|-------------------|
| Marketable securities | \$ 20,000         | \$ 45,000         |
| Equipment (net)       | 120,000           | 140,000           |



**Required:**

- A. Prepare a Computation and Allocation Schedule for the difference between book value of equity acquired and the value implied by the purchase price.
- B. Determine the amounts at which the above assets (plus goodwill, if any) will appear on the consolidated balance sheet on January 1, 2013.

**EXERCISE 5-2 End of the Year of Acquisition Workpaper Entries LO 1 LO 9**

On January 1, 2015, Payne Corporation purchased a 75% interest in Salmon Company for \$585,000. A summary of Salmon Company's balance sheet on that date revealed the following:

|                   | <i>Book Value</i> | <i>Fair Value</i> |
|-------------------|-------------------|-------------------|
| Equipment         | \$525,000         | \$705,000         |
| Other assets      | 150,000           | 150,000           |
|                   | <u>\$675,000</u>  | <u>\$855,000</u>  |
| Liabilities       | \$ 75,000         | \$ 75,000         |
| Common stock      | 225,000           |                   |
| Retained earnings | <u>375,000</u>    |                   |
|                   | <u>\$675,000</u>  |                   |

The equipment had an original life of 15 years and has a remaining useful life of 10 years.

**Required:**

For the December 31, 2015, consolidated financial statements workpaper, prepare the workpaper entry to allocate and depreciate the difference between book value and the value implied by the purchase price assuming:

- A. Equipment is presented net of accumulated depreciation.
- B. Accumulated depreciation is presented on a separate row in the workpaper and in the consolidated statement of financial position.

**EXERCISE 5-3 Allocation of Cost LO 2**

Pace Company purchased 20,000 of the 25,000 shares of Saddler Corporation for \$525,000. On January 3, 2014, the acquisition date, Saddler Corporation's capital stock and retained earnings account balances were \$500,000 and \$100,000, respectively.

The following values were determined for Saddler Corporation on the date of purchase:

|                       | <i>Book Value</i> | <i>Fair Value</i> |
|-----------------------|-------------------|-------------------|
| Inventory             | \$ 50,000         | \$ 70,000         |
| Other current assets  | 200,000           | 200,000           |
| Marketable securities | 100,000           | 125,000           |
| Plant and equipment   | 300,000           | 330,000           |

**Required:**

- A. Prepare the entry on the books of Pace Company to record its investment in Saddler Corporation.
- B. Prepare a Computation and Allocation Schedule for the difference between book value and the value implied by the purchase price in the consolidated statements workpaper.

**EXERCISE 5-4 Allocation of Cost and Workpaper Entries at Date of Acquisition LO 2**

On January 1, 2015, Porter Company purchased an 80% interest in Salem Company for \$260,000. On this date, Salem Company had common stock of \$207,000 and retained earnings of \$130,500.

An examination of Salem Company's balance sheet revealed the following comparisons between book and fair values:

|                      | <i>Book Value</i> | <i>Fair Value</i> |
|----------------------|-------------------|-------------------|
| Inventory            | \$ 30,000         | \$ 35,000         |
| Other current assets | 50,000            | 55,000            |
| Equipment            | 300,000           | 350,000           |
| Land                 | 200,000           | 200,000           |

**Required:**

- A. Determine the amounts that should be allocated to Salem Company's assets on the consolidated financial statements workpaper on January 1, 2015.
- B. Prepare the January 1, 2015, consolidated financial statements workpaper entries to eliminate the investment account and to allocate the difference between book value and the value implied by the purchase price.

**EXERCISE 5-5 T-Account Calculation of Controlling and Noncontrolling Interest in Consolidated Net Income LO4**

On January 1, 2014, P Company purchased an 80% interest in S Company for \$600,000, at which time S Company had retained earnings of \$300,000 and capital stock of \$350,000. Any difference between book value and the value implied by the purchase price was entirely attributable to a patent with a remaining useful life of 10 years.

Assume that P and S Companies reported net incomes from their independent operations of \$200,000 and \$100,000, respectively.

**Required:**

Prepare a t-account calculation of the controlling interest and noncontrolling interest in consolidated net income for the year ended December 31, 2014.

**EXERCISE 5-6 Workpaper Entries LO1**

Park Company acquires an 85% interest in Sunland Company on January 2, 2015. The resulting difference between book value and the value implied by the purchase price in the amount of \$120,000 is entirely attributable to equipment with an original life of 15 years and a remaining useful life, on January 2, 2015, of 10 years.

**Required:**

Prepare the December 31 consolidated financial statements workpaper entries for 2015 and 2016 to allocate and depreciate the difference between book value and the value implied by the purchase price, recording accumulated depreciation as a separate balance.

**EXERCISE 5-7 Workpaper Entries LO1 LO9**

On January 1, 2014, Packard Company purchased an 80% interest in Sage Company for \$600,000. On this date Sage Company had common stock of \$150,000 and retained earnings of \$400,000.

Sage Company's equipment on the date of Packard Company's purchase had a book value of \$400,000 and a fair value of \$600,000. All equipment had an estimated useful life of 10 years on January 2, 2009.

**Required:**

Prepare the December 31 consolidated financial statements workpaper entries for 2014 and 2015 to allocate and depreciate the difference between book value and the value implied by the purchase price, recording accumulated depreciation as a separate balance.

**EXERCISE 5-8 Workpaper Entries and Gain on Sale of Land LO1**

Padilla Company purchased 80% of the common stock of Sanoma Company in the open market on January 1, 2013, paying \$31,000 more than the book value of the interest acquired. The difference between book value and the value implied by the purchase price is attributable to land.

**Required:**

- What workpaper entry is required each year until the land is disposed of?
- Assume that the land is sold on 1/1/16 and that Sanoma Company recognizes a \$50,000 gain on its books. What amount of gain will be reflected in consolidated income on the 2016 consolidated income statement?
- In all years subsequent to the disposal of the land, what workpaper entry will be necessary? Show entry for all three methods (cost, partial equity, and complete equity).

**EXERCISE 5-9 Allocation of Cost and Workpaper Entries LO1 LO3 LO7**

On January 1, 2013, Point Corporation acquired an 80% interest in Sharp Company for \$2,000,000. At that time Sharp Company had capital stock of \$1,500,000 and retained earnings of \$700,000. The book values of Sharp Company's assets and liabilities were equal to their fair values except for land and bonds payable. The land had a fair value of \$100,000 and a book value of \$80,000. The outstanding bonds were issued at par value on January 1, 2008, pay 10% annually, and mature on January 1, 2018. The bond principal is \$500,000 and the current yield rate on similar bonds is 8%.

**Required:**

- Prepare a Computation and Allocation Schedule for the difference between book value and the value implied by the purchase price in the consolidated statements workpaper on the acquisition date.
- Prepare the workpaper entries necessary on December 31, 2013, to allocate and depreciate the difference between book value and the value implied by the purchase price.

**EXERCISE 5-10 Allocation of Cost and Workpaper Entries LO1 LO3 LO7**

On January 2, 2013, Page Corporation acquired a 90% interest in Salcedo Company for \$3,500,000. At that time Salcedo Company had capital stock of \$2,250,000 and retained earnings of \$1,250,000. The book values of Salcedo Company's assets and liabilities were equal to their fair values except for land and bonds payable.

The land had a fair value of \$200,000 and a book value of \$120,000. The outstanding bonds were issued on January 1, 2008, at 9% and mature on January 1, 2018. The bonds' principal is \$500,000 and the current yield rate on similar bonds is 6%.

**Required:**

- A. Assuming interest is paid annually, prepare a Computation and Allocation Schedule for the difference between book value and the value implied by the purchase price in the consolidated statements workpaper on the acquisition date.
- B. Prepare the workpaper entries necessary on December 31, 2013, to allocate and depreciate the difference between book value and the value implied by the purchase price.

**EXERCISE 5-11 Workpaper Entries for Three Years LO 6 LO 3**

On January 1, 2013, Piper Company acquired an 80% interest in Sand Company for \$2,276,000. At that time the capital stock and retained earnings of Sand Company were \$1,800,000 and \$700,000, respectively. Differences between the fair value and the book value of the identifiable assets of Sand Company were as follows:

|                 | <i>Fair Value in Excess of Book Value</i> |
|-----------------|---|
| Inventory       | \$45,000                                  |
| Equipment (net) | 50,000                                    |

The book values of all other assets and liabilities of Sand Company were equal to their fair values on January 1, 2013. The equipment had a remaining useful life of eight years. Inventory is accounted for on a FIFO basis. Sand Company's reported net income and declared dividends for 2013 through 2015 are shown here:

|            | <i>2013</i> | <i>2014</i> | <i>2015</i> |
|------------|-------------|-------------|-------------|
| Net Income | \$100,000   | \$150,000   | \$80,000    |
| Dividends  | 20,000      | 30,000      | 15,000      |

**Required:**

Prepare the eliminating/adjusting entries needed on the consolidated worksheet for the years ended 2013, 2014, and 2015. (It is not necessary to prepare the worksheet.)

1. Assume the use of the cost method.
2. Assume the use of the partial equity method.
3. Assume the use of the complete equity method.

**EXERCISE 5-12 Workpaper Entries and Consolidated Retained Earnings, Cost Method LO 6 LO 2**

A 90% interest in Saxton Corporation was purchased by Palm Incorporated on January 2, 2014. The capital stock balance of Saxton Corporation was \$3,000,000 on this date, and the balance in retained earnings was \$1,000,000. The cost of the investment to Palm Incorporated was \$3,750,000.

The balance sheet information available for Saxton Corporation on the acquisition date revealed these values:

|                  | <i>Book Value</i> | <i>Fair Value</i> |
|------------------|-------------------|-------------------|
| Inventory (FIFO) | \$ 700,000        | \$ 800,000        |
| Equipment (net)  | 2,000,000         | 2,000,000         |
| Land             | 1,600,000         | 2,000,000         |

The equipment was determined to have a 15-year useful life when purchased at the beginning of 2009. Saxton Corporation reported net income in 2014 of \$250,000 and \$300,000 in 2015. No dividends were declared in either of those years.

**Required:**

- A. Prepare the workpaper entries, assuming that the cost method is used to account for the investment, to establish reciprocity, to eliminate the investment account, and to allocate and depreciate the difference between book value and the value implied by the purchase price in the 2015 consolidated statements workpaper.
- B. Calculate the consolidated retained earnings for the year ended December 31, 2015, assuming that the balance in Palm Incorporated's ending retained earnings on that date was \$2,000,000.

**EXERCISE 5-13 Push Down Accounting LO 10**

Pascal Corporation purchased 90% of the stock of Salzer Company for \$2,070,000 on January 1, 2015. On this date, the fair value of the assets and liabilities of Salzer Company was equal to their book value except for the inventory and equipment accounts. The inventory had a fair value of \$725,000 and a book value of \$600,000. The equipment had a book value of \$900,000 and a fair value of \$1,075,000.

The balances in Salzer Company's capital stock and retained earnings accounts on the date of acquisition were \$1,200,000 and \$600,000, respectively.

**Required:**

In general journal form, prepare the entries on Salzer Company's books to record the effect of the pushed down values implied by the purchase of its stock by Pascal Company assuming that values are allocated on the basis of the fair value of Salzer Company as a whole imputed from the transaction.

**EXERCISE 5-14 Workpaper Entries and Consolidated Retained Earnings, Partial Equity LO 6**

A 90% interest in Saxton Corporation was purchased by Palm Incorporated on January 2, 2014. The capital stock balance of Saxton Corporation was \$3,000,000 on this date, and the balance in retained earnings was \$1,000,000. The cost of the investment to Palm Incorporated was \$3,750,000.

The balance sheet information available for Saxton Corporation on the acquisition date revealed these values:

|                  | <i>Book Value</i> | <i>Fair Value</i> |
|------------------|-------------------|-------------------|
| Inventory (FIFO) | \$ 700,000        | \$ 800,000        |
| Equipment (net)  | 2,000,000         | 2,000,000         |
| Land             | 1,600,000         | 2,000,000         |

The equipment was determined to have a 15-year useful life when purchased at the beginning of 2009. Saxton Corporation reported net income in 2014 of \$250,000 and \$300,000 in 2015. No dividends were declared in either of those years.

- Prepare the worksheet entries, assuming that the partial equity method is used to account for the investment, to eliminate the investment account, and to allocate and depreciate the difference between book value and the value implied by the purchase price in the 2015 consolidated statements workpaper.
- Calculate the consolidated retained earnings for the year ended December 31, 2015, assuming that the balance in Palm Incorporated's ending retained earnings on that date was \$2,495,000.

**EXERCISE 5-15 Workpaper Entries and Consolidated Retained Earnings, Complete Equity LO 6**

A 90% interest in Saxton Corporation was purchased by Palm Incorporated on January 2, 2014. The capital stock balance of Saxton Corporation was \$3,000,000 on this date, and the balance in retained earnings was \$1,000,000. The cost of the investment to Palm Incorporated was \$3,750,000.

The balance sheet information available for Saxton Corporation on the acquisition date revealed these values:

|                  | <i>Book Value</i> | <i>Fair Value</i> |
|------------------|-------------------|-------------------|
| Inventory (FIFO) | \$ 700,000        | \$ 800,000        |
| Equipment (net)  | 2,000,000         | 2,000,000         |
| Land             | 1,600,000         | 2,000,000         |

The equipment was determined to have a 15-year useful life when purchased at the beginning of 2009. Saxton Corporation reported net income in 2014 of \$250,000 and \$300,000 in 2015. No dividends were declared in either of those years.

**Required:**

- Prepare the worksheet entries, assuming that the complete equity method is used to account for the investment, to eliminate the investment account, and to allocate and depreciate the difference between book value and the value implied by the purchase price in the 2015 consolidated statements workpaper.
- Calculate the consolidated retained earnings for the year ended December 31, 2015, assuming that the balance in Palm Incorporated's ending retained earnings on that date was \$2,705,000.

**EXERCISE 5-16 Goodwill Impairment LO 3**

On January 1, 2013, Porsche Company acquired 100% of Saab Company's stock for \$450,000 cash. The fair value of Saab's identifiable net assets was \$375,000 on this date. Porsche Company decided to measure goodwill impairment using comparable prices of similar businesses to estimate the fair value of the reporting unit (Saab). The information for these subsequent years is as follows:

| <i>Year</i> | <i>Present Value of Future Cash Flows</i> | <i>Carrying Value of Saab's Identifiable Net Assets*</i> | <i>Fair Value of Saab's Identifiable Net Assets</i> |
|-------------|---|--|---|
| 2014        | \$400,000                                 | \$330,000  | \$340,000   |
| 2015        | \$400,000                                 | \$320,000  | \$345,000   |
| 2016        | \$350,000                                 | \$300,000  | \$325,000   |

\*Identifiable net assets do not include goodwill.

**Required:**

- A. For each year determine the amount of goodwill impairment, if any. Hint: You may wish to refer back to the section entitled Goodwill Impairment Test in Chapter 2.
- B. Prepare the workpaper entries needed *each year* (2014 through 2016) on the consolidating worksheet to record any goodwill impairment assuming:
  1. The cost or partial equity method is used.
  2. The complete equity method is used.

**ASC EXERCISES:** For all ASC exercises indicate as part of your answer: the Codification topic, subtopic, section, and/or paragraph upon which your answer is based (unless otherwise specified). All ASC questions require access to the FASB Codification.

- ASC5-1** **Presentation** You are writing a research paper on the accounting for treasury stock. You wonder if it is possible to treat treasury stock as an asset. If not, you wonder if, over the history of GAAP, it has ever been acceptable for treasury stock to be classified as an asset (you vaguely recall reading something in *FASB Statement No. 135*, paragraph 4).
- ASC5-2** **Presentation** Management changed an accounting method. Several executives would have qualified for additional bonuses totaling \$50,000 in the prior year under the new method. Can the firm restate the previous year's income statement to include this expense?
- ASC5-3** **Objective** What is the objective of the statement of cash flows?
- ASC5-4** **Cross-Reference** *FASB Statement No. 142* changed the guidance for goodwill and other intangibles. List all the topics in the Codification where this information can be found (i.e., ASC XXX). (*Hint:* There are two general topics.)
- ASC5-5** **Measurement** What is a reverse acquisition? How should the consideration transferred in a reverse acquisition be measured?
- ASC5-6** **Disclosure** When does the SEC staff believe that push down accounting should be applied? **LO 10**

**PROBLEMS****PROBLEM 5-1** **Workpaper Entries and Consolidated Net Income for Two Years, Cost Method** **LO 6** **LO 3** **LO 5**

On January 1, 2014, Palmero Company purchased an 80% interest in Santos Company for \$2,800,000, at which time Santos Company had retained earnings of \$1,000,000 and capital stock of \$500,000. On the date of acquisition, the fair value of the assets and liabilities of Santos Company was equal to their book value, except for property and equipment (net), which had a fair value of \$1,500,000 and a book value of \$600,000. The property and equipment had an estimated remaining life of 10 years. Palmero Company reported net income from independent operations of \$400,000 in 2014 and \$425,000 in 2015. Santos Company reported net income of \$300,000 in 2014 and \$400,000 in 2015. Neither company declared dividends in 2014 or 2015. Palmero uses the cost method to account for its investment in Santos.

**Required:**

- A. Prepare in general journal form the entries necessary in the consolidated statements workpapers for the years ended December 31, 2014 and 2015.
- B. Prepare a schedule or t-account showing the calculation of the controlling and noncontrolling interest in consolidated net income for the years ended December 31, 2014 and December 31, 2015.

**PROBLEM 5-2** **Workpaper Entries (including Goodwill Impairment), Consolidated Net Income for Two Years, Partial Equity Method** **LO 6** **LO 3** **LO 4** **LO 7**

On January 1, 2014, Paxton Company purchased a 70% interest in Sagon Company for \$1,300,000, at which time Sagon Company had retained earnings of \$500,000 and capital stock of \$1,000,000. On January 1, 2014, the fair value of the assets and liabilities of Sagon Company was equal to their book value except for bonds payable. Sagon Company had outstanding a \$1,000,000 issue of 6% bonds that were issued at par and that mature on January 1, 2019. Interest on the bonds is payable annually, and the yield rate on similar bonds on January 1, 2014, is 10%. Paxton Company reported net income from independent operations of \$300,000 in 2014 and \$250,000 in 2015. Sagon Company reported net income of \$100,000 in 2014 and \$120,000 in 2015. Neither company paid or declared dividends in 2014 or 2015. Paxton uses the partial equity method to account for its investment in Santos.

Despite two profitable years, changes in the market during 2015 for Sagon's product line have caused Paxton to be concerned about the future profitability of the unit. The following data are collected to test for goodwill impairment at 12/31/15. (No goodwill impairment has been recorded on the parent's books.)

Paxton chose to measure goodwill impairment using the present value of future cash flows to estimate the fair value of the reporting unit (Sagon).

| Year | Present Value of Future Cash Flows | Carrying Value of Sagon's Identifiable Net Assets* | Fair Value of Sagon's Identifiable Net Assets |
|------|------------------------------------|--|---|
| 2015 | \$1,500,000                        | \$1,409,000  | \$1,320,000                                   |

\* Identifiable Net Assets do not include goodwill.

**Required:**

- Prepare in general journal form the entries necessary in the consolidated statements workpapers for the years ended December 31, 2014, and December 31, 2015. Hint: You may wish to refer back to the section entitled Goodwill Impairment Test in Chapter 2.
- Prepare in good form a schedule or t-account showing the calculation of the controlling and noncontrolling interest in consolidated net income for the years ended December 31, 2014, and December 31, 2015.

**PROBLEM 5-3**

**Workpaper Entries and Consolidated Net Income, Complete Equity Method LO 5 LO 6 LO 3**

Perke Corporation purchased 80% of the stock of Superstition Company for \$1,970,000 on January 1, 2015. On this date, the fair value of the assets and liabilities of Superstition Company was equal to their book value except for the inventory and equipment accounts. The inventory had a fair value of \$725,000 and a book value of \$600,000. Sixty percent of Superstition Company's inventory was sold in 2015; the remainder was sold in 2016. The equipment had a book value of \$900,000 and a fair value of \$1,075,000. The remaining useful life of the equipment is seven years.

The balances in Superstition Company's capital stock and retained earnings accounts on the date of acquisition were \$1,200,000 and \$600,000, respectively. Perke uses the complete equity method to account for its investment in Superstition. The following financial data are from Superstition Company's records.

|                    | 2015      | 2016      |
|--------------------|-----------|-----------|
| Net income         | \$750,000 | \$900,000 |
| Dividends declared | 150,000   | 225,000   |

**Required:**

- In general journal form, prepare the entries on Perke Company's books to account for its investment in Superstition Company for 2015 and 2016.
- Prepare the eliminating entries necessary for the consolidated statements workpapers in 2015 and 2016.
- Assuming Perke Corporation's net income for 2015 was \$1,000,000, calculate the controlling interest in consolidated net income for 2016.

**PROBLEM 5-4**

**Eliminating Entries (including Goodwill Impairment) and Worksheets for Various Years LO 1 LO 6**

On January 1, 2013, Porter Company purchased an 80% interest in the capital stock of Salem Company for \$850,000. At that time, Salem Company had capital stock of \$550,000 and retained earnings of \$80,000.

Differences between the fair value and the book value of the identifiable assets of Salem Company were as follows:

|           | Fair Value in Excess of Book Value |
|-----------|------------------------------------|
| Equipment | \$130,000                          |
| Land      | 65,000                             |
| Inventory | 40,000                             |

The book values of all other assets and liabilities of Salem Company were equal to their fair values on January 1, 2013. The equipment had a remaining life of five years on January 1, 2013. The inventory was sold in 2013.

Salem Company's net income and dividends declared in 2013 and 2014 were as follows:

Year 2013 Net Income of \$100,000; Dividends Declared of \$25,000  
 Year 2014 Net Income of \$110,000; Dividends Declared of \$35,000

**Required:**

- Prepare a Computation and Allocation Schedule for the difference between book value of equity acquired and the value implied by the purchase price.
- Present the eliminating/adjusting entries needed on the consolidated worksheet for the year ended December 31, 2013. (It is not necessary to prepare the worksheet.)



1. Assume the use of the cost method.
  2. Assume the use of the partial equity method.
  3. Assume the use of the complete equity method.
- C. Present the eliminating/adjusting entries needed on the consolidated worksheet for the year ended December 31, 2014. (It is not necessary to prepare the worksheet.)
1. Assume the use of the cost method.
  2. Assume the use of the partial equity method.
  3. Assume the use of the complete equity method.

Use the following financial data for 2015 for requirements D through G.

|                              | <i>Porter Company</i> | <i>Salem Company</i> |
|------------------------------|-----------------------|----------------------|
| Sales                        | \$1,100,000           | \$ 450,000           |
| Dividend income              | 48,000                | —                    |
| Total revenue                | <u>1,148,000</u>      | <u>450,000</u>       |
| Cost of goods sold           | 900,000               | 200,000              |
| Depreciation expense         | 40,000                | 30,000               |
| Other expenses               | 60,000                | 50,000               |
| Total cost and expense       | <u>1,000,000</u>      | <u>280,000</u>       |
| Net income                   | <u>\$ 148,000</u>     | <u>\$ 170,000</u>    |
| 1/1 Retained earnings        | \$ 500,000            | \$ 230,000           |
| Net income                   | 148,000               | 170,000              |
| Dividends declared           | (90,000)              | (60,000)             |
| 12/31 Retained earnings      | <u>\$ 558,000</u>     | <u>\$ 340,000</u>    |
| Cash                         | \$ 70,000             | \$ 65,000            |
| Accounts receivable          | 260,000               | 190,000              |
| Inventory                    | 240,000               | 175,000              |
| Investment in Salem Company  | 850,000               |                      |
| Land                         | —0—                   | 320,000              |
| Plant and equipment          | 360,000               | 280,000              |
| Total assets                 | <u>\$1,780,000</u>    | <u>\$1,030,000</u>   |
| Accounts payable             | \$ 132,000            | \$ 110,000           |
| Notes payable                | 90,000                | 30,000               |
| Capital stock                | 1,000,000             | 550,000              |
| Retained earnings            | 558,000               | 340,000              |
| Total liabilities and equity | <u>\$1,780,000</u>    | <u>\$1,030,000</u>   |

**Required:**

- D. Prepare a consolidated financial statements workpaper for the year ended December 31, 2015. Although no goodwill impairment was reflected at the end of 2013 or 2014, the goodwill impairment test conducted at December 31, 2015 revealed implied goodwill from Salem to be only \$150,000. The impairment has not been recorded in the books of the parent. (*Hint:* You can infer the method being used by the parent from the information in its trial balance.)
- E. Prepare a consolidated statement of financial position and a consolidated income statement for the year ended December 31, 2015.
- F. Describe the effect on the consolidated balances if Salem Company uses the LIFO cost flow assumption in pricing its inventory and there has been no decrease in ending inventory quantities since 2013.
- G. Prepare an analytical calculation of consolidated retained earnings for the year ended December 31, 2015.

**PROBLEM 5-5**

**Workpaper Entries and Consolidated Financial Statements LO 1 LO 6 LO 7 LO 9**

On January 1, 2014, Palmer Company acquired a 90% interest in Stevens Company at a cost of \$1,000,000. At the purchase date, Stevens Company's stockholders' equity consisted of the following:

|                   |           |
|-------------------|-----------|
| Common stock      | \$500,000 |
| Retained earnings | 190,000   |

An examination of Stevens Company's assets and liabilities revealed the following at the date of acquisition:

|                                    | <i>Book Value</i> | <i>Fair Value</i> |
|------------------------------------|-------------------|-------------------|
| Cash                               | \$ 90,726         | \$ 90,726         |
| Accounts receivable                | 200,000           | 200,000           |
| Inventories                        | 160,000           | 210,000           |
| Equipment                          | 300,000           | 390,000           |
| Accumulated depreciation—equipment | (100,000)         | (130,000)         |
| Land                               | 190,000           | 290,000           |
| Bonds payable                      | (205,556)         | (150,000)         |
| Other                              | 54,830            | 54,830            |
| Total                              | <u>\$690,000</u>  | <u>\$955,556</u>  |

#### Additional Information—Date of Acquisition

Stevens Company's equipment had an original life of 15 years and a remaining useful life of 10 years. All the inventory was sold in 2014. Stevens Company purchased its bonds payable on the open market on January 10, 2014, for \$150,000 and recognized a gain of \$55,556.

Financial statement data for 2016 are presented here:

|                                    | <i>Palmer<br/>Company</i> | <i>Stevens<br/>Company</i> |
|------------------------------------|---------------------------|----------------------------|
| Sales                              | \$620,000                 | \$340,000                  |
| Cost of sales                      | 430,000                   | 240,000                    |
| Gross margin                       | 190,000                   | 100,000                    |
| Depreciation expense               | 30,000                    | 20,000                     |
| Other expenses                     | 60,000                    | 35,000                     |
| Income from operations             | 100,000                   | 45,000                     |
| Dividend income                    | 31,500                    | 0                          |
| Net income                         | <u>\$131,500</u>          | <u>\$ 45,000</u>           |
| 1/1 Retained earnings              | \$ 297,600                | \$210,000                  |
| Net income                         | 131,500                   | 45,000                     |
|                                    | 429,100                   | 255,000                    |
| Dividends                          | (120,000)                 | (35,000)                   |
| 12/31 Retained earnings            | <u>\$ 309,100</u>         | <u>\$220,000</u>           |
| Cash                               | \$ 201,200                | \$151,000                  |
| Accounts receivable                | 221,000                   | 173,000                    |
| Inventories                        | 100,400                   | 81,000                     |
| Investment in Stevens Company      | 1,000,000                 |                            |
| Equipment                          | 450,000                   | 300,000                    |
| Accumulated depreciation—equipment | (300,000)                 | (140,000)                  |
| Land                               | 360,000                   | 290,000                    |
| Total assets                       | <u>\$2,032,600</u>        | <u>\$855,000</u>           |
| Accounts payable                   | \$ 323,500                | \$135,000                  |
| Bonds payable                      | 400,000                   |                            |
| Common stock                       | 1,000,000                 | 500,000                    |
| Retained earnings                  | 309,100                   | 220,000                    |
| Total liabilities and equity       | <u>\$2,032,600</u>        | <u>\$855,000</u>           |

#### Required:

- A. What method is Palmer using to account for its investment in Stevens? How can you tell?
- B. Prepare in general journal form the workpaper entry to allocate and depreciate the difference between book value and the value implied by the purchase price in the December 31, 2014, consolidated statements workpaper.
- C. Prepare a consolidated financial statements workpaper for the year ended December 31, 2016.
- D. Prepare in good form a schedule or t-account showing the calculation of the controlling and noncontrolling interest in consolidated net income for the year ended December 31, 2016.



**PROBLEM 5-6** Workpaper Entries for Two Years and Sale of Equipment in Year Two **LO 6 LO 9**

On January 1, 2014, Perini Company purchased an 85% interest in Silvas Company for \$400,000. On this date, Silvas Company had common stock of \$90,000 and retained earnings of \$210,000. An examination of Silvas Company's assets and liabilities revealed that their book value was equal to their fair value except for the equipment.

|                          | <i>Book Value</i> | <i>Fair Value</i> |
|--------------------------|-------------------|-------------------|
| Equipment                | \$360,000         |                   |
| Accumulated depreciation | (120,000)         |                   |
|                          | <u>\$240,000</u>  | <u>\$300,000</u>  |

The equipment had an expected remaining life of six years and no salvage value. Straightline depreciation is used.

During 2014 and 2015, Perini Company reported net income from its own operations of \$80,000 and paid dividends of \$50,000 in each year. Silvas Company had income of \$40,000 each year and paid dividends of \$30,000 on each December 31.

Accumulated depreciation is presented on a separate row in the workpaper and in the consolidated financial statements.

**Required:**

- A.** Prepare eliminating entries for consolidated financial statements workpaper for the year ended December 31, 2014, assuming:
1. The cost method is used to account for the investment.
  2. The partial equity method is used to account for the investment.
- B.** On January 1, 2014, Silvas Company sold all its equipment for \$220,000. Prepare the eliminating entries for the consolidated financial statements workpaper for the year ended December 31, 2014, assuming:
1. The cost method is used to account for the investment.
  2. The partial equity method is used to account for the investment.

**PROBLEM 5-7** Workpaper Entries and Sale of Equipment in Year Three, Complete Equity **LO 6 LO 9**

On January 1, 2014, Pueblo Corporation purchased a 75% interest in Sanchez Company for \$900,000. A summary of Sanchez Company's balance sheet at date of purchase follows:

|                          | <i>Book Value</i> | <i>Fair Value</i> |
|--------------------------|-------------------|-------------------|
| Equipment                | \$720,000         |                   |
| Accumulated depreciation | (240,000)         |                   |
| Equipment (net)          | 480,000           | \$660,000         |
| Other assets             | 450,000           | 450,000           |
|                          | <u>\$930,000</u>  |                   |
| Liabilities              | \$255,000         | \$255,000         |
| Common stock             | 300,000           |                   |
| Retained earnings        | 375,000           |                   |
|                          | <u>\$930,000</u>  |                   |

The equipment had an original life of 15 years and remaining useful life of 10 years.

During 2014 Pueblo Corporation reported income of \$237,000 and paid dividends of \$150,000. Sanchez Company reported net income of \$123,000 and paid dividends of \$120,000. Pueblo uses the complete equity method to account for its investment in Sanchez.

**Required:**

- A.** Prepare the elimination entries for the consolidated financial statements workpaper on December 31, 2014. Accumulated depreciation is presented on a separate row in the workpaper and in the consolidated financial statements.
- B.** Assume that Sanchez Company disposed of all its equipment on January 1, 2016, for \$450,000.
1. What amount of gain (loss) will Sanchez Company report?
  2. What is the consolidated gain (loss)?
  3. Prepare the workpaper entry necessary to allocate the amount of the difference between book value and the value implied by the purchase price that was originally allocated to the equipment that has now been sold to outsiders.
  4. What workpaper entry will be necessary to allocate this difference between book value and the value implied by the purchase price in future years?

**PROBLEM 5-8 Eliminating Entries and Consolidated Net Income LO 1 LO 6 LO 2**

Patten Corporation acquired an 85% interest in Savage Company for \$3,100,000 on January 1, 2014. On this date, the balances in Savage Company's capital stock and retained earnings accounts were \$2,000,000 and \$700,000, respectively.

An examination of Savage Company's books on this date revealed the following:

|                       | <i>Book Value</i> | <i>Fair Value</i> |
|-----------------------|-------------------|-------------------|
| Current assets        | \$ 650,000        | \$ 650,000        |
| Inventory             | 560,000           | 610,000           |
| Marketable securities | 430,000           | 430,000           |
| Plant and equipment   | 1,200,000         | 1,600,000         |
| Land                  | 400,000           | 900,000           |
| Liabilities           | 540,000           | 540,000           |

The remaining useful life of the plant and equipment is 10 years, and all the inventory was sold in 2014. The net income from Patten Corporation's own operations was \$950,000 in 2014 and \$675,000 in 2015. Savage Company's net income for the respective years was \$110,000 and \$180,000. No dividends were declared.

**Required:**

- A. Prepare a Computation and Allocation Schedule for the difference between book value of equity and the value implied by the purchase price.
- B. Prepare the consolidated statements workpaper eliminating entries for 2014 and 2015 in general journal form, under each of the following assumptions:
  1. The cost method is used to account for the investment.
  2. The partial equity method is used to account for the investment.
  3. The complete equity method is used to account for the investment.
- C. Calculate the controlling interest in consolidated net income for 2014 and 2015.

**PROBLEM 5-9 Workpaper Entries and Consolidated Net Income for Year of Acquisition LO 6**

On January 1, 2014, Pump Company acquired all the outstanding common stock of Sound Company for \$556,000 in cash. Financial data relating to Sound Company on January 1, 2014, are presented here:

|                                    | <i>Balance Sheet</i> |                    |
|------------------------------------|----------------------|--------------------|
|                                    | <i>Book Value</i>    | <i>Fair Value</i>  |
| Cash                               | \$ 104,550           | \$ 104,550         |
| Receivables                        | 123,000              | 112,310            |
| Inventories                        | 220,000              | 268,000            |
| Buildings                          | 331,000              | 375,000            |
| Accumulated depreciation—buildings | (264,800)            | (300,000)          |
| Equipment                          | 145,000              | 130,000            |
| Accumulated depreciation—equipment | (108,750)            | (97,500)           |
| Land                               | 150,000              | 420,000            |
| Total assets                       | <u>\$ 700,000</u>    | <u>\$1,012,360</u> |
|                                    | <i>Book Value</i>    | <i>Fair Value</i>  |
| Current liabilities                | \$106,000            | \$ 106,000         |
| Bonds payable, 8% due 1/1/2028     |                      |                    |
| Interest payable on 6/30 and 12/31 | 300,000              |                    |
| Common stock                       | 200,000              |                    |
| Premium on common stock            | 80,000               |                    |
| Retained earnings                  | 14,000               |                    |
| Total liabilities and equities     | <u>\$700,000</u>     |                    |

Sound Company would expect to pay 10% interest to borrow long-term funds on the date of acquisition. During 2014, Sound Company wrote its receivables down by \$10,690 and recorded a corresponding loss. Sound Company accounts for its inventories at lower of FIFO cost or market. Its buildings and equipment had a remaining estimated useful life on January 1, 2014, of 10 years and 2½ years, respectively. Sound Company reported net income of \$80,000 and declared no dividends in 2014.

**Required:**

- A. Prepare in general journal form the December 31, 2014, workpaper entries necessary to eliminate the investment account and to allocate and depreciate the difference between book value and the value implied by the purchase price.
- B. Assume that Pump Company's net income from independent operations in 2014 amounts to \$500,000. Calculate the controlling interest in consolidated net income for 2014.

**PROBLEM 5-10 Workpaper Entries for Year of Acquisition LO 5 LO 6**

Pearson Company purchased a 100% interest in Sanders Company and a 90% interest in Taylor Company on January 2, 2014, for \$800,000 and \$1,300,000, respectively. The account balances and fair values of the acquired companies on the acquisition date were as follows:

|                           | <i>Sanders</i>     |                   | <i>Taylor</i>      |                   |
|---------------------------|--------------------|-------------------|--------------------|-------------------|
|                           | <i>Book Value</i>  | <i>Fair Value</i> | <i>Book Value</i>  | <i>Fair Value</i> |
| Current assets            | \$ 200,000         | \$200,000         | \$ 350,000         | \$350,000         |
| Inventory                 | 400,000            | 400,000           | 500,000            | 575,000           |
| Plant and equipment (net) | 300,000            | 350,000           | 600,000            | 600,000           |
| Land                      | 600,000            | 600,000           | 550,000            | 625,000           |
| Total                     | <u>\$1,500,000</u> |                   | <u>\$2,000,000</u> |                   |
| Current liabilities       | \$ 500,000         | \$500,000         | \$ 300,000         | \$300,000         |
| Bonds payable             | 300,000            | 300,000           | 600,000            | 600,000           |
| Capital stock             | 500,000            |                   | 800,000            |                   |
| Retained earnings         | 200,000            |                   | 300,000            |                   |
| Total                     | <u>\$1,500,000</u> |                   | <u>\$2,000,000</u> |                   |

Sanders Company's equipment has a remaining useful life of 10 years. Two-thirds of Taylor Company's inventory was sold in 2014, and the rest was sold in the following year. In 2014, Sanders Company reported net income of \$500,000 and declared dividends of \$100,000. Taylor Company's net income and declared dividends for 2014 were \$800,000 and \$200,000, respectively.

**Required:**

- A. Prepare in general journal form the entries on the books of Pearson Corporation to account for its investments in 2014.
- B. Prepare the elimination entries necessary in the consolidated statements workpaper for the year ended December 31, 2014.

**PROBLEM 5-11 Eliminating Entries (including Goodwill Impairment) and Worksheets for Various Years, Partial Equity Method LO 6**

(Note that this is the same problem as Problem 5-4, but assuming the use of the partial equity method.)

On January 1, 2013, Porter Company purchased an 80% interest in the capital stock of Salem Company for \$850,000. At that time, Salem Company had capital stock of \$550,000 and retained earnings of \$80,000. Porter Company uses the partial equity method to record its investment in Salem Company. Differences between the fair value and the book value of the identifiable assets of Salem Company were as follows:

|           | <i>Fair Value in Excess of Book Value</i> |
|-----------|---|
| Equipment | \$130,000                                 |
| Land      | 65,000                                    |
| Inventory | 40,000                                    |

The book values of all other assets and liabilities of Salem Company were equal to their fair values on January 1, 2013. The equipment had a remaining life of five years on January 1, 2013. The inventory was sold in 2013.

Salem Company's net income and dividends declared in 2013 and 2014 were as follows:

Year 2013 Net Income of \$100,000; Dividends Declared of \$25,000  
 Year 2014 Net Income of \$110,000; Dividends Declared of \$35,000

**Required:**

- A. Present the eliminating/adjusting entries needed on the consolidated worksheet for the year ended December 31, 2013. (It is not necessary to prepare the worksheet.)
- B. Present the eliminating/adjusting entries needed on the consolidated worksheet for the year ended December 31, 2014. (It is not necessary to prepare the worksheet.)

Use the following financial data for 2015 for requirements C through G.

|                              | <i>Porter Company</i> | <i>Salem Company</i> |
|------------------------------|-----------------------|----------------------|
| Sales                        | \$1,100,000           | \$ 450,000           |
| Equity in subsidiary income  | <u>136,000</u>        | <u>—0—</u>           |
| Total revenue                | <u>1,236,000</u>      | <u>450,000</u>       |
| Cost of goods sold           | 900,000               | 200,000              |
| Depreciation expense         | 40,000                | 30,000               |
| Other expenses               | <u>60,000</u>         | <u>50,000</u>        |
| Total cost and expense       | <u>1,000,000</u>      | <u>280,000</u>       |
| Net income                   | <u>\$ 236,000</u>     | <u>\$ 170,000</u>    |
| 1/1 Retained earnings        | \$ 620,000            | \$ 230,000           |
| Net income                   | 236,000               | 170,000              |
| Dividends declared           | <u>(90,000)</u>       | <u>(60,000)</u>      |
| 12/31 Retained earnings      | <u>\$ 766,000</u>     | <u>\$ 340,000</u>    |
| Cash                         | \$ 70,000             | \$ 65,000            |
| Accounts receivable          | 260,000               | 190,000              |
| Inventory                    | 240,000               | 175,000              |
| Investment in Salem Company  | 1,058,000             |                      |
| Land                         | —0—                   | 320,000              |
| Plant and equipment          | <u>360,000</u>        | <u>280,000</u>       |
| Total assets                 | <u>\$1,988,000</u>    | <u>\$1,030,000</u>   |
| Accounts payable             | \$ 132,000            | \$ 110,000           |
| Notes payable                | 90,000                | 30,000               |
| Capital stock                | 1,000,000             | 550,000              |
| Retained earnings            | <u>766,000</u>        | <u>340,000</u>       |
| Total liabilities and equity | <u>\$1,988,000</u>    | <u>\$1,030,000</u>   |

**Required:**

- C. Although no goodwill impairment was reflected at the end of 2013 or 2014, the goodwill impairment test conducted at December 31, 2015 revealed implied goodwill from Salem to be only \$150,000. The impairment has not been recorded in the books of the parent. Prepare a t-account calculation of the controlling and noncontrolling interests in consolidated income for the year ended December 31, 2015.
- D. Prepare a consolidated financial statements workpaper for the year ended December 31, 2015.
- E. Prepare a consolidated statement of financial position and a consolidated income statement for the year ended December 31, 2015.
- F. Describe the effect on the consolidated balances if Salem Company uses the LIFO cost flow assumption in pricing its inventory and there has been no decrease in ending inventory quantities since 2013.
- G. Prepare an analytical calculation of consolidated retained earnings for the year ended December 31, 2015.

*Note:* If you completed Problem 5-4, a comparison of the consolidated balances in this problem with those you obtained in Problem 5-4 will demonstrate that the method (cost or partial equity) used by the parent company to record its investment in a consolidated subsidiary has no effect on the consolidated balances.

**PROBLEM 5-12 Workpaper Entries and Consolidated Financial Statements, Partial Equity**

**Method LO 1 LO 6 LO 7 LO 9**

(Note that this is the same problem as Problem 5-5, but assuming the use of the partial equity method.)

On January 1, 2014, Palmer Company acquired a 90% interest in Stevens Company at a cost of \$1,000,000. At the purchase date, Stevens Company's stockholders' equity consisted of the following:

|                   |           |
|-------------------|-----------|
| Common stock      | \$500,000 |
| Retained earnings | 190,000   |

An examination of Stevens Company's assets and liabilities revealed the following at the date of acquisition:

|                     | <i>Book Value</i> | <i>Fair Value</i> |
|---------------------|-------------------|-------------------|
| Cash                | \$ 90,726         | \$ 90,726         |
| Accounts receivable | 200,000           | 200,000           |
| Inventories         | 160,000           | 210,000           |
| Equipment           | 300,000           | 390,000           |

|                                    |                  |                  |
|------------------------------------|------------------|------------------|
| Accumulated depreciation—equipment | (100,000)        | (130,000)        |
| Land                               | 190,000          | 290,000          |
| Bonds payable                      | (205,556)        | (150,000)        |
| Other                              | 54,830           | 54,830           |
| Total                              | <u>\$690,000</u> | <u>\$955,556</u> |

#### Additional Information—Date of Acquisition

Stevens Company's equipment had an original life of 15 years and a remaining useful life of 10 years. All the inventory was sold in 2014. Stevens Company purchased its bonds payable on the open market on January 10, 2014, for \$150,000 and recognized a gain of \$55,556. Palmer Company uses the partial equity method to record its investment in Stevens Company. Financial statement data for 2016 are presented here:

|                                    | <i>Palmer<br/>Company</i> | <i>Stevens<br/>Company</i> |
|------------------------------------|---------------------------|----------------------------|
| Sales                              | \$ 620,000                | \$340,000                  |
| Cost of sales                      | 430,000                   | 240,000                    |
| Gross margin                       | 190,000                   | 100,000                    |
| Depreciation expense               | 30,000                    | 20,000                     |
| Other expenses                     | 60,000                    | 35,000                     |
| Income from operations             | 100,000                   | 45,000                     |
| Equity in subsidiary income        | 40,500                    | 0                          |
| Net income                         | <u>\$ 140,500</u>         | <u>\$ 45,000</u>           |
| 1/1 Retained earnings              | \$ 315,600                | \$210,000                  |
| Net income                         | 140,500                   | 45,000                     |
|                                    | 456,100                   | 255,000                    |
| Dividends                          | <u>(120,000)</u>          | <u>(35,000)</u>            |
| 12/31 Retained earnings            | <u>\$ 336,100</u>         | <u>\$220,000</u>           |
|                                    | <i>Palmer<br/>Company</i> | <i>Stevens<br/>Company</i> |
| Cash                               | \$ 201,200                | \$151,000                  |
| Accounts receivable                | 221,000                   | 173,000                    |
| Inventories                        | 100,400                   | 81,000                     |
| Investment in Stevens Company      | 1,027,000                 |                            |
| Equipment                          | 450,000                   | 300,000                    |
| Accumulated depreciation—equipment | (300,000)                 | (140,000)                  |
| Land                               | 360,000                   | 290,000                    |
| Total assets                       | <u>\$2,059,600</u>        | <u>\$855,000</u>           |
| Accounts payable                   | \$ 323,500                | \$135,000                  |
| Bonds payable                      | 400,000                   |                            |
| Common stock                       | 1,000,000                 | 500,000                    |
| Retained earnings                  | 336,100                   | 220,000                    |
| Total liabilities and equity       | <u>\$2,059,600</u>        | <u>\$855,000</u>           |

#### Required:

- Prepare in general journal form the workpaper entry to allocate and depreciate the difference between book value and the value implied by the purchase price in the December 31, 2014, consolidated statements workpaper.
- Prepare a consolidated financial statements workpaper for the year ended December 31, 2016.
- Prepare in good form a schedule or t-account showing the calculation of the controlling interest in consolidated net income for the year ended December 31, 2016.

If you completed Problem 5-5, a comparison of the consolidated balances in this problem with those you obtained in Problem 5-5 will demonstrate that the method (cost or partial equity) used by the parent company to record its investment in a consolidated subsidiary has no effect on the consolidated balances.

**PROBLEM 5-13 Push Down Accounting LO 10**

On January 2, 2014, Press Company purchased on the open market 90% of the outstanding common stock of Sensor Company for \$800,000 cash. Balance sheets for Press Company and Sensor Company on January 1, 2014, just before the stock acquisition by Press Company, were:

|                           | <i>Press Company</i> | <i>Sensor Company</i> |
|---------------------------|----------------------|-----------------------|
| Cash                      | \$1,065,000          | \$ 38,000             |
| Receivables               | 422,500              | 76,000                |
| Inventory                 | 216,500              | 124,000               |
| Building (net)            | 465,000              | 322,000               |
| Equipment (net)           | 229,000              | 185,000               |
| Land                      | 188,000              | 100,000               |
| Patents                   | 167,500              | 88,000                |
| Total assets              | <u>\$2,753,500</u>   | <u>\$933,000</u>      |
| Liabilities               | \$ 667,000           | \$249,000             |
| Common stock              | 700,000              | 300,000               |
| Other contributed capital | 846,000              | 164,000               |
| Retained earnings         | 540,500              | 220,000               |
| Total equities            | <u>\$2,753,500</u>   | <u>\$933,000</u>      |

The full implied value of Sensor Company is to be “pushed down” and recorded in Sensor Company’s books. The excess of the implied fair value over the book value of net assets acquired is allocated as follows: To equipment, 30%; to land, 20%; to patents, 50%.

**Required:**

- A. Prepare the entry on Sensor Company’s books on January 2, 2014, to record the values implied by the 90% stock purchase by Press Company.
- B. Prepare a consolidated balance sheet workpaper on January 1, 2014.

**PROBLEM 5-14 Push Down Accounting LO 10 LO 2**

On January 1, 2012, Push Company purchased an 80% interest in the capital stock of Way-Down Company for \$820,000. At that time, WayDown Company had capital stock of \$500,000 and retained earnings of \$100,000. Differences between the fair value and the book value of identifiable assets of WayDown Company were as follows:

|           | <i>Fair Value in Excess of Book Value</i> |
|-----------|---|
| Equipment | \$125,000                                 |
| Land      | 62,500                                    |
| Inventory | 37,500                                    |

The book values of all other assets and liabilities of WayDown Company were equal to their fair values on January 1, 2012. The equipment had a remaining life of five years on January 1, 2012. The inventory was sold in 2012. WayDown Company revalued its assets on January 2, 2012. New values were allocated on the basis of the fair value on WayDown Company as a whole imputed from the transaction.

Financial data for 2012 are presented here:

|                         | <i>Push Company</i> | <i>WayDown Company</i> |
|-------------------------|---------------------|------------------------|
| Sales                   | \$1,050,000         | \$ 400,000             |
| Dividend income         | 40,000              | —0—                    |
| Total revenue           | <u>1,090,000</u>    | <u>400,000</u>         |
| Cost of goods sold      | 850,000             | 180,000                |
| Depreciation expense    | 35,000              | 50,000                 |
| Other expenses          | 65,000              | 50,000                 |
| Total cost and expense  | <u>950,000</u>      | <u>280,000</u>         |
| Net income              | <u>\$ 140,000</u>   | <u>\$ 120,000</u>      |
| 1/1 Retained earnings   | \$ 480,000          | \$ 102,500             |
| Net income              | 140,000             | 120,000                |
| Dividends declared      | (100,000)           | (50,000)               |
| 12/31 Retained earnings | <u>\$ 520,000</u>   | <u>\$ 172,500</u>      |

|                              |                    |                    |
|------------------------------|--------------------|--------------------|
| Cash                         | \$ 80,000          | \$ 35,000          |
| Accounts receivable          | 250,000            | 170,000            |
| Inventory                    | 230,000            | 150,000            |
| Investment in WayDown        | 820,000            |                    |
| Goodwill                     | —0—                | 200,000            |
| Land                         | —0—                | 362,500            |
| Plant and equipment          | 350,000            | 300,000            |
| Total assets                 | <u>\$1,730,000</u> | <u>\$1,217,500</u> |
| Accounts payable             | \$ 160,000         | \$ 100,000         |
| Notes payable                | 50,000             | 20,000             |
| Capital stock                | 1,000,000          | 500,000            |
| Revaluation capital          |                    | 425,000            |
| Retained earnings            | 520,000            | 172,500            |
| Total liabilities and equity | <u>\$1,730,000</u> | <u>\$1,217,500</u> |

**Required:**

- A. In general journal form, prepare the entry made by WayDown Company on January 2, 2012, to record the effect of the pushed down values implied by the purchase of its stock by Push Company assuming that values were allocated on the basis of the fair value of WayDown Company as a whole imputed from the transaction.
- B. Prepare a consolidated financial statements worksheet for the year ended December 31, 2012.
- C. What effect does the decision to apply the full push down approach have on the following items (compared to the case where push down accounting is not used):
  1. Consolidated net income?
  2. Consolidated retained earnings?
  3. Consolidated net assets?
  4. Noncontrolling interest in consolidated net assets?

**PROBLEM 5-15** **Eliminating Entries and Worksheets for Various Years (including Goodwill Impairment), Complete Equity Method LO 6**

(Note that this is the same problem as Problem 5-4 and Problem 5-11, but assuming the use of the complete equity method.)

On January 1, 2013, Porter Company purchased an 80% interest in the capital stock of Salem Company for \$850,000. At that time, Salem Company had capital stock of \$550,000 and retained earnings of \$80,000. Porter Company uses the complete equity method to record its investment in Salem Company. Differences between the fair value and the book value of the identifiable assets of Salem Company were as follows:

|           | <i>Fair Value in Excess of Book Value</i> |
|-----------|---|
| Equipment | \$130,000                                 |
| Land      | 65,000                                    |
| Inventory | 40,000                                    |

The book values of all other assets and liabilities of Salem Company were equal to their fair values on January 1, 2013. The equipment had a remaining life of five years on January 1, 2013. The inventory was sold in 2013.

Salem Company's net income and dividends declared in 2013 and 2014 were as follows:

Year 2013 Net Income of \$100,000; Dividends Declared of \$25,000

Year 2014 Net Income of \$110,000; Dividends Declared of \$35,000

**Required:**

- A. Present the eliminating/adjusting entries needed on the consolidated worksheet for the year ended December 31, 2013. (It is not necessary to prepare the worksheet.)
- B. Present the eliminating/adjusting entries needed on the consolidated worksheet for the year ended December 31, 2014. (It is not necessary to prepare the worksheet.)

Use the following financial data for 2015 for requirements C through G.

|                              | <i>Porter Company</i> | <i>Salem Company</i> |
|------------------------------|-----------------------|----------------------|
| Sales                        | \$1,100,000           | \$ 450,000           |
| Equity in subsidiary income  | 77,200                | —                    |
| Total revenue                | <u>1,177,200</u>      | <u>450,000</u>       |
| Cost of goods sold           | 900,000               | 200,000              |
| Depreciation expense         | 40,000                | 30,000               |
| Other expenses               | 60,000                | 50,000               |
| Total cost and expense       | <u>1,000,000</u>      | <u>280,000</u>       |
| Net income                   | <u>\$ 177,200</u>     | <u>\$ 170,000</u>    |
| 1/1 Retained earnings        | \$ 546,400            | \$ 230,000           |
| Net income                   | 177,200               | 170,000              |
| Dividends declared           | (90,000)              | (60,000)             |
| 12/31 Retained earnings      | <u>\$ 633,600</u>     | <u>\$ 340,000</u>    |
| Cash                         | \$ 70,000             | \$ 65,000            |
| Accounts receivable          | 260,000               | 190,000              |
| Inventory                    | 240,000               | 175,000              |
| Investment in Salem Company  | 925,600               |                      |
| Land                         | —0—                   | 320,000              |
| Plant and equipment          | 360,000               | 280,000              |
| Total assets                 | <u>\$1,855,600</u>    | <u>\$1,030,000</u>   |
| Accounts payable             | \$ 132,000            | \$ 110,000           |
| Notes payable                | 90,000                | 30,000               |
| Capital stock                | 1,000,000             | 550,000              |
| Retained earnings            | 633,600               | 340,000              |
| Total liabilities and equity | <u>\$1,855,600</u>    | <u>\$1,030,000</u>   |

**Required:**

- C. Although no goodwill impairment was reflected at the end of 2013 or 2014, the goodwill impairment test conducted at December 31, 2015 revealed implied goodwill from Salem to be only \$150,000. The impairment was reflected in the books of the parent. Prepare a t-account calculation of the controlling and noncontrolling interests in consolidated income for the year ended December 31, 2015.
- D. Prepare a consolidated financial statements workpaper for the year ended December 31, 2015.
- E. Prepare a consolidated statement of financial position and a consolidated income statement for the year ended December 31, 2015.
- F. Describe the effect on the consolidated balances if Salem Company uses the LIFO cost flow assumption in pricing its inventory and there has been no decrease in ending inventory quantities since 2013.
- G. Prepare an analytical calculation of consolidated retained earnings for the year ended December 31, 2015.

*Note:* If you completed Problem 5-4 and Problem 5-11, a comparison of the consolidated balances in this problem with those you obtained in Problem 5-4 and Problem 5-11 will demonstrate that the method (cost or partial equity) used by the parent company to record its investment in a consolidated subsidiary has no effect on the consolidated balances.

**PROBLEM 5-16 Workpaper Entries and Consolidated Financial Statements, Complete Equity Method LO 1 LO 6 LO 7 LO 9**

(Note that this is the same problem as Problem 5-5 or Problem 5-12, but assuming the use of the complete equity method.)

On January 1, 2014, Palmer Company acquired a 90% interest in Stevens Company at a cost of \$1,000,000. At the purchase date, Stevens Company's stockholders' equity consisted of the following:

|                   |           |
|-------------------|-----------|
| Common stock      | \$500,000 |
| Retained earnings | 190,000   |





An examination of Stevens Company's assets and liabilities revealed the following at the date of acquisition:

|                                    | <i>Book Value</i> | <i>Fair Value</i> |
|------------------------------------|-------------------|-------------------|
| Cash                               | \$ 90,726         | \$ 90,726         |
| Accounts receivable                | 200,000           | 200,000           |
| Inventories                        | 160,000           | 210,000           |
| Equipment                          | 300,000           | 390,000           |
| Accumulated depreciation—equipment | (100,000)         | (130,000)         |
| Land                               | 190,000           | 290,000           |
| Bonds payable                      | (205,556)         | (150,000)         |
| Other                              | 54,830            | 54,830            |
| Total                              | <u>\$690,000</u>  | <u>\$955,556</u>  |

#### Additional Information—Date of Acquisition

Stevens Company's equipment had an original life of 15 years and a remaining useful life of 10 years. All the inventory was sold in 2014. Stevens Company purchased its bonds payable on the open market on January 10, 2014, for \$150,000 and recognized a gain of \$55,556. Palmer Company uses the complete equity method to record its investment in Stevens Company. Financial statement data for 2016 are presented on the next page.

|                                    | <i>Palmer Company</i> | <i>Stevens Company</i> |
|------------------------------------|-----------------------|------------------------|
| Sales                              | \$ 620,000            | \$340,000              |
| Cost of sales                      | 430,000               | 240,000                |
| Gross margin                       | 190,000               | 100,000                |
| Depreciation expense               | 30,000                | 20,000                 |
| Other expenses                     | 60,000                | 35,000                 |
| Income from operations             | 100,000               | 45,000                 |
| Equity in subsidiary income        | 35,100                | 0                      |
| Net income                         | <u>135,100</u>        | <u>\$ 45,000</u>       |
| 1/1 Retained earnings              | \$ 209,800            | \$210,000              |
| Net income                         | 135,100               | 45,000                 |
|                                    | 344,900               | 255,000                |
| Dividends                          | (120,000)             | (35,000)               |
| 12/31 Retained earnings            | <u>\$ 224,900</u>     | <u>\$220,000</u>       |
|                                    | <i>Palmer Company</i> | <i>Stevens Company</i> |
| Cash                               | \$ 201,200            | \$151,000              |
| Accounts receivable                | 221,000               | 173,000                |
| Inventories                        | 100,400               | 81,000                 |
| Investment in Stevens Company      | 915,800               |                        |
| Equipment                          | 450,000               | 300,000                |
| Accumulated depreciation—equipment | (300,000)             | (140,000)              |
| Land                               | 360,000               | 290,000                |
| Total assets                       | <u>\$1,948,400</u>    | <u>\$855,000</u>       |
| Accounts payable                   | \$ 323,500            | \$135,000              |
| Bonds payable                      | 400,000               |                        |
| Common stock                       | 1,000,000             | 500,000                |
| Retained earnings                  | 224,900               | 220,000                |
| Total liabilities and equity       | <u>\$1,948,400</u>    | <u>\$855,000</u>       |

#### Required:

- A. Prepare in general journal form the workpaper entry to allocate and depreciate the difference between book value and the value implied by the purchase price in the December 31, 2014, consolidated statements workpaper.
- B. Prepare a consolidated financial statements workpaper for the year ended December 31, 2016.
- C. Prepare in good form a schedule or t-account showing the calculation of the controlling interest in consolidated net income for the year ended December 31, 2016.

If you completed Problem 5-5 and Problem 5-12, a comparison of the consolidated balances in this problem with those you obtained in Problem 5-5 and Problem 5-12 will demonstrate that the method (cost, partial equity, or complete equity) used by the parent company to record its investment in a consolidated subsidiary has no effect on the consolidated balances.

### PROBLEM 5-17 Impact on Future Profits and In-process R&D LO 1

The Mcquire Company is considering acquiring 100% of the Sosa Company. The management of Mcquire fears that the acquisition price may be too high. Condensed financial statements for Sosa Company for the current year are as follows:

| <i>Income Statement</i> | <i>2015</i> |               |
|-------------------------|-------------|---------------|
| Revenues                |             | \$100,000     |
| Cost of Goods Sold      |             | <u>40,000</u> |
| Gross Margin            |             | 60,000        |
| Operating Expenses      |             | <u>35,000</u> |
| Pretax Income           |             | 25,000        |
| Income Tax Expense      |             | <u>10,000</u> |
| Net Income              |             | <u>15,000</u> |

| <i>Balance Sheet</i>         | <i>Year Ended 12/31/14</i> | <i>Year Ended 12/31/15</i> |
|------------------------------|----------------------------|----------------------------|
| Cash                         | \$ 4,000                   | \$ 4,000                   |
| Receivables                  | 10,000                     | 14,000                     |
| Inventory                    | 31,000                     | 27,000                     |
| Fixed Assets (net)           | 50,000                     | 55,000                     |
| Total Assets                 | <u>\$95,000</u>            | <u>\$100,000</u>           |
| Current Liabilities          | \$15,000                   | \$ 17,000                  |
| Long-term Liabilities        | 25,000                     | 18,000                     |
| Common Stock                 | 20,000                     | 20,000                     |
| Retained Earnings            | 35,000                     | 45,000                     |
| Total Liabilities and Equity | <u>\$95,000</u>            | <u>\$100,000</u>           |

You believe that Sosa might be currently acquired at a price resulting in a price to earnings (P/E) ratio of 8 to 12 times. Also, the fair market value of Sosa's net assets is approximately \$105,000, and the difference between book value and the value implied by the purchase price is due solely to depreciable assets with a remaining useful life of 10 years. Sosa Company is heavily involved in research and development of new baseball bats that enable the batter to hit the ball further. You estimate that \$30,000 of the acquisition price might be classified as in-process R&D. Sosa's net income is expected to grow an average of 10% per year for the next 10 years and remain constant thereafter.

#### Required:

- A. If the acquisition occurs on January 1, 2016, determine the amount of income from Sosa Company that would be included in consolidated income assuming the following P/E ratios are used to determine the acquisition price, based on earnings for the year 2015. Suppose that the FASB revoked its requirement that in-process R&D be capitalized and amortized, as the result of extensive lobbying. Instead, in-process R&D will be expensed in the year of acquisition.
  1. P/E ratio = 10
  2. P/E ratio = 12
- B. Now assume that FASB does require (as is currently the case at this writing) that in process R&D be capitalized (assume an amortization period of 20 years). How would your answer to part A change?

### PROBLEM 5-18 Deferred Tax Effects LO 6 LO 7

On January 1, 2015, Pruitt Company issued 25,500 shares of its common stock (\$2 par) in exchange for 85% of the outstanding common stock of Shah Company. Pruitt's common stock had a fair value of \$28 per share at that time. Pruitt Company uses the cost method to account for its investment in Shah Company and files a consolidated income tax return. A schedule of the Shah Company assets acquired and liabilities assumed at book values (which are equal to their tax bases) and fair values follows.

| <i>Item</i>               | <i>Book Value/Tax Basis</i> | <i>Fair Value</i>  | <i>Excess</i>    |
|---------------------------|-----------------------------|--------------------|------------------|
| Receivables (net)         | \$125,000                   | \$ 125,000         | \$ —0—           |
| Inventory                 | 167,000                     | 195,000            | 28,000           |
| Land                      | 86,500                      | 120,000            | 33,500           |
| Plant assets (net)        | 467,000                     | 567,000            | 100,000          |
| Patents                   | 95,000                      | 200,000            | 105,000          |
| Total                     | <u>\$940,500</u>            | <u>\$1,207,000</u> | <u>\$266,500</u> |
| Current liabilities       | \$ 89,500                   | \$ 89,500          | \$ —0—           |
| Bonds payable             | 300,000                     | 360,000            | 60,000           |
| Common stock              | 120,000                     |                    |                  |
| Other contributed capital | 164,000                     |                    |                  |
| Retained earnings         | 267,000                     |                    |                  |
| Total                     | <u>\$940,000</u>            |                    |                  |

**Additional Information:**

- Pruitt's income tax rate is 35%.
- Shah's beginning inventory was all sold during 2015.
- Useful lives for depreciation and amortization purposes are:

|              |          |
|--------------|----------|
| Plant assets | 10 years |
| Patents      | 8 years  |
| Bond premium | 10 years |
- Pruitt uses the straight-line method for all depreciation and amortization purposes.

**Required:**

- Prepare the stock acquisition entry on Pruitt Company's books.
- Assuming Shah Company earned \$216,000 and declared a \$90,000 dividend during 2015, prepare the eliminating entries for a consolidated statements workpaper on December 31, 2015.
- Assuming Shah Company earned \$240,000 and declared a \$100,000 dividend during 2016, prepare the eliminating entries for a consolidated statements workpaper on December 31, 2016.

**PROBLEM 5-19 Interim Acquisition, Contingent Consideration, Cost Method LO 5 LO 6**

(This is a continuation of Problem 4-20.)

Pcost Company purchased 85% of the common stock of Scost Company on April 1, Year 1 for total consideration of \$545,000 cash plus \$50,000 of contingent consideration as measured according to GAAP at fair value. Both companies have a December 31 year-end. December 31, Year 1, trial balances for Pcost and Scost were:

|                                    | <i>At December 31, Year 1</i> |                    |
|------------------------------------|-------------------------------|--------------------|
|                                    | <i>Pcost</i>                  | <i>Scost</i>       |
| Cash                               | \$ 30,000                     | \$ 25,000          |
| Accounts Receivables               | 173,000                       | 135,000            |
| Inventory                          | 232,000                       | 130,000            |
| Treasury Stock at Cost, 500 Shares |                               | 48,000             |
| Investment in Scost Company        | 595,000                       |                    |
| Property and Equipment (net)       | 936,000                       | 519,000            |
| Cost of Goods Sold                 | 1,540,000                     | 754,000            |
| Selling, General, & Administration | 320,000                       | 260,000            |
| Other Expenses                     | 96,000                        | 90,000             |
| Dividends Declared                 | —0—                           | 50,000             |
| Total                              | <u>\$3,936,000</u>            | <u>\$2,011,000</u> |
| Accounts Payable                   | \$ 193,500                    | \$ 130,000         |
| Contingent Consideration           | 61,000                        |                    |
| Dividends Payable                  | —0—                           | 50,000             |
| Common Stock, \$5 par Value        | 270,000                       | 40,000             |
| Other Contributed Capital          | 900,000                       | 250,000            |
| Retained Earnings, 1/1             | 355,000                       | 241,000            |
| Sales                              | 2,100,000                     | 1,300,000          |
| Dividend Income                    | 42,500                        | —0—                |
| Total                              | <u>\$3,936,000</u>            | <u>\$2,011,000</u> |

Scost Company declared a \$50,000 cash dividend on December 20, Year 1, payable on January 10, Year 2, to stockholders of record on December 31, Year 1. Pcost Company recognized the dividend on its declaration date. Pcost includes dividend income receivable in the accounts receivable account.

On the acquisition date, the book values and fair values of Scost's assets and liabilities were equal with the following exceptions.

|                        | <i>Book Value</i> | <i>Fair Value</i> |
|------------------------|-------------------|-------------------|
| Inventory              | 116,000           | 146,000           |
| Property and Equipment | 465,000           | 507,000           |

Any difference between book value and fair value for property and equipment is depreciated over seven years. Depreciation expense is reported on the income statement in Selling, General, and Administration expense. The entire amount of inventory acquired was sold in Year 1.

No payments were made for the earn-out at the end of year 1, and the adjustment to contingent consideration included only interest adjustments (no change in fair value was expected since the actual and target levels for revenue were equal at the end of year 1).

Both companies report depreciation expense as a component of Selling, General, and Administration expense on the income statement. For the year ending December 31, Year 1, Pcost and Scost reported depreciation expense of \$96,000 and \$72,000, respectively. Both companies use straight-line and use the full-year option in computing depreciation expense (i.e., they take a full year's depreciation on any asset acquired during the year). The following balance sheet is available for both companies at the beginning of the year of acquisition and the acquisition date.

| <i>Balance Sheet</i>         | <i>Pcost</i>       | <i>Scost</i>      | <i>Pcost</i>       | <i>Scost</i>      |
|------------------------------|--------------------|-------------------|--------------------|-------------------|
|                              | <i>1/1/Year 1</i>  | <i>1/1/Year 1</i> | <i>4/1/Year 1</i>  | <i>4/1/Year 1</i> |
| Cash                         | \$100,000          | \$15,000          | 28,000             | 11,000            |
| Accounts Receivables         | 170,000            | 115,000           | 124,000            | 121,000           |
| Inventory                    | 220,000            | 122,000           | 229,000            | 116,000           |
| Investment in Scost Company  | 0                  | 0                 | 595,000            |                   |
| Property and Equipment       | 850,000            | 450,000           | 850,000            | 465,000           |
| Total                        | <u>\$1,340,000</u> | <u>\$702,000</u>  | <u>1,826,000</u>   | <u>\$713,000</u>  |
| Accounts and Notes Payable   | \$65,000           | \$169,000         | 215,000            | 156,000           |
| Contingent Consideration     |                    |                   | 50,000             |                   |
| Dividends Payable            | —                  | 50,000            |                    | —                 |
| Capital Stock, \$5 par value | 220,000            | 40,000            | 270,000            | 40,000            |
| Other Contributed Capital    | 700,000            | 250,000           | 900,000            | 250,000           |
| Retained Earnings            | 355,000            | 241,000           | 391,000            | 315,000           |
| Treasury Stock               |                    | (48,000)          | —                  | (48,000)          |
| Total                        | <u>\$1,340,000</u> | <u>\$702,000</u>  | <u>\$1,826,000</u> | <u>\$713,000</u>  |

**Required:**

1. Prepare a consolidated workpaper at the end of year 1.
2. Prepare a consolidated statement of cash flows for year 1 (see Chapter 4 for a review of the consolidated statement of cash flows).
3. Prepare the journal entry on the books of Pcost to account for the change in the contingent consideration liability for year 1.

**PROBLEM 5-20 Interim acquisition, contingent consideration, complete equity method LO 5 LO 6**

(This is a continuation of Problem 4-21)

Pequity Company purchased 85% of the common stock of Sequity Company on April 1, Year 1 for total consideration of \$545,000 cash plus \$50,000 of contingent consideration as measured according to GAAP at

fair value. Both companies have a December 31 year-end. December 31, Year 1, trial balances for Pequity and Sequity were:

|                                    | <i>At December 31, Year 1</i> |                    |
|------------------------------------|-------------------------------|--------------------|
|                                    | <i>Pequity</i>                | <i>Sequity</i>     |
| Cash                               | \$ 30,000                     | \$ 25,000          |
| Accounts Receivables               | 173,000                       | 135,000            |
| Inventory                          | 232,000                       | 130,000            |
| Treasury Stock at Cost, 500 shares |                               | 48,000             |
| Investment in Sequity Company      | 626,875                       |                    |
| Property and Equipment (net)       | 936,000                       | 519,000            |
| Cost of Goods Sold                 | 1,540,000                     | 754,000            |
| Selling, General, & Administration | 320,000                       | 260,000            |
| Other Expenses                     | 96,000                        | 90,000             |
| Dividends Declared                 | —0—                           | 50,000             |
| Total                              | <u>\$3,953,875</u>            | <u>\$2,011,000</u> |
| Accounts Payable                   | \$ 193,500                    | \$ 130,000         |
| Contingent Consideration           | 61,000                        |                    |
| Dividends Payable                  | —0—                           | 50,000             |
| Common Stock, \$5 par Value        | 270,000                       | 40,000             |
| Other Contributed Capital          | 900,000                       | 250,000            |
| Retained Earnings, 1/1             | 355,000                       | 241,000            |
| Sales                              | 2,100,000                     | 1,300,000          |
| Equity Income                      | 74,375                        | —0—                |
| Total                              | <u>\$3,953,875</u>            | <u>\$2,011,000</u> |

Sequity Company declared a \$50,000 cash dividend on December 20, Year 1, payable on January 10, Year 2, to stockholders of record on December 31, Year 1. Pequity Company recognized the dividend on its declaration date. Pequity includes dividend income receivable in the accounts receivable account.

On the acquisition date, the book values and fair values of Sequity's assets and liabilities were equal with the following exceptions.

|                        | <i>Book Value</i> | <i>Fair Value</i> |
|------------------------|-------------------|-------------------|
| Inventory              | 116,000           | 146,000           |
| Property and Equipment | 465,000           | 507,000           |

Any difference between book value and fair value for property and equipment is depreciated over seven years. Depreciation expense is reported on the income statement in selling, general, and administration expense. The entire amount of inventory acquired was sold in Year 1.

No payments were made for the earn-out at the end of year 1, and the adjustment to contingent consideration included only interest adjustments (no change in fair value was expected since the actual and target levels for revenue were equal at the end of year 1).

Both companies report depreciation expense as a component of Selling, General, and Administration expense on the income statement. For the year ending December 31, Year 1, Pequity and Sequity reported depreciation expense of \$96,000 and \$72,000, respectively. Both companies use straight-line and use the full-year option in computing depreciation expense (i.e., they take a full year's depreciation on any asset acquired during the year). The following balance sheet is available for both companies at the beginning of the year of acquisition and the acquisition date.

| <i>Balance Sheet</i>         | <i>Pequity</i>     | <i>Sequity</i>    | <i>Pequity</i>     | <i>Sequity</i>    |
|------------------------------|--------------------|-------------------|--------------------|-------------------|
|                              | <i>1/1/Year 1</i>  | <i>1/1/Year 1</i> | <i>4/1/Year 1</i>  | <i>4/1/Year 1</i> |
| Cash                         | \$100,000          | \$15,000          | 28,000             | 11,000            |
| Accounts Receivables         | 170,000            | 115,000           | 124,000            | 121,000           |
| Inventory                    | 220,000            | 122,000           | 229,000            | 116,000           |
| Investment in Scost Company  | 0                  | 0                 | 595,000            |                   |
| Property and Equipment       | 850,000            | 450,000           | 850,000            | 465,000           |
| Total                        | <u>\$1,340,000</u> | <u>\$702,000</u>  | <u>1,826,000</u>   | <u>\$713,000</u>  |
| Accounts and Notes Payable   | \$65,000           | \$169,000         | 215,000            | 156,000           |
| Contingent Consideration     | —                  |                   | 50,000             |                   |
| Dividends Payable            | —                  | 50,000            | —                  |                   |
| Capital Stock, \$5 par value | 220,000            | 40,000            | 270,000            | 40,000            |
| Other Contributed Capital    | 700,000            | 250,000           | 900,000            | 250,000           |
| Retained Earnings            | 355,000            | 241,000           | 391,000            | 315,000           |
| Treasury Stock               |                    | (48,000)          | —                  | (48,000)          |
| Total                        | <u>\$1,340,000</u> | <u>\$702,000</u>  | <u>\$1,826,000</u> | <u>\$713,000</u>  |

**Required:**

1. Prepare a consolidated workpaper at the end of year 1.
2. Prepare a consolidated statement of cash flows for year 1 (see Chapter 4 for a review of the consolidated statement of cash flows).
3. Prepare the journal entry on the books of Pequity to account for the change in the contingent consideration liability for year 1.

## Chapter 5 – Review Questions

The review questions accompanying this course are designed to assist you in achieving the course learning objectives. The review section is not graded; do not submit it in place of your qualified assessment. While completing the review questions, it may be helpful to study any unfamiliar terms in the glossary in addition to course content. After completing the review questions, proceed to the review question answers and rationales.

28. A bargain purchase is when:
- Fair value is less than implied value.
  - Fair value is below book value.
  - Book value is greater than implied value.
  - The implied value is below the aggregate fair value of identifiable assets less liabilities.
29. Historically, in a bargain purchase:
- All assets and liabilities of the subsidiary were recorded at fair value as the first step.
  - An extraordinary gain was recognized for the difference between fair value of net assets and the purchase price.
  - Long-lived assets (other than some specifically required to be accounted for differently) were recorded at fair value less an adjustment for the bargain.
  - Only current assets and marketable securities were recorded at fair value.
30. If the price paid by the acquiring company for a subsidiary is between the fair value of the net assets and the book value of the net assets:
- The acquiring company will recognize goodwill.
  - The acquiring company will write down the assets on a pro rata basis.
  - The acquiring company will recognize a gain for the excess of fair value over implied value.
  - The acquiring company will recognize a noncontrolling interest.
31. Which of the following statements is accurate regarding the parent company's required entries for the subsidiary under the cost method?
- After the acquisition, the only entry the parent company will record on its books is for any dividend income paid by the subsidiary.
  - After the acquisition, the parent company will record dividends and its share of subsidiary income on its books.
  - After the acquisition, the parent company will not record any entries related to the investment in subsidiary unless there is a permanent impairment.
  - After the acquisition, the parent company will reduce the value of the investment in subsidiary for any dividends paid.

32. Which of the following entries would only be required in consolidation in the years after the acquisition if the subsidiary had been accounted for under the cost method?
- Debit the equity accounts of the subsidiary and credit the investment in subsidiary.
  - Debit investment in subsidiary and credit beginning retained earnings of the parent company.
  - Debit asset accounts and credit difference between implied value and book value for the amount that fair value of individual assets exceeds their book values.
  - Debit goodwill and credit difference between implied value and book value.
33. Which of the following statements is accurate regarding the correct accounting for a goodwill impairment 2 years after acquisition by the parent of an 80% ownership in the subsidiary?
- The amount of impairment will permanently reduce goodwill on the parent company's balance sheet.
  - The amount of impairment will be recognized as a loss and there will be a valuation account set up for goodwill.
  - The amount of the impairment will be recognized as a loss in the consolidated income statement and such loss will be fully reflected in the controlling interest in consolidated income.
  - The amount of the impairment will be recognized as a loss in the consolidated income statement and such loss will be allocated between the controlling and noncontrolling interests.



34. Which of the following is the correct course of action if goodwill is determined to be impaired?
- Reduce the difference between implied value and book value account.
  - Recognize an extraordinary loss in the current period.
  - Set up an allowance account for goodwill to adjust for current and future increases and decreases in value.
  - Recognize impairment loss on the income statement.
35. Which of the following is accurate regarding the calculation of consolidated retained earnings when using the partial equity method?
- It is the parent's ending retained earnings plus their share of the subsidiary's current year income/loss.
  - It is the beginning retained earnings of the parent plus the cumulative effect of the subsidiary's earnings/loss since the acquisition.
  - It is the parent's retained earnings plus or minus the cumulative effect of adjustments to date related to depreciation of the difference between implied and book value.
  - It is the parent's beginning retained earnings plus the current year consolidated earnings less the noncontrolling interest.
36. When a company uses the complete equity method, which of the following accounts must be eliminated in consolidation?
- Equity in subsidiary income.
  - Dividend income.
  - Goodwill.
  - Minority interest in income.
37. Which of the following statements is accurate regarding calculating the fair value of liabilities?
- Fair value does not take into consideration nonperformance risk.
  - The valuation technique used to value the debt should be the approach that is the best match to the nature of the debt and the circumstances so it will necessarily vary across the various liabilities.
  - Recording additional liabilities at acquisition can be a way to manipulate future earnings by running the related expenses through the liability accounts rather than recording the expenses.
  - FASB greatly favors use of the income approach over the market approach for valuing liabilities.

38. Push down accounting:
- a. Is required in the banking industry.
  - b. Is required when 100% of the stock is acquired.
  - c. Is not allowed in any industry but some companies maintain a separate set of “push down” books for internal purposes.
  - d. Was used heavily in the early 2000s, but because of abuses after the financial crisis has been disallowed.

## **Chapter 6 – Elimination of Unrealized Profit on Intercompany Sales of Inventory**

### **Learning Objectives**

After completing this section of the course, you will be able to:

- Identify the reporting objectives for intercompany sales of inventory.
- Calculate the amount of intercompany profit to be eliminated from the consolidated financial statements.
- Cite the authoritative position for eliminating 100% of intercompany profit not realized in transactions with outsiders and apply it in client situations.
- Recognize differences between upstream and downstream sales of inventory.
- Compute the noncontrolling interest in consolidated net income for upstream and downstream sales when not all inventory has been sold to outsiders.
- Recognize differences between the consolidation requirements for cost, partial equity, and complete equity situations.
- Identify the appropriate treatment of intercompany profit earned prior to the parent-subsidiary affiliation.
- Identify potential tax issues related to intercompany activity.

## ELIMINATION OF UNREALIZED PROFIT ON INTERCOMPANY SALES OF INVENTORY

### CHAPTER CONTENTS

- 6.1 EFFECTS OF INTERCOMPANY SALES OF MERCHANDISE ON THE DETERMINATION OF CONSOLIDATED BALANCES
- 6.2 COST METHOD: CONSOLIDATED STATEMENTS WORKPAPER—UPSTREAM SALES
- 6.3 COST METHOD—ANALYSIS OF CONSOLIDATED NET INCOME AND CONSOLIDATED RETAINED EARNINGS
- 6.4 CONSOLIDATED STATEMENTS WORKPAPER—PARTIAL EQUITY METHOD
- 6.5 PARTIAL EQUITY METHOD—ANALYSIS OF CONSOLIDATED NET INCOME AND CONSOLIDATED RETAINED EARNINGS
- 6.6 CONSOLIDATED STATEMENTS WORKPAPER—COMPLETE EQUITY METHOD
- 6.7 COMPLETE EQUITY METHOD—ANALYSIS OF CONSOLIDATED NET INCOME AND CONSOLIDATED RETAINED EARNINGS
- 6.8 SUMMARY OF WORKPAPER ENTRIES RELATING TO INTERCOMPANY SALES OF INVENTORY
- 6.9 INTERCOMPANY PROFIT PRIOR TO PARENT-SUBSIDIARY AFFILIATION

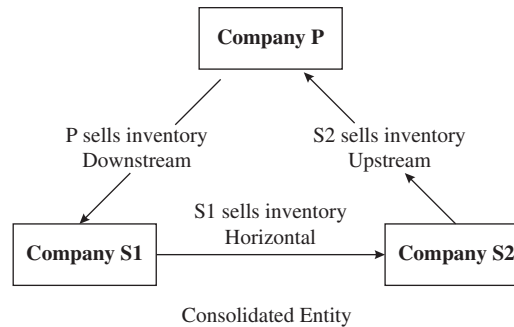
IN  
THE  
NEWS

“What separates a good year in mergers-and-acquisitions from a bad one? By the Pavlovian measure of Wall Street, it is simple: The more deals, the better the year. But 2007 revealed the fallacy of this approach. Buyers gorged on cheap credit, overpaying along the way. Some raced to rip up transactions signed months earlier. More deals, more problems.”<sup>1</sup>

<sup>1</sup> *Wall Street Journal*, “What to Look for as Deal Makers Revise Strategies,” by Dennis Berman, p. C1, January 15, 2008.

**LO 4** Upstream and downstream sales.

Affiliated companies may make intercompany sales of inventory or other assets. The term “affiliated group” is used to refer to a parent and all subsidiaries for which consolidated financial statements are prepared; alternatively, this group may be referred to as the economic entity or as the consolidated entity.<sup>2</sup> Sales from a parent company to one or more of its subsidiaries are referred to as **downstream sales**. Sales from subsidiaries to the parent company are referred to as **upstream sales**. Sales from one subsidiary to another subsidiary are referred to as **horizontal sales**.


**IN THE NEWS**

AOL Time Warner reported that intercompany advertising revenue

increased to \$97 million in the third quarter of 2001 (which represented 5% of the advertising revenue). The networks segment reported that advertising and commerce revenue fell by 6%. Later, a spokesperson for the company stated that these numbers included intercompany sales (a number that would be eliminated for consolidated statements).<sup>3</sup>

Ordinarily, the selling affiliate will record a profit or loss on such sales. From the point of view of the consolidated entity, however, such profit or loss should not be reported until the inventory or other assets acquired by the purchasing affiliate have been used during the course of operations or sold to parties outside the affiliated group (third parties). Profit (loss) that has not been realized from the point of view of the consolidated entity through subsequent sales to third parties is defined as **unrealized intercompany profit (loss)** and must be eliminated in the preparation of consolidated financial statements. The elimination of unrealized profit resulting from intercompany sales of inventory is examined in this chapter. The elimination of unrealized profit resulting from intercompany sales of property and equipment will be examined in the next chapter.

## 6.1 EFFECTS OF INTERCOMPANY SALES OF MERCHANDISE ON THE DETERMINATION OF CONSOLIDATED BALANCES

**LO 1** Financial reporting objectives for intercompany sales.

The workpaper procedures illustrated in this chapter are designed to accomplish the following financial reporting objectives in the consolidated financial statements:

- Consolidated sales include only **sales to parties outside the affiliated group**.
- Consolidated cost of sales includes only **the cost to the affiliated group**, of goods that have been sold to parties outside the affiliated group.
- Consolidated inventory on the balance sheet is recorded at a value equal its **cost to the affiliated group**.

Stated another way, the objective of eliminating the effects of intercompany sales of merchandise is to present consolidated balances for sales, cost of sales, and inventory as if the intercompany sale had **never** occurred. As a result, the recognition of income or loss on the intercompany transaction, including its allocation between the noncontrolling and controlling interests, is deferred until the profit or loss is confirmed by sale of the merchandise to nonaffiliates.

<sup>2</sup> Note that this definition of an affiliated group is broader than the definition imposed by the Tax Code (Section 1504(a)). A parent must own at least 80% of the voting power of all stock classes and 80% of the fair value of its subsidiaries' outstanding stock to qualify as an affiliated group for tax purposes.

<sup>3</sup> *The Street.com*, “Why You Can’t Avoid Those AOL Ads,” by George Mannes, 11/15/2001.

Thoughtful consideration of these financial reporting objectives will indicate that they are logical and noncontroversial. However, the workpaper procedures for accomplishing these objectives are not self-evident. Thus the workpaper procedures for accomplishing these objectives are the central topic of this chapter. These procedures include workpaper entries to adjust the recorded amounts of sales, cost of sales (or components thereof), and ending inventory to amounts based on the objectives stated above. In addition, the procedures are designed to equate beginning consolidated retained earnings and noncontrolling interest (NCI) in equity with the amounts reported as ending consolidated retained earnings and ending NCI, respectively, in the previous reporting period for firms using the cost or partial equity methods. These procedures also serve to allocate consolidated income properly between the noncontrolling and controlling interests.

In order to concentrate on intercompany profit eliminations and adjustments, reporting complications relating to accounting for the difference between implied and book values are avoided in the initial illustrations by assuming that all acquisitions are made at the book value of the acquired interest in net assets and that the book value of the subsidiary company's net assets equals their fair value on the date the parent company acquires interest. (This assumption is later relaxed.) It is also assumed that the affiliates file consolidated income tax returns. If the affiliates file separate tax returns, deferred tax issues arise. These are addressed in Appendix 6A, Deferred Tax and Intercompany Sales of Inventory available online at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter).

### Determination of Consolidated Sales, Cost of Sales, and Inventory Balances Assuming Downstream Sales

The basic workpaper eliminating entries required because of intercompany sales of merchandise are illustrated using the following simplifying assumptions:

1. P Company sells all goods it buys or manufactures to its wholly owned subsidiary, S Company, at 125% of cost.
2. During the first year of this arrangement, goods that cost P Company \$200,000 are sold to S Company for \$250,000 (*downstream sale*).
3. During the same year, S Company sold all the goods purchased by it from P Company to third parties for \$270,000.

Sales, cost of sales, and inventory balances reported by the affiliated companies are presented in Illustration 6-1. Recall that the cost of sales is computed as:

$$\begin{array}{r}
 \text{Beginning inventory} \\
 + \text{Net purchases}^4 \\
 \hline
 \text{Total available for sale} \\
 - \text{Ending inventory} \\
 \hline
 \text{Cost of sales}
 \end{array}$$

Depending upon the accounting system used, a given company may have a single account in its general ledger entitled “cost of sales” or “cost of goods sold” and a single line on its workpaper or, alternatively, separate accounts for the various components. In this chapter, we assume that the trial balance lists each component separately, and we present the workpaper entries accordingly. Using this approach, the cost of sales line on the income statement is replaced with lines for Beginning Inventory—Income Statement; Purchases; Ending Inventory—Income Statement; and Cost of Sales. Note that under this assumption, Ending Inventory—Income Statement requires an entry distinct from that to the balance sheet account Inventory. The account “Ending Inventory—Income Statement” has a normal credit balance because it is subtracted in computing Cost of Sales. We indicate in

<sup>4</sup> For a manufacturing concern, “purchases” is replaced by the total cost of goods manufactured, which includes labor and overhead in addition to the raw materials used. Nonetheless, when a company purchases manufactured items from an affiliate, the purchasing affiliate would record those items as “purchases” at the amount charged by the selling affiliate.

## ILLUSTRATION 6-1

**Partial Consolidated Statements Workpaper, Elimination of Intercompany Sale of Inventory, No Unrealized Profit (All Inventory Sold to Third Parties)**

| <i>Income Statement</i> | <i>P Company</i> | <i>S Company</i> | <i>Eliminations</i> |             | <i>Consolidated Balances</i> | <i>%</i> |
|-------------------------|------------------|------------------|---------------------|-------------|------------------------------|----------|
|                         |                  |                  | <i>Dr.</i>          | <i>Cr.</i>  |                              |          |
| Sales                   | 250,000          | 270,000          | (1) 250,000         |             | 270,000                      | 100.0%   |
| Cost of Sales           | 200,000          | 250,000          |                     | (1) 250,000 | 200,000                      | 74.1%    |
| Gross Profit            | 50,000           | 20,000           |                     |             | 70,000                       | 25.9%    |
| <i>Balance Sheet</i>    |                  |                  |                     |             |                              |          |
| Inventory               | —0—              | —0—              |                     |             | —0—                          |          |

(1) To eliminate intercompany sales.

parentheses those entries that might be replaced by the use of the single account “cost of sales.”

The workpaper entry in the year of the sale to eliminate intercompany sales of merchandise takes the following form:

**LO 6** Consolidated workpapers for downstream sales.

|                                  |         |         |
|----------------------------------|---------|---------|
| (1) Sales                        | 250,000 |         |
| Purchases (Cost of Sales)        |         | 250,000 |
| To eliminate intercompany sales. |         |         |

No unrealized intercompany profit exists, since all goods sold by P Company to S Company have been resold to third parties. After the elimination of intercompany sales, consolidated sales of \$270,000 equals the amount of sales by the affiliated group (S Company) to third parties, and consolidated cost of sales of \$200,000 equals the cost to the affiliated group (P Company) of purchasing/manufacturing the goods sold.

Failure to eliminate intercompany sales would result in an overstatement of sales and of cost of sales in the consolidated financial statements. If the intercompany sales were not eliminated, the gross profit would be calculated as shown in Illustration 6-2. Compare this to the gross profit computed in Illustration 6-1, with the proper eliminating entry. If the intercompany sales were not eliminated, the consolidated gross profit would be correct but the gross profit percentage would not. Whereas the gross profit percentage should be 25.9% (\$70,000/\$270,000), failure to eliminate the intercompany sales would show the gross percentage as only 13.5% (\$70,000/\$520,000). Since both sales and cost of sales would be overstated by the same amounts, consolidated net income is not affected by the failure to eliminate intercompany sales. However, a number of financial ratios based on sales revenues would be distorted if the elimination were not made.

**RELATED CONCEPTS**

The *historical cost* principle suggests that inventory and other assets should not be reported above their cost to the consolidated entity (\$80,000).

Assume now that S Company sells 60% of the goods purchased from P Company to third parties prior to the end of the current year. Sales, cost of sales, and inventory balances reported by each of the affiliated companies are presented in Illustration 6-3. Entry (1) to eliminate sales and purchases is the same as explained before. However, intercompany profit in the amount of \$20,000 [ $\$50,000 \times 40\%$ ] resides in the ending inventory balance of S Company. This profit has not yet been realized by the consolidated entity through sales to outsiders (third parties). When, at the end of the accounting period, some of the merchandise remains in the inventory of the purchasing affiliate, the intercompany profit

## ILLUSTRATION 6-2

**The Impact on Gross Profit Percentages if Intercompany Sales Are Not Eliminated**

| <i>Account</i> | <i>Without Eliminating Intercompany Sales</i> |                  |              | <i>%</i> |
|----------------|---|------------------|--------------|----------|
|                | <i>P Company</i>                              | <i>S Company</i> | <i>Total</i> |          |
| Sales          | \$250,000                                     | \$270,000        | \$520,000    | 100.0%   |
| Cost of Sales  | 200,000                                       | 250,000          | 450,000      | 86.5%    |
| Gross Profit   | 50,000  | 20,000           | 70,000       | 13.5%    |

## ILLUSTRATION 6-3

**Partial Consolidated Statements Workpaper,\* Elimination of Downstream Intercompany Sale of Inventory, Unrealized Profit in Ending Inventory (First Year of Intercompany Sales)**

| <i>Income Statement</i> | <i>P<br/>Company</i> | <i>S<br/>Company</i> | <i>Eliminations</i> |             | <i>Consolidated<br/>Balances</i> |
|-------------------------|----------------------|----------------------|---------------------|-------------|----------------------------------|
|                         |                      |                      | <i>Dr.</i>          | <i>Cr.</i>  |                                  |
| Sales                   | 250,000              | 162,000              | (1) 250,000         |             | 162,000                          |
| Beginning Inventory     | 0                    | 0                    |                     |             | 0                                |
| Purchases               | 200,000              | 250,000              |                     | (1) 250,000 | 200,000                          |
|                         | 200,000              | 250,000              |                     |             | 200,000                          |
| Ending Inventory        | 0                    | 100,000              | (2) 20,000          |             | 80,000                           |
| Cost of Sales           | 200,000              | 150,000              |                     |             | 120,000                          |
| Gross Profit            | 50,000               | 12,000               |                     |             | 42,000                           |
| <i>Balance Sheet</i>    |                      |                      |                     |             |                                  |
| Inventory (40% remains) | —0—                  | 100,000              |                     | (2) 20,000  | 80,000                           |

\* These entries are the same for firms using the cost, partial equity, and complete equity methods.

(1) To eliminate intercompany sales.

(2) To eliminate unrealized intercompany profit in ending inventory.

recognized thereon must be excluded from consolidated net income and from the inventory balance in the consolidated balance sheet. The workpaper entry to accomplish this elimination and to reduce Inventory on both the Income Statement and the Balance Sheet is as follows:

|     |   |        |        |
|-----|---|--------|--------|
| (2) | Ending Inventory—Income Statement (Cost of Sales)                                       | 20,000 |        |
|     | Inventory—Balance Sheet   |        | 20,000 |
|     | To defer the unrealized gross profit in ending inventory until it is sold to outsiders. |        |        |

The form of the entry eliminating intercompany sales, entry (1), implicitly assumes that there is no unrealized intercompany profit. Accordingly, either entry (1) must be adjusted, or entry (2) must be made to remove the unrealized intercompany profit from the ending inventory and to reduce the excessive credit to cost of sales.

The first and second eliminating entries could be combined and one entry prepared as follows, if a single account is used for “cost of sales”:

|                         |         |         |
|-------------------------|---------|---------|
| Sales                   | 250,000 |         |
| Cost of Sales           |         | 230,000 |
| Inventory—Balance Sheet |         | 20,000  |

As a practical matter, two entries are conventionally prepared as shown in Illustration 6-3. In either case, after adjustment, consolidated sales of \$162,000 equals the amount of sales of the affiliated group to third parties. Consolidated cost of sales of \$120,000 equals the cost to the affiliated group of the goods sold ( $60\% \times \$200,000$ ), and the consolidated inventory balance of \$80,000 equals the cost to the affiliated group of the goods held by S Company at the end of the year ( $40\% \times \$200,000$ ).

The above entries for intercompany sales and unrealized profit in ending inventory are the same regardless of whether the parent uses the cost, partial equity, or complete equity method. However, as shown next, the entries for intercompany profit in beginning inventory differ slightly.

## Year Two Eliminating Entries—Downstream Sales

Assume now that in the next period P Company sells merchandise to S Company in the amount of \$500,000 (cost \$400,000) and that S Company sells all its beginning inventory (\$100,000 cost to S; \$80,000 cost to consolidated entity) and one-half of its current purchases from P Company (\$250,000 cost to S; \$200,000 cost to consolidated entity) to third parties for \$378,000. Sales, cost of sales, and inventory balances reported by the affiliated



## ILLUSTRATION 6-4

**Partial Consolidated Statements Workpaper—Cost or Partial Equity Method,  
Elimination of Downstream Intercompany Sale of Inventory, Unrealized Profit in Ending Inventory  
(Second Year of Intercompany Sales)**

| Income Statement            | P<br>Company | S<br>Company | Eliminations |             | Consolidated<br>Balances |
|-----------------------------|--------------|--------------|--------------|-------------|--------------------------|
|                             |              |              | Dr.          | Cr.         |                          |
| Sales                       | 500,000      | 378,000      | (1) 500,000  |             | 378,000                  |
| Beginning Inventory         | 0            | 100,000      |              | (3) 20,000  | 80,000                   |
| Purchases                   | 400,000      | 500,000      |              | (1) 500,000 | 400,000                  |
|                             | 400,000      | 600,000      |              |             | 480,000                  |
| Ending Inventory            | 0            | 250,000      | (2) 50,000   |             | 200,000                  |
| Cost of Sales               | 400,000      | 350,000      |              |             | 280,000                  |
| Gross Profit                | 100,000      | 28,000       | 550,000      | 520,000     | 98,000                   |
| <b>Retained Earnings</b>    |              |              |              |             |                          |
| Beginning Retained Earnings |              |              |              |             |                          |
| P Company                   | XXXX (a)     |              | (3) 20,000   |             | XXXX                     |
| <b>Balance Sheet</b>        |              |              |              |             |                          |
| Inventory                   | —0—          | 250,000      |              | (2) 50,000  | 200,000                  |

(a) Includes \$20,000 of gross profit on intercompany sales from the previous year (not yet sold to third parties).

(1) To eliminate intercompany sales.

(2) To eliminate unrealized intercompany profit in ending inventory.

(3) To recognize intercompany profit in beginning inventory realized during the period.

companies are presented in Illustration 6-4. This illustration assumes that either the cost or the partial equity method is used.

Unrealized intercompany profit in the amount of \$50,000 [ $\$250,000 - \$200,000$ ] or [ $\$250,000 - (\$250,000/1.25)$ ] resides in the ending inventory of S Company. Workpaper eliminating entries (1) and (2) are similar to those discussed in the preceding example. Assuming a first-in, first-out (FIFO) inventory cost flow, intercompany profit in inventories excluded from consolidated net income in one period will be realized by sales to third parties in the next period. The form of the workpaper entry to recognize profit in the buying affiliate's beginning inventory that is realized during the current period depends on the method of accounting for the investment on the books of the parent.

If the parent uses the *cost* or *partial equity* method of recording its investment in the subsidiary, the entry takes the following form (as shown in Illustration 6-4):



COST

**Cost or Partial Equity Method**

|     |  |        |        |
|-----|--|--------|--------|
| (3) | Beginning Retained Earnings—P Company <sup>5</sup>                               | 20,000 |        |
|     | Beginning Inventory—Income Statement (Cost of Sales)                             |        | 20,000 |
|     | To realize the gross profit in beginning inventory deferred in the prior period. |        |        |



PARTIAL

The credit to beginning inventory (*Cost of Sales*) in entry (3) is necessary in order to recognize in consolidated income the amount of profit in the beginning inventory that has been confirmed by sales to third parties during the current period. S Company charged cost of sales for its cost of \$100,000, whereas the cost to the affiliated group of the beginning inventory of S Company is only \$80,000. Accordingly, cost of sales must be decreased by \$20,000, which increases consolidated net income by \$20,000. The adjustment to Beginning Inventory this period is in the same amount as that to Ending Inventory last period.

For firms using the cost or partial equity method to account for its investment in the subsidiary, the rationale for the debit of \$20,000 to beginning retained earnings of P Company is as follows. In the previous year, P Company recorded \$50,000 in profit on intercompany sales and transferred it to its Retained Earnings account as part of the normal

<sup>5</sup> If the parent firm uses the complete equity method, this debit is replaced by a debit to the Investment in Subsidiary account (see below).

## ILLUSTRATION 6-5

**Partial Consolidated Statements Workpaper—Complete Equity Method,  
Elimination of Downstream Intercompany Sale of Inventory, Unrealized Profit in Ending Inventory  
(Second Year of Intercompany Sales)**

| <i>Income Statement</i>  | <i>P<br/>Company</i> | <i>S<br/>Company</i> | <i>Eliminations</i> |             | <i>Consolidated<br/>Balances</i> |
|--------------------------|----------------------|----------------------|---------------------|-------------|----------------------------------|
|                          |                      |                      | <i>Dr.</i>          | <i>Cr.</i>  |                                  |
| Sales                    | 500,000              | 378,000              | (1) 500,000         |             | 378,000                          |
| Beginning Inventory      | 0                    | 100,000              |                     | (3) 20,000  | 80,000                           |
| Purchases                | 400,000              | 500,000              |                     | (1) 500,000 | 400,000                          |
|                          | 400,000              | 600,000              |                     |             | 480,000                          |
| Ending Inventory         | 0                    | 250,000              | (2) 50,000          |             | 200,000                          |
| Cost of Sales            | 400,000              | 350,000              |                     |             | 280,000                          |
| Gross Profit             | 100,000              | 28,000               | 550,000             | 520,000     | 98,000                           |
| <i>Balance Sheet</i>     |                      |                      |                     |             |                                  |
| Inventory                | —0—                  | 250,000              |                     | (2) 50,000  | 200,000                          |
| Investment in Subsidiary | XXX                  |                      | (3) 20,000          | XXX         | —0—                              |

(1) To eliminate intercompany sales.

(2) To eliminate unrealized intercompany profit in ending inventory.

(3) To recognize intercompany profit in beginning inventory realized during the period.

accounting process. Since, at the beginning of the year, 40% of that amount has not been realized by sales to third parties, it must be eliminated from the beginning retained earnings of P Company to correctly reflect the beginning consolidated retained earnings.

The debit to beginning retained earnings may also be viewed in the following manner. In determining consolidated net income in the prior year, \$20,000 was deducted from the reported income and thus from the retained earnings of the affiliated group by a workpaper entry (which, like all workpaper entries, was not posted to the ledger accounts). In order for beginning retained earnings to match the prior year's ending retained earnings (to the consolidated entity), this \$20,000 adjustment must be made to beginning retained earnings.

For firms using the *complete equity* method, the debit to beginning retained earnings is not needed, assuming the parent correctly adjusted for all intercompany profits/losses in its "revenue from subsidiary" account in the preceding year. Under the complete equity method, consolidated retained earnings is identical to the parent's reported retained earnings and thus no adjustment is needed. The debit to retained earnings is replaced by a debit to Investment in Subsidiary, which serves simply to facilitate the elimination of this account on the workpaper (as shown in Illustration 6-5):



COMPLETE

**Complete Equity Method**

|  |          |          |
|--|----------|----------|
| (3) Investment in Subsidiary   | \$20,000 |          |
| Beginning Inventory—Income Statement (Cost of Sales)                             |          | \$20,000 |
| To realize the gross profit in beginning inventory deferred in the prior period. |          |          |

Consolidated sales of \$378,000 are equal to the amount of sales of the affiliated group to third parties. Consolidated cost of sales of \$280,000 equals the cost to the affiliated group of the goods sold and is calculated as follows:

|  |                  |
|--|------------------|
| Cost of goods transferred to                                   |                  |
| S Company in prior year and sold this year (40% × \$200,000)   | \$80,000         |
| Cost of goods transferred to                                   |                  |
| S Company in current year and sold this year (50% × \$400,000) | 200,000          |
| Cost of sales to third parties during current year             | <u>\$280,000</u> |

Consolidated inventory of \$200,000 equals the cost to the affiliated group (P Company) of the goods on hand at the end of the year (50% × \$400,000).

Over two consecutive periods, assuming a FIFO flow of inventory costs and no new deferrals, differences between the summed net income recorded on the books of the individual affiliates and consolidated net income offset each other, as do the effects of the differences on beginning retained earnings.

If an inventory cost flow assumption other than FIFO is used, unrealized intercompany profit in beginning inventory balances may continue to be included in the ending inventory. In that case, to the extent that unrealized intercompany profit from the beginning of the year remains unrealized, the effects on consolidated net income from the credit to Beginning Inventory—Income Statement (Cost of Sales) in entry (3) and the debit to Ending Inventory—Income Statement (Cost of Sales) in entry (2) offset each other. Thus, as a matter of workpaper procedure, there is no need to be concerned in formulating entry (3) as to whether FIFO or LIFO is used, as long as any unrealized gross profit in ending inventory is appropriately deferred.

## Determination of Amount of Intercompany Profit

IN  
THE  
NEWS

Bunge Ltd., a leading agribusiness and food company, overstated its

2007 sales and cost of goods sold by \$7 billion. The correction was the result of a review of its accounting processes, financial statements, and certain transactions related to its agribusiness. It said certain intercompany sales were classified as third-party transactions in both net sales and cost of goods sold and were not eliminated in the consolidation process.<sup>6</sup>

In the preceding examples, the amount of intercompany profit subject to elimination was calculated on the basis of the selling affiliate's **gross profit rate** stated as a percentage of cost. Recall that gross profit may be stated either as a percentage of sales or as a percentage of cost. When it is stated as a percentage of cost, it is often referred to as "markup." To calculate the amount of intercompany gross profit to be eliminated from ending inventory, be careful to distinguish between percentages stated in terms of sales versus cost of sales. For example, if ending inventory (obtained from an affiliate) of \$12,000 reflects a markup of 20% of cost of sales, the gross profit to be eliminated would be calculated as:

|                               |               |
|-------------------------------|---------------|
| Sales                         | \$12,000      |
| Cost of Sales (\$12,000/120%) | <u>10,000</u> |
| Gross Profit (20% × \$10,000) | \$ 2,000      |

In contrast, if ending inventory of \$12,000 reflects a gross profit of 20% of sales, the gross profit to be eliminated would be \$2,400, or 20% of \$12,000.

## Inventory Pricing Adjustments

When inventory adjustments (write-downs) have been made on the books of one of the affiliated firms due to market fluctuations, the workpaper entries are modified accordingly. To illustrate, assume the following:

1. P Company sells S Company goods costing \$200,000 for \$250,000 (*downstream sale*);
2. At the end of the year, all these goods remain in the ending inventory of S Company and are written down from \$250,000 to \$215,000 on that company's books;
3. The write-down on the books of S Company results from the application of the lower-of-cost-or-market rule in pricing its ending inventory; and
4. The related loss is included in the cost of sales of S Company, or may be disclosed separately if considered material.

What amount of intercompany profit is subject to elimination in the preparation of consolidated financial statements? Since the gross profit of \$50,000 recognized by P Company is offset by the reduction of gross profit of \$35,000 recognized by S Company, only the remaining \$15,000 is still subject to elimination in the preparation of consolidated financial statements. The deduction of the amount of the current year's write-down of intercompany inventory from the amount of intercompany profit otherwise subject to elimination also results in the presentation of intercompany inventory at cost to the affiliated group (\$215,000 – \$15,000 = \$200,000). In summary, the amount of intercompany profit subject to elimination should be reduced to the extent that the related goods have been written down by the purchasing affiliate.

**LO 2** Determining the amount of intercompany profit.

<sup>6</sup> *Forbes*, "Bunge Says It Overstated 2007 Sales, Cost of Goods Sold by Around \$7 Billion," by M. Cotton, 3/3/08.

## Determination of Proportion of Intercompany Profit to Be Eliminated

**Lo 3** Eliminating 100% of intercompany profit.

It is clear that unrealized intercompany profit should not be included in consolidated net income or assets. However, two alternative views of the amount of intercompany profit that should be considered as “unrealized” exist. The elimination methods associated with these two points of view are generally referred to as **100% (total) elimination** and **partial elimination**. Both current and past GAAP **require** 100% elimination of intercompany profit **in the preparation of consolidated financial statements**. Because past and current GAAP agree in this regard, and because IFRS are silent in this regard we do not elaborate on the alternative of partial elimination. Under 100% elimination, the entire amount of unconfirmed intercompany profit is eliminated from consolidated net income and the related asset balance. This approach is particularly logical under the current view of consolidated financial statements, based on the “entity” rather than “parent” concept, and may be summarized as follows:

The amount of intercompany profit or loss to be eliminated . . . is not affected by the existence of a minority [noncontrolling] interest. The complete elimination of the intercompany profit or loss is consistent with the underlying assumption that consolidated statements represent the financial position and operating results of a single business enterprise. [FASB ASC paragraph 810-10-45-18]

## Determination of the Noncontrolling Interest in Consolidated Income—Upstream or Horizontal Sales

**Lo 5** Noncontrolling interest (NCI) for upstream sales.

**Subsidiary as Intercompany Seller** In the preceding examples, the selling affiliate was the parent company (downstream sale). Accordingly, even though 100% of the unrealized intercompany profit was eliminated, no modification in the calculation of the noncontrolling interest in consolidated net income or consolidated net assets was necessary. Had the selling affiliate been a less than wholly owned subsidiary (upstream sale), however, the controlling and the noncontrolling interests would have needed to be adjusted to reflect their interest in the amount of unrealized intercompany profit eliminated.

Intercompany sales of inventory necessitate adjustments to the calculation of the distribution of income to the controlling and noncontrolling interests. Whether the

### ILLUSTRATION 6-6

#### Calculation of Noncontrolling Interest in Consolidated Income—Upstream Sales

##### General Format:

| Noncontrolling Interest in Consolidated Income with Upstream Sales              |        |  |                |
|---|--------|--|----------------|
| Amortization of the difference between implied and book value                   | \$XXXX | Net income reported by subsidiary  | \$XXXXX        |
| Unrealized intercompany profit recorded by the subsidiary in the current period | XXXX   | Intercompany profit recognized by the subsidiary in the prior period(s) that is realized by sales to third parties during the current period | XXXX           |
|   |        | Subsidiary income included in consolidated income  | \$ XXXX        |
|   |        | Noncontrolling ownership percentage interest   | _____ %        |
|   |        | Noncontrolling interest in consolidated income   | <u>\$ XXXX</u> |

##### Succinct Format:

| Noncontrolling Interest in Consolidated Income with Upstream Sales |        |   |                |
|--|--------|---|----------------|
| Amortization of the difference between implied and book value      | \$ XXX | Net income reported by subsidiary                 | \$XXXXX        |
| Unrealized profit in ending inventory                              | XXXX   | Realized profit from beginning inventory          | XXXX           |
|  |        | Subsidiary income included in consolidated income | \$ XXXX        |
|  |        | NCI %   | _____ %        |
|  |        | NCI in consolidated income                        | <u>\$ XXXX</u> |

adjustments directly affect the noncontrolling interest (or only the controlling interest) depends on *who is the intercompany seller (selling affiliate)*. If the intercompany seller is the subsidiary, it is the subsidiary's income that needs adjustment, therefore directly affecting the noncontrolling interest, as shown in Illustration 6-6.

In essence, the amount of the noncontrolling interest in consolidated net income that is deducted to arrive at the controlling interest is based on the amount of subsidiary income (loss) that has been realized in transactions with third parties. This deduction is, as usual, made on the consolidated statements workpaper (final column) to be presented later in this chapter.

The general and succinct formats for the calculation of the noncontrolling interest in consolidated net income in the case of an *upstream sale* are presented in Illustration 6-6.

The reader is reminded, however, that this modification of the calculation of the noncontrolling interest is applicable only when the subsidiary is the *selling affiliate* (upstream or horizontal sales). Where the parent company is the selling affiliate (*downstream sale*), the amount of subsidiary income included in consolidated net income is not affected by the elimination of unrealized intercompany profit and no adjustment is necessary in the calculation of the noncontrolling interest in consolidated net income. (See Illustration 6-11 for the effects of both upstream and downstream sales on income distribution.)

### TEST YOUR KNOWLEDGE 6.1

**NOTE:** Solutions to *Test Your Knowledge* questions are found at the end of each chapter before the end-of-chapter questions.

#### Multiple Choice

- Pristine Corporation owns 80% of Serendipity Inc.'s common stock. During 2011, Pristine sold Serendipity \$250,000 of inventory on the same terms as sales made to third parties. Serendipity sold all the inventory purchased from Pristine in 2011. The following data pertain to sales by each company for the year:

|                    | <i>Pristine</i> | <i>Serendipity</i> |
|--------------------|-----------------|--------------------|
| Sales              | \$1,000,000     | \$700,000          |
| Cost of goods sold | 400,000         | 350,000            |

How much should be reported as cost of goods sold in the consolidated income statement for 2011?

- a. \$400,000   b. \$500,000   c. \$680,000   d. \$750,000
- Polychromasia Company sold inventory costing \$30,000 to its subsidiary, Simply Colorful, for double its cost in 2012. Polychromasia owns 80% of Simply Colorful.

Simply resold \$50,000 of this inventory for \$60,000 to outsiders in 2012. How much unrealized profit exists at the end of the year?

- a. \$10,000   b. \$8,000   c. \$5,000   d. \$20,000

- Skipper Company owns all the outstanding common stock of Anchorage Inc. During 2013, Skipper sells merchandise to Anchorage that is in turn sold to outsiders. None of the intercompany merchandise remains in Anchorage's year-end inventory, but some of the intercompany purchases from Skipper have not yet been paid. Identify the accounts that will reflect incorrect balances in the consolidated financial statements if no adjustments are made:
  - Accounts Receivable and Accounts Payable
  - Sales, Cost of Goods Sold, Inventory, Accounts Receivable
  - Sales, Cost of Goods Sold, Accounts Receivable, and Accounts Payable
  - Accounts Payable, Inventory, and Net Income

## 6.2 COST METHOD: CONSOLIDATED STATEMENTS WORKPAPER—UPSTREAM SALES

IN  
THE  
NEWS

Dell Inc. warned investors on March 8, 2006, that it would not achieve its sales and earnings goals for the fiscal period ending May 5. Eleven days later, Dell announced that it intended to start using AMD chips in some high-end servers. Analysts speculated that the move was in response to competitors.<sup>7</sup>

<sup>7</sup> *WSJ*, "Dell to Use AMD Chips in Some Servers," by Don Clark and Christopher Lawton, 5/19/06, p. A3.



COST

**LO 6** Consolidated workpapers for upstream Sales-Cost Method.

To illustrate consolidation procedures when the parent company records its investment using the cost method, assume the following:

1. P Company acquired an 80% interest in S Company on January 1, 2014, for \$1,360,000, at which time S Company had capital stock of \$1,000,000 and retained earnings of \$700,000.
2. In 2014, S Company reported net income of \$125,000 and declared dividends of \$20,000.
3. In 2015, S Company reported net income of \$140,000 and declared dividends of \$60,000.
4. P Company uses the cost method to account for its investment in S Company.
5. The purchase price equals 80% of both the book values and fair values of S Company's net assets on the date of acquisition. Thus, the implied value equals the total book value equals fair value.
6. S Company sells merchandise to P Company as follows (upstream sales):

| Year | Total Sales of S Company to P Company | Intercompany Merchandise in 12/31 Inventory of P Company | Unrealized Intercompany Profit (25% of Selling Price) |
|------|---------------------------------------|--|---|
| 2014 | \$ 700,000                            | \$400,000  | \$100,000   |
| 2015 | 1,000,000                             | 500,000  | 125,000   |



COST

Consolidated statements workpapers for the years ended December 31, 2014, and December 31, 2015, are presented in Illustrations 6-7 and 6-8, respectively. Entries *on the books* of P Company as well as *workpaper entries* necessary in the consolidated statements workpapers for the years ended December 31, 2014, and December 31, 2015, are summarized in general journal form below. The workpaper entries and the determination of the noncontrolling interest are explained in more detail as needed.

**Entries on Books of P Company—Cost Method 2014—Year of Acquisition**

|  |           |           |
|--|-----------|-----------|
| (1) Investment in S Company                                    | 1,360,000 |           |
| Cash   |           | 1,360,000 |
| To record purchase of S Company stock.                         |           |           |
| (2) Cash   | 16,000    |           |
| Dividend Income  |           | 16,000    |
| To record receipt of dividends from S Company (.8 × \$20,000). |           |           |

**Consolidated Statements Workpaper Entries—December 31, 2014 (Year of Acquisition)**

|  |           |           |
|--|-----------|-----------|
| (1) Sales  | 700,000   |           |
| Purchases  |           | 700,000   |
| To eliminate intercompany sales.   |           |           |
| (2) 12/31 Inventory—Income Statement (Cost of Sales)                     | 100,000   |           |
| Inventory—Balance Sheet  |           | 100,000   |
| To defer (eliminate) unrealized intercompany profit in ending inventory. |           |           |
| (3) Dividend Income  | 16,000    |           |
| Dividends Declared   |           | 16,000    |
| To eliminate intercompany dividends.                                     |           |           |
| (4) Beginning Retained Earnings—S Company                                | 700,000   |           |
| Capital Stock—S Company  | 1,000,000 |           |
| Investment in S Company  |           | 1,360,000 |
| NCI in Equity  |           | 340,000   |
| To eliminate investment account and create NCI account.                  |           |           |

## Cost Method

## ILLUSTRATION 6-7

80% Owned Subsidiary

## Consolidated Statements Workpaper

Upstream Sale of Inventory

## P Company and Subsidiary

Year of Acquisition

for the Year Ended December 31, 2014

| Income Statement                               | P<br>Company     | S<br>Company     | Eliminations     |                  | Noncontrolling<br>Interest | Consolidated<br>Balances |
|--|------------------|------------------|------------------|------------------|----------------------------|--------------------------|
|  |                  |                  | Dr.              | Cr.              |                            |                          |
| Sales  | 3,104,000        | 2,200,000        | (1) 700,000      |                  |                            | 4,604,000                |
| Dividend Income                                | 16,000           |                  | (3) 16,000       |                  |                            |                          |
| Total Revenue                                  | <u>3,120,000</u> | <u>2,200,000</u> |                  |                  |                            | <u>4,604,000</u>         |
| Inventory 1/1                                  | 500,000          | 300,000          |                  |                  |                            | 800,000                  |
| Purchases                                      | 1,680,000        | 1,370,000        |                  | (1) 700,000      |                            | 2,350,000                |
|  | 2,180,000        | 1,670,000        |                  |                  |                            | 3,150,000                |
| Inventory 12/31                                | 480,000          | 310,000          | (2) 100,000      |                  |                            | 690,000                  |
| Cost of Goods Sold                             | 1,700,000        | 1,360,000        |                  |                  |                            | 2,460,000                |
| Other Expenses                                 | 1,124,000        | 715,000          |                  |                  |                            | 1,839,000                |
| Total Expense                                  | <u>2,824,000</u> | <u>2,075,000</u> |                  |                  |                            | <u>4,299,000</u>         |
| Net/Consolidated Income                        | 296,000          | 125,000          |                  |                  |                            | 305,000                  |
| Noncontrolling Interest in<br>Income           |                  |                  |                  |                  | 5,000*                     | 5,000                    |
| Net Income to Retained<br>Earnings             | <u>296,000</u>   | <u>125,000</u>   | <u>816,000</u>   | <u>700,000</u>   | <u>5,000</u>               | <u>300,000</u>           |
| <i>Retained Earnings Statement</i>             |                  |                  |                  |                  |                            |                          |
| 1/1 Retained Earnings                          |                  |                  |                  |                  |                            |                          |
| P Company                                      | 1,650,000        |                  |                  |                  |                            | 1,650,000                |
| S Company                                      |                  | 700,000          | (4) 700,000      |                  |                            |                          |
| Net Income from above                          | 296,000          | 125,000          | 816,000          | 700,000          | 5,000                      | 300,000                  |
| Dividends Declared                             |                  |                  |                  |                  |                            |                          |
| P Company                                      | (150,000)        |                  |                  |                  |                            | (150,000)                |
| S Company                                      |                  | (20,000)         |                  | (3) 16,000       | (4,000)                    |                          |
| 12/31 Retained Earnings to<br>Balance Sheet    | <u>1,796,000</u> | <u>805,000</u>   | <u>1,516,000</u> | <u>716,000</u>   | <u>1,000</u>               | <u>1,800,000</u>         |
| <i>Balance Sheet</i>                           |                  |                  |                  |                  |                            |                          |
| Inventory                                      | 480,000          | 310,000          |                  | (2) 100,000      |                            | 690,000                  |
| Investment in S Company                        | 1,360,000        |                  |                  | (4) 1,360,000    |                            |                          |
| Other Assets (net)                             | 5,090,000        | 2,310,000        |                  |                  |                            | 7,400,000                |
| Total  | <u>6,930,000</u> | <u>2,620,000</u> |                  |                  |                            | <u>8,090,000</u>         |
| Liabilities                                    | 2,134,000        | 815,000          |                  |                  |                            | 2,949,000                |
| Capital Stock                                  |                  |                  |                  |                  |                            |                          |
| P Company                                      | 3,000,000        |                  |                  |                  |                            | 3,000,000                |
| S Company                                      |                  | 1,000,000        | (4) 1,000,000    |                  |                            |                          |
| Retained Earnings from above                   | 1,796,000        | 805,000          | 1,516,000        | 716,000          | 1,000                      | 1,800,000                |
| 1/1 Noncontrolling Interest<br>in Net Assets   |                  |                  |                  | (4) 340,000      | 340,000                    |                          |
| 12/31 Noncontrolling Interest<br>in Net Assets |                  |                  |                  |                  | <u>341,000</u>             | <u>341,000</u>           |
| Total Liabilities and Equity                   | <u>6,930,000</u> | <u>2,620,000</u> | <u>2,516,000</u> | <u>2,516,000</u> |                            | <u>8,090,000</u>         |

\*  $.2(\$125,000 - \$100,000) = \$5,000$ .

(1) To eliminate intercompany sales.

(2) To eliminate unrealized intercompany profit in ending inventory.

(3) To eliminate intercompany dividends.

(4) To eliminate the investment account and create noncontrolling interest account.

| Cost Method                                 |                  | ILLUSTRATION 6-8                     |                  |                  |                         |                       |                |
|---|------------------|--------------------------------------|------------------|------------------|-------------------------|-----------------------|----------------|
| 80% Owned Subsidiary                        |                  | Consolidated Statements Workpaper    |                  |                  |                         |                       |                |
| Upstream Sale of Inventory                  |                  | P Company and Subsidiary             |                  |                  |                         |                       |                |
| Year Subsequent to Acquisition              |                  | for the Year Ended December 31, 2015 |                  |                  |                         |                       |                |
| Income Statement                            | P                | S                                    | Eliminations     |                  | Noncontrolling Interest | Consolidated Balances |                |
|   | Company          | Company                              | Dr.              | Cr.              |                         |                       |                |
| Sales                                       | 3,546,000        | 2,020,000                            | (2)              | 1,000,000        |                         | 4,566,000             |                |
| Dividend Income                             | 48,000           |                                      | (5)              | 48,000           |                         |                       |                |
| Total Revenue                               | <u>3,594,000</u> | <u>2,020,000</u>                     |                  |                  |                         | <u>4,566,000</u>      |                |
| Inventory 1/1                               | 480,000          | 310,000                              |                  | (4)              | 100,000                 | 690,000               |                |
| Purchases                                   | <u>2,070,000</u> | <u>1,250,000</u>                     |                  | (2)              | 1,000,000               | <u>2,320,000</u>      |                |
|   | <u>2,550,000</u> | <u>1,560,000</u>                     |                  |                  |                         | <u>3,010,000</u>      |                |
| Inventory 12/31                             | 510,000          | 360,000                              | (3)              | 125,000          |                         | 745,000               |                |
| Cost of Goods Sold                          | <u>2,040,000</u> | <u>1,200,000</u>                     |                  |                  |                         | <u>2,265,000</u>      |                |
| Other Expenses                              | <u>1,100,000</u> | <u>680,000</u>                       |                  |                  |                         | <u>1,780,000</u>      |                |
| Total Expense                               | <u>3,140,000</u> | <u>1,880,000</u>                     |                  |                  |                         | <u>4,045,000</u>      |                |
| Net/Consolidated Income                     | <u>454,000</u>   | <u>140,000</u>                       |                  |                  |                         | <u>521,000</u>        |                |
| Noncontrolling Interest in Income           |                  |                                      |                  |                  | 23,000*                 | 23,000                |                |
| Net Income to Retained Earnings             | <u>454,000</u>   | <u>140,000</u>                       | <u>1,173,000</u> | <u>1,100,000</u> | <u>23,000</u>           | <u>498,000</u>        |                |
| <b>Retained Earnings Statement</b>          |                  |                                      |                  |                  |                         |                       |                |
| 1/1 Retained Earnings                       |                  |                                      |                  |                  |                         |                       |                |
| P Company                                   | 1,796,000        |                                      | (4)              | 80,000           | (1)                     | 84,000                | 1,800,000      |
| S Company                                   |                  | 805,000                              | (6)              | 805,000          |                         |                       |                |
| Net Income from above                       | 454,000          | 140,000                              | 1,173,000        | 1,100,000        | 23,000                  | 498,000               |                |
| Dividends Declared                          |                  |                                      |                  |                  |                         |                       |                |
| P Company                                   | (150,000)        |                                      |                  |                  |                         |                       | (150,000)      |
| S Company                                   |                  | (60,000)                             |                  | (5)              | 48,000                  | (12,000)              |                |
| 12/31 Retained Earnings to Balance Sheet    | <u>2,100,000</u> | <u>885,000</u>                       | <u>2,058,000</u> | <u>1,232,000</u> | <u>11,000</u>           | <u>2,148,000</u>      |                |
| <b>Balance Sheet</b>                        |                  |                                      |                  |                  |                         |                       |                |
| Inventory                                   | 510,000          | 360,000                              |                  | (3)              | 125,000                 | 745,000               |                |
| Investment in S Company                     | 1,360,000        |                                      | (1)              | 84,000           | (6)                     | 1,444,000             |                |
| Other Assets (net)                          | <u>5,450,000</u> | <u>2,330,000</u>                     |                  |                  |                         | <u>7,780,000</u>      |                |
| Total                                       | <u>7,320,000</u> | <u>2,690,000</u>                     |                  |                  |                         | <u>8,525,000</u>      |                |
| Liabilities                                 | <u>2,220,000</u> | <u>805,000</u>                       |                  |                  |                         | <u>3,025,000</u>      |                |
| Capital Stock                               |                  |                                      |                  |                  |                         |                       |                |
| P Company                                   | 3,000,000        |                                      |                  |                  |                         | 3,000,000             |                |
| S Company                                   |                  | 1,000,000                            | (6)              | 1,000,000        |                         |                       |                |
| Retained Earnings from above                | 2,100,000        | 885,000                              | 2,058,000        | 1,232,000        | 11,000                  | 2,148,000             |                |
| 1/1 Noncontrolling Interest in Net Assets   |                  |                                      | (4)              | 20,000           | (6)                     | 361,000**             | 341,000        |
| 12/31 Noncontrolling Interest in Net Assets |                  |                                      |                  |                  |                         | <u>352,000</u>        | <u>352,000</u> |
| Total Liabilities and Equity                | <u>7,320,000</u> | <u>2,690,000</u>                     | <u>3,162,000</u> | <u>3,162,000</u> |                         | <u>8,525,000</u>      |                |

\* .2(\$140,000 - \$125,000 + \$100,000) = \$23,000.

\*\* \$340,000 + .2(\$805,000 - \$700,000) = \$361,000

(1) To convert to equity/establish reciprocity as of 1/1/15 [.8 × (\$805,000 - \$700,000)].

(2) To eliminate intercompany sales.

(3) To eliminate unrealized intercompany profit in ending inventory.

(4) To recognize profit realized during year and to reduce the controlling and noncontrolling interests for their shares of unrealized intercompany profit at beginning of year.

(5) To eliminate intercompany dividends.

(6) To eliminate investment account and create noncontrolling interest account.



Since the selling affiliate is a partially owned subsidiary, unrealized intercompany profit is subtracted from reported subsidiary income when calculating the noncontrolling interest in consolidated net income as follows:

$$.20 \times (\$125,000 - \$100,000) = \$5,000$$

If the sale of merchandise had been *downstream* rather than *upstream*, the amount of subsidiary income included in consolidated income would not be affected by the elimination of unrealized intercompany profit and no adjustment would be necessary in the calculation of the noncontrolling interest in consolidated income.

**Entry on Books of P Company—Cost Method 2015—  
Year Subsequent to Acquisition**

|   |        |        |
|---|--------|--------|
| Cash  | 48,000 |        |
| Dividend Income   |        | 48,000 |
| To record receipt of dividends from S Company (.80 × \$60,000). |        |        |

**Consolidated Statements Workpaper Entries—December 31,  
2015 (Year Subsequent to Acquisition)—Cost Method**

|     |  |           |           |
|-----|--|-----------|-----------|
| (1) | Investment in S Company  | 84,000    |           |
|     | Beginning Retained Earnings—P Company  |           | 84,000    |
|     | To convert to the equity method or to establish reciprocity<br>[.80 × (\$805,000 – \$700,000)]   |           |           |
| (2) | Sales  | 1,000,000 |           |
|     | Purchases (Cost of Sales)  |           | 1,000,000 |
|     | To eliminate intercompany sales.   |           |           |
| (3) | 12/31 Inventory—Income Statement (Cost of Sales)   | 125,000   |           |
|     | Inventory—Balance Sheet  |           | 125,000   |
|     | To eliminate unrealized intercompany profit in ending inventory.   |           |           |
| (4) | Beginning Retained Earnings—P Company  | 80,000    |           |
|     | (.80 × \$100,000)  |           |           |
|     | NCI  | 20,000    |           |
|     | (.20 × \$100,000)  |           |           |
|     | 1/1 Inventory—Income Statement (Cost of Sales)   |           | 100,000   |
|     | To recognize intercompany profit in beginning inventory realized during<br>the year and to reduce the controlling and noncontrolling interests for their<br>shares of unrealized intercompany profit at beginning of year. |           |           |
| (5) | Dividend Income  | 48,000    |           |
|     | Dividends Declared—S Company   |           | 48,000    |
|     | To eliminate intercompany dividends (.80 × \$60,000).  |           |           |
| (6) | Beginning Retained Earnings—S Company  | 805,000   |           |
|     | Capital Stock—S Company  | 1,000,000 |           |
|     | Investment in S Company (\$1,360,000 + \$84,000)   |           | 1,444,000 |
|     | NCI (\$340,000 + .2(\$805,000 – \$700,000))  |           | 361,000   |
|     | To eliminate investment account, and create NCI.   |           |           |



COST

The unrealized profit in the current year's beginning inventory is the same as the unrealized profit in the prior year's ending inventory. Since the sale is *upstream*, the unrealized profit at the end of the prior year was apportioned between the controlling and noncontrolling interests by reducing the noncontrolling interest in consolidated income in the consolidated statements workpaper in the previous year. Thus, the retained earnings effects in entry (4) are split between P Company's (80%) beginning retained earnings accounts and the NCI (20%).

As a matter of workpaper procedure, adjustments to the controlling interest (consolidated retained earnings) are made by debiting (decreasing) or crediting (increasing) the *beginning* retained earnings row of the parent company. Adjustments to the noncontrolling interest are made by debiting (decreasing) or crediting (increasing) the *beginning* NCI in Net Assets (or Equity).

**ILLUSTRATION 6-9****Calculation of Realized Assets of Company S  
December 31, 2015**

|                              | 12/31/15           | <i>Unrealized Intercompany<br/>Profits in Ending Inventory</i> | <i>Realized<br/>12/31/15</i> |
|------------------------------|--------------------|--|------------------------------|
| Total Assets—S Company       | \$2,690,000        | 125,000  | \$2,565,000                  |
| Total Liabilities—S Company  | 805,000            |  | 805,000                      |
| Capital Stock—S Company      | 1,000,000          |  | 1,000,000                    |
| Retained Earnings            | 885,000            | 125,000  | 760,000                      |
| Total Liabilities and Equity | <u>\$2,690,000</u> |  | <u>\$2,565,000</u>           |

The net effect of the adjustments to the noncontrolling interest in the income statement and retained earnings statement sections of the consolidated statements workpaper that are necessary in the case of *upstream sales* is to adjust the amount of the noncontrolling interest in consolidated net assets. The amount of the noncontrolling interest reported in the consolidated balance sheet is based on the net assets of the subsidiary that have been realized in transactions with third parties. Workpaper entry (6) creates the beginning balance in the noncontrolling interest account reflective of the sum of the 20% interest at acquisition plus the noncontrolling share of changes in Retained Earnings of S since acquisition to the beginning of the current year. This entry could just as easily be numbered as entry (1) or (2), as there is no particular sequence for workpaper entries. Workpaper entry (4) debits the noncontrolling interest, thus adjusting the balance as needed for prior year unrealized profit in inventory (that is to be realized through the current share of consolidated income).

In Illustration 6-8, for example, the noncontrolling interest in consolidated net assets on December 31, 2015, may be calculated as follows. First, as shown in Illustration 6-9, the reported assets are adjusted for the unrealized intercompany profit at the end of the year on upstream sales. Then the noncontrolling interest in realized net assets can be computed either of two ways as shown in Illustration 6-10.

**ILLUSTRATION 6-10****Calculation of the Noncontrolling Interest in Consolidated Net Assets  
December 31, 2015***Method One:*

|  |                   |
|--|-------------------|
| Total Realized Assets—S Company (see Illustration 6-9) | \$2,565,000       |
| Less: Total Liabilities—S Company                      | <u>(805,000)</u>  |
| Realized Net Assets—S Company                          | 1,760,000         |
| Noncontrolling percentage                              | <u>20%</u>        |
| Noncontrolling interest in consolidated net assets     | <u>\$ 352,000</u> |

*Method Two:*

|   |                   |
|---|-------------------|
| Capital Stock—S Company                                     | \$1,000,000       |
| Realized Retained Earnings—S Company (see Illustration 6-9) | <u>760,000</u>    |
| Realized Net Assets—S Company                               | \$1,760,000       |
| Noncontrolling percentage                                   | <u>20%</u>        |
| Noncontrolling interest in consolidated net assets          | <u>\$ 352,000</u> |

## 6.3 COST METHOD—ANALYSIS OF CONSOLIDATED NET INCOME AND CONSOLIDATED RETAINED EARNINGS

In Chapter 5, the calculations of consolidated net income and consolidated retained earnings were refined to accommodate the effect of the amortization, depreciation, and impairment of differences between implied and book values. These analyses must now be further refined to accommodate the effect of unrealized intercompany profit.

The noncontrolling interest in consolidated net income is calculated after subtracting end-of-year unrealized intercompany profit and adding intercompany profit realized during the current year to the net income reported by the subsidiary, as presented in Illustration 6-11. If the sale of merchandise had been downstream rather than upstream, the amount of subsidiary income included in consolidated net income would not be affected by the workpaper entries related to unrealized intercompany profit, and no adjustment would be necessary in the calculation of the noncontrolling interest in consolidated income.

## Consolidated Net Income

*Consolidated net income is the parent company's income from its independent operations that has been realized in transactions with third parties plus (minus) subsidiary income (loss) that has been realized in transactions with third parties plus or minus adjustments for the period relating to the depreciation, amortization, and impairment of differences between implied and book values.*

Using the data from Illustration 6-8, the calculation of the controlling and noncontrolling interests in consolidated net income for the year ended December 31, 2015, is presented in t-account form in Illustration 6-11.

## Consolidated Retained Earnings

*Consolidated retained earnings is the parent company's cost basis retained earnings that has been realized in transactions with third parties plus (minus) the parent company's share of the increase (decrease) in subsidiary retained earnings that has been realized in transactions with third parties from the date of acquisition to the current date plus or minus the cumulative effect of adjustments to date relating to the amortization, depreciation, and impairment of differences between implied and book values.*

On the basis of Illustration 6-8, a t-account calculation of consolidated retained earnings on December 31, 2015, is shown in Illustration 6-12. Notice that the retained earnings calculation reflects cumulative rather than only current-year data, in contrast to the distribution of current income (Illustration 6-11). There is no need, however, to include the realized profit in beginning inventory from January 1, 2015, or the unrealized profit in ending inventory at December 31, 2014, in the retained earnings calculation as they would cancel out.

### ILLUSTRATION 6-11

#### Calculation of the Controlling and Noncontrolling Interest in Consolidated Income— Cost Method for the Year Ended December 31, 2015

| Noncontrolling Interest in Consolidated Income                        |           |  |           |
|---|-----------|--|-----------|
| Unrealized profit on upstream sales in ending inventory               | \$125,000 | Net income reported by S Company   | \$140,000 |
| Amortization of the difference between implied and book value         | 0         | Realized profit (upstream sales) from beginning inventory                                | 100,000   |
|   |           | Subsidiary income included in consolidated income  | \$115,000 |
|   |           | Noncontrolling ownership percentage interest   | 20%       |
|   |           | Noncontrolling interest in consolidated income   | \$ 23,000 |
| Controlling Interest in Consolidated Income                           |           |  | 80%       |
|   |           | Net income internally generated by P Company (\$454,000 less \$48,000 dividend income)   | \$406,000 |
| Unrealized profit on downstream sales to S Company (ending inventory) | \$0       | Realized profit (downstream sales) from begin. inventory                                 | 0         |
|   |           | P Company's percentage of S Company's income realized from third parties, .80(\$115,000) | 92,000    |
|   |           | Controlling Interest in Consolidated Income  | \$498,000 |

**ILLUSTRATION 6-12****Calculation of Consolidated Retained Earnings  
for the Year Ended December 31, 2015**

| Consolidated Retained Earnings   |         |   |                        |
|--|---------|---|------------------------|
| P Company's share of unrealized profit on upstream sales from S Company (in P's ending inventory), .8(\$125,000) | 100,000 | P Company's Retained Earnings on 12/31/15   | \$2,100,000            |
|  |         | Increase in S Company's Retained Earnings since acquisition (\$885,000 – \$700,000)               | 185,000                |
| Unrealized profit on downstream sales to S Company (in S's ending Inventory)                                     | 0       | <i>Less:</i> Cumulative amount of depreciation of the differences between implied and book values | 0                      |
|  |         | Adjusted increase   | 185,000                |
|  |         | P Company's share thereof   | 0.80                   |
|  |         | Consolidated Retained Earnings  | 148,000<br>\$2,148,000 |

**Comprehensive Example: Upstream and Downstream Sales—Cost Method**

COST

To illustrate all aspects of the t-account calculations of consolidated net income and consolidated retained earnings, assume that:

1. Pepper Company acquired 80% of the voting stock of Salt Company on January 1, 2014, when Salt Company's retained earnings amounted to \$150,000.
2. The difference between implied and book value on the date of acquisition was allocated as follows:

|                          |          |
|--------------------------|----------|
| Land                     | \$50,000 |
| Equipment (10-year life) | 20,000   |
| Goodwill                 | 40,000   |

3. Salt Company reported retained earnings of \$260,000 on January 1, 2017, and \$320,000 on December 31, 2017.
4. Salt Company reported net income of \$90,000 and declared dividends of \$30,000 in 2017.
5. Pepper Company reported net income in 2017 in the amount of \$724,000 and retained earnings on December 31, 2017, of \$3,500,000.
6. There were no intercompany sales prior to 2016, and unrealized profits on January 1 and on December 31, 2017, resulting from intercompany sales, are as summarized below:

| Resulting From                          | <i>Unrealized Intercompany Profit on</i> |          |
|---|--|----------|
|   | 1/1/17                                   | 12/31/17 |
| Sales by Salt Company to Pepper Company | \$10,000                                 | \$ 5,000 |
| Sales by Pepper Company to Salt Company | 15,000                                   | 20,000   |

T-account calculations of the controlling and noncontrolling interests in consolidated net income for the year ended December 31, 2017, and consolidated retained earnings on December 31, 2017, are presented in Illustrations 6-13 and 6-14 respectively.

**6.4 CONSOLIDATED STATEMENTS WORKPAPER—  
PARTIAL EQUITY METHOD**

**Lo 6** Consolidated workpapers—partial equity method.

The balances reported by the parent company in income, retained earnings, and the investment account differ depending on the method used by the parent company to record its investment. As demonstrated in Chapters 4 and 5, however, the method used by the parent company to record its investment has no effect on the consolidated balances. To illustrate

**ILLUSTRATION 6-13****Calculation of the Controlling and Noncontrolling Interest in Consolidated Income for the Year Ended December 31, 2017**

| Noncontrolling Interest in Combined Income                                      |        |   |                  |
|---|--------|---|------------------|
| Unrealized profit on <i>upstream</i> sales in ending inventory                  | 5,000  | Net income reported by Salt Company   | \$ 90,000        |
| Depreciation (\$20,000/10)  | 2,000  | Realized profit ( <i>upstream</i> sales) from beginning inventory                               | 10,000           |
|   |        | Subsidiary income included in consolidated income   | \$ 93,000        |
|   |        | Noncontrolling ownership percentage interest  | 20%              |
|   |        | Noncontrolling interest in consolidated income  | <u>\$ 18,600</u> |
| Controlling Interest in Income  |        |   |                  |
| Unrealized profit on <i>downstream</i> sales to Salt Company (ending inventory) | 20,000 | Net income internally generated by Pepper Company (\$724,000 less \$24,000 dividends from Salt) | \$ 700,000       |
|   |        | Realized profit ( <i>downstream</i> sales) from begin. inventory                                | 15,000           |
|   |        | Pepper Company's percentage of Salt Company's income realized from third parties, .80(\$93,000) | \$ 74,400        |
|   |        | Controlling Interest in Consolidated Income   | \$769,400        |

**ILLUSTRATION 6-14****Calculation of Consolidated Retained Earnings—Cost Method for the Year Ended December 31, 2017**

| Consolidated Retained Earnings  |        |  |                    |
|---|--------|--|--------------------|
| Pepper Company's share of unrealized profit on <i>upstream</i> sales from S Company (in Pepper's ending inventory), .8(\$5,000) | 4,000  | Pepper Company's Retained Earnings on 12/31/17   | \$3,500,000        |
| Unrealized profit on <i>downstream</i> sales to Salt Company (in Salt's ending inventory)                                       | 20,000 | Increase in Salt Company's Retained Earnings since acquisition (\$320,000 2 \$150,000)     | 170,000            |
|   |        | Less: Cumulative amount of depreciation of the differences between implied and book values | <u>(10,000)</u>    |
|   |        | Adjusted increase  | 160,000            |
|   |        | Pepper Company's share thereof   | <u>80%</u> 128,000 |
|   |        | Consolidated Retained Earnings   | \$3,604,000        |

consolidation procedures when the parent company records its investment using the partial equity method, assume the following:



PARTIAL

1. P Company acquired an 80% interest in S Company on January 1, 2014, for \$1,360,000, at which time S Company had capital stock of \$1,000,000 and retained earnings of \$700,000.
2. In 2014, S Company reported net income of \$125,000 and declared dividends of \$20,000.
3. In 2015, S Company reported net income of \$140,000 and declared dividends of \$60,000.
4. P Company uses the partial equity method to account for its investment in S Company.
5. The purchase price equals 80% of both the book values and fair values of S Company's net assets on the date of acquisition. Thus, implied value equals total book value equals fair value of S company net assets.
6. S Company sells merchandise to P Company as follows (upstream sales):

|      | <i>Total Sales<br/>of S Company<br/>to P Company</i> | <i>Intercompany<br/>Merchandise<br/>in 12/31 Inventory<br/>of P Company</i> | <i>Unrealized<br/>Intercompany<br/>Profit (25%<br/>of Selling Price)</i> |
|------|--|---|--|
| 2014 | \$ 700,000   | \$400,000   | \$100,000  |
| 2015 | 1,000,000  | 500,000   | 125,000  |

## Entries on Books of P Company—Partial Equity Method

Entries recorded on the books of P Company under the partial equity method are as follows:

### 2014—Year of Acquisition—Partial Equity

|     |  |           |           |
|-----|--|-----------|-----------|
| (1) | Investment in S Company                                  | 1,360,000 |           |
|     | Cash   |           | 1,360,000 |
|     | To record purchase of 80% interest in S Company.         |           |           |
| (2) | Cash   | 16,000    |           |
|     | Investment in S Company                                  |           | 16,000    |
|     | To record dividends received (.80 × \$20,000).           |           |           |
| (3) | Investment in S Company                                  | 100,000   |           |
|     | Equity in Subsidiary Income                              |           | 100,000   |
|     | To record equity in subsidiary income (.80 × \$125,000). |           |           |

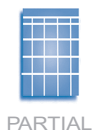
### 2015—Year Subsequent to Acquisition—Partial Equity

|     |  |         |         |
|-----|--|---------|---------|
| (4) | Cash   | 48,000  |         |
|     | Investment in S Company                                  |         | 48,000  |
|     | To record dividends received (.80 × \$60,000).           |         |         |
| (5) | Investment in S Company                                  | 112,000 |         |
|     | Equity in Subsidiary Income                              |         | 112,000 |
|     | To record equity in subsidiary income (.80 × \$140,000). |         |         |

After these entries are posted, the investment account will appear as follows:

| Investment in S Company |                  |               |        |
|-------------------------|------------------|---------------|--------|
| (1) Cost                | 1,360,000        | (2) Dividends | 16,000 |
| (3) Subsidiary Income   | 100,000          |               |        |
| <b>12/31/14 Balance</b> | <b>1,444,000</b> |               |        |
| (5) Subsidiary Income   | 112,000          | (4) Dividends | 48,000 |
| <b>12/31/15 Balance</b> | <b>1,508,000</b> |               |        |

**Workpaper Entries—2015—Partial Equity** Consolidated workpapers under the partial equity method for the years ended December 31, 2014 and 2015, are presented in Illustrations 6-15 and 6-16. Workpaper entries in Illustration 6-16 (the year subsequent to acquisition) are presented in general journal form as follows:



PARTIAL

|     |  |           |           |
|-----|--|-----------|-----------|
| (1) | Equity in Subsidiary Income  | 112,000   |           |
|     | Dividends Declared   |           | 48,000    |
|     | Investment in S Company  |           | 64,000    |
|     | To reverse the effect of parent company entries during the year for subsidiary dividends and income.   |           |           |
| (2) | Sales  | 1,000,000 |           |
|     | Purchases (Cost of Sales)  |           | 1,000,000 |
|     | To eliminate intercompany sales.   |           |           |
| (3) | 12/31 Inventory—Income Statement (Cost of Sales)   | 125,000   |           |
|     | Inventory—Balance Sheet  |           | 125,000   |
|     | To eliminate unrealized intercompany profit in ending inventory.   |           |           |
| (4) | Beginning Retained Earnings—P Company  | 80,000    |           |
|     | (.80 × \$100,000)  |           |           |
|     | NCI in Equity  | 20,000    |           |
|     | (.20 × \$100,000)  |           |           |
|     | 1/1 Inventory—Income Statement (Cost of Sales)   |           | 100,000   |
|     | To recognize intercompany profit in beginning inventory realized during the year and to reduce controlling and noncontrolling interest for their share of unrealized intercompany profit at beginning of year. |           |           |

Entries (2), (3), and (4) are the same as the corresponding entries in Illustration 6-8 (investment recorded using cost method).

## Partial Equity Method

## ILLUSTRATION 6-15

80% Owned Subsidiary

## Consolidated Statements Workpaper

Upstream Sale of Inventory

## P Company and Subsidiary

Year of Acquisition

## for the Year Ended December 31, 2014

| Income Statement                               | P<br>Company     | S<br>Company     | Eliminations     |                  | Noncontrolling Consolidated |                  |
|--|------------------|------------------|------------------|------------------|-----------------------------|------------------|
|  |                  |                  | Dr.              | Cr.              | Interest                    | Balances         |
| Sales  | 3,104,000        | 2,200,000        | (2)              | 700,000          |                             | 4,604,000        |
| Equity in Subsidiary Income                    | 100,000          |                  | (1)              | 100,000          |                             |                  |
| Total Revenue                                  | <u>3,204,000</u> | <u>2,200,000</u> |                  |                  |                             | <u>4,604,000</u> |
| Inventory 1/1                                  | 500,000          | 300,000          |                  |                  |                             | 800,000          |
| Purchases                                      | 1,680,000        | 1,370,000        |                  | (2)              | 700,000                     | 2,350,000        |
|  | 2,180,000        | 1,670,000        |                  |                  |                             | 3,150,000        |
| Inventory 12/31                                | 480,000          | 310,000          | (3)              | 100,000          |                             | 690,000          |
| Cost of Goods Sold                             | 1,700,000        | 1,360,000        |                  |                  |                             | 2,460,000        |
| Other Expenses                                 | 1,124,000        | 715,000          |                  |                  |                             | 1,839,000        |
| Total Cost and Expense                         | <u>2,824,000</u> | <u>2,075,000</u> |                  |                  |                             | <u>4,299,000</u> |
| Net/Combined Income                            | 380,000          | 125,000          |                  |                  |                             | 305,000          |
| Noncontrolling Interest in<br>Income           |                  |                  |                  |                  |                             | 5,000*           |
| Net Income to Retained<br>Earnings             | <u>380,000</u>   | <u>125,000</u>   | <u>900,000</u>   | <u>700,000</u>   | <u>5,000</u>                | <u>300,000</u>   |
| <b>Retained Earnings Statement</b>             |                  |                  |                  |                  |                             |                  |
| 1/1 Retained Earnings                          |                  |                  |                  |                  |                             |                  |
| P Company                                      | 1,650,000        |                  |                  |                  |                             | 1,650,000        |
| S Company                                      |                  | 700,000          | (4)              | 700,000          |                             |                  |
| Net Income from above                          | 380,000          | 125,000          | 900,000          | 700,000          | 5,000                       | 300,000          |
| Dividends Declared                             |                  |                  |                  |                  |                             |                  |
| P Company                                      | (150,000)        |                  |                  |                  |                             | (150,000)        |
| S Company                                      |                  | (20,000)         |                  | (1)              | 16,000                      | (4,000)          |
| 12/31 Retained Earnings to<br>Balance Sheet    | <u>1,880,000</u> | <u>805,000</u>   | <u>1,600,000</u> | <u>716,000</u>   | <u>1,000</u>                | <u>1,800,000</u> |
| <b>Balance Sheet</b>                           |                  |                  |                  |                  |                             |                  |
| Inventory                                      | 480,000          | 310,000          |                  | (3)              | 100,000                     | 690,000          |
| Investment in S Company                        | 1,444,000        |                  |                  | (1)              | 84,000                      |                  |
|  |                  |                  |                  | (4)              | 1,360,000                   |                  |
| Other Assets (net)                             | 5,090,000        | 2,310,000        |                  |                  |                             | 7,400,000        |
| Total  | <u>7,014,000</u> | <u>2,620,000</u> |                  |                  |                             | <u>8,090,000</u> |
| Liabilities                                    | 2,134,000        | 815,000          |                  |                  |                             | 2,949,000        |
| Capital Stock                                  |                  |                  |                  |                  |                             |                  |
| P Company                                      | 3,000,000        |                  |                  |                  |                             | 3,000,000        |
| S Company                                      |                  | 1,000,000        | (4)              | 1,000,000        |                             |                  |
| Retained Earnings from above                   | 1,880,000        | 805,000          | 1,600,000        | 716,000          | 1,000                       | 1,800,000        |
| 1/1 Noncontrolling Interest in<br>Net Assets   |                  |                  |                  | (4)              | 340,000                     | 340,000          |
| 12/31 Noncontrolling Interest in<br>Net Assets |                  |                  |                  |                  |                             | 341,000          |
| Total Liabilities and Equity                   | <u>7,014,000</u> | <u>2,620,000</u> | <u>2,600,000</u> | <u>2,600,000</u> |                             | <u>8,090,000</u> |

\* .20(\$125,000 - \$100,000) = \$5,000.

(1) To reverse the effect of parent company entries during the year for subsidiary dividends and income.

(2) To eliminate intercompany sales.

(3) To eliminate unrealized intercompany profit in ending inventory.

(4) To recognize profit realized during year and to reduce the controlling and noncontrolling interests for their shares of unrealized intercompany profit at beginning of year.

(5) To eliminate investment account and create noncontrolling interest account.

**Partial Equity Method** **ILLUSTRATION 6-16**  
**80% Owned Subsidiary** **Consolidated Statements Workpaper**  
**Upstream Sale of Inventory** **P Company and Subsidiary**  
**Year Subsequent to Acquisition** **for the Year Ended December 31, 2015**

| <i>Income Statement</i>                     | <i>P Company</i> | <i>S Company</i> | <i>Eliminations</i> |                  | <i>Noncontrolling Interest</i> | <i>Consolidated Balances</i> |
|---|------------------|------------------|---------------------|------------------|--------------------------------|------------------------------|
|   |                  |                  | <i>Dr.</i>          | <i>Cr.</i>       |                                |                              |
| Sales                                       | 3,546,000        | 2,020,000        | (2) 1,000,000       |                  |                                | 4,566,000                    |
| Equity in Subsidiary Income                 | 112,000          |                  | (1) 112,000         |                  |                                |                              |
| Total Revenue                               | <u>3,658,000</u> | <u>2,020,000</u> |                     |                  |                                | <u>4,566,000</u>             |
| Inventory 1/1                               | 480,000          | 310,000          |                     | (4) 100,000      |                                | 690,000                      |
| Purchases                                   | <u>2,070,000</u> | <u>1,250,000</u> |                     | (2) 1,000,000    |                                | <u>2,320,000</u>             |
|   | <u>2,550,000</u> | <u>1,560,000</u> |                     |                  |                                | <u>3,010,000</u>             |
| Inventory 12/31                             | 510,000          | 360,000          | (3) 125,000         |                  |                                | 745,000                      |
| Cost of Goods Sold                          | 2,040,000        | 1,200,000        |                     |                  |                                | 2,265,000                    |
| Other Expenses                              | <u>1,100,000</u> | <u>680,000</u>   |                     |                  |                                | <u>1,780,000</u>             |
| Total Cost and Expense                      | <u>3,140,000</u> | <u>1,880,000</u> |                     |                  |                                | <u>4,045,000</u>             |
| Net/Consolidated Income                     | 518,000          | 140,000          |                     |                  |                                | 521,000                      |
| Noncontrolling Interest in Income           |                  |                  |                     |                  | 23,000*                        | 23,000                       |
| Net Income to Retained Earnings             | <u>518,000</u>   | <u>140,000</u>   | <u>1,237,000</u>    | <u>1,100,000</u> | <u>23,000</u>                  | <u>498,000</u>               |
| <i>Retained Earnings Statement</i>          |                  |                  |                     |                  |                                |                              |
| 1/1 Retained Earnings                       |                  |                  |                     |                  |                                |                              |
| P Company                                   | 1,880,000        |                  | (4) 80,000          |                  |                                | 1,800,000                    |
| S Company                                   |                  | 805,000          | (5) 805,000         |                  |                                |                              |
| Net Income from above                       | 518,000          | 140,000          | 1,237,000           | 1,100,000        | 23,000                         | 498,000                      |
| Dividends Declared                          |                  |                  |                     |                  |                                |                              |
| P Company                                   | (150,000)        |                  |                     |                  |                                | (150,000)                    |
| S Company                                   |                  | (60,000)         |                     | (1) 48,000       | (12,000)                       |                              |
| 12/31 Retained Earnings to                  |                  |                  |                     |                  |                                |                              |
| Balance Sheet                               | <u>2,248,000</u> | <u>885,000</u>   | <u>2,122,000</u>    | <u>1,148,000</u> | <u>11,000</u>                  | <u>2,148,000</u>             |
| <i>Balance Sheet</i>                        |                  |                  |                     |                  |                                |                              |
| Inventory                                   | 510,000          | 360,000          |                     | (3) 125,000      |                                | 745,000                      |
| Investment in S Company                     | 1,508,000        |                  |                     | (1) 64,000       |                                |                              |
|   |                  |                  |                     | (5) 1,444,000    |                                |                              |
| Other Assets (net)                          | <u>5,450,000</u> | <u>2,330,000</u> |                     |                  |                                | <u>7,780,000</u>             |
| Total                                       | <u>7,468,000</u> | <u>2,690,000</u> |                     |                  |                                | <u>8,525,000</u>             |
| Liabilities                                 | <u>2,220,000</u> | <u>805,000</u>   |                     |                  |                                | <u>3,025,000</u>             |
| Capital Stock                               |                  |                  |                     |                  |                                |                              |
| P Company                                   | 3,000,000        |                  |                     |                  |                                | 3,000,000                    |
| S Company                                   |                  | 1,000,000        | (5) 1,000,000       |                  |                                |                              |
| Retained Earnings from above                | 2,248,000        | 885,000          | 2,122,000           | 1,148,000        | 11,000                         | 2,148,000                    |
| 1/1 Noncontrolling Interest in Net Assets   |                  |                  | (4) 20,000          | (5) 361,000      | 341,000                        |                              |
| 12/31 Noncontrolling Interest in Net Assets |                  |                  |                     |                  | 352,000                        | 352,000                      |
| Total Liabilities and Equity                | <u>7,468,000</u> | <u>2,690,000</u> | <u>3,142,000</u>    | <u>3,142,000</u> |                                | <u>8,525,000</u>             |

\*.20(\$140,000 - \$125,000 + \$100,000) = \$23,000.

\*\*\$340,000 + .2(\$805,000 - \$700,000) = \$361,000.

(1) To reverse the effect of parent company entries during the year for subsidiary dividends and income.

(2) To eliminate intercompany sales.

(3) To eliminate unrealized intercompany profit in ending inventory.

(4) To recognize profit realized during year and to reduce the controlling and noncontrolling interests for their shares of unrealized intercompany profit at beginning of year.

(5) To eliminate investment account and create noncontrolling interest account.



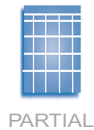
|     |  |           |           |
|-----|--|-----------|-----------|
| (5) | Beginning Retained Earnings—S Company                  | 805,000   |           |
|     | Capital Stock—S Company                                | 1,000,000 |           |
|     | Investment in S Company (\$1,508,000 – \$64,000)       |           | 1,444,000 |
|     | NCI in Equity (\$340,000 + .20(\$805,000 – \$700,000)) |           | 361,000   |
|     | To eliminate investment account.                       |           |           |

This entry is the same as entry (6) in Illustration 6-8 (investment recorded using cost method). Workpaper entry (5) creates the balance in the noncontrolling interest account reflective of the sum of the 20% interest at acquisition plus the noncontrolling share of changes in Retained Earnings of S since acquisition. This entry could just as easily be numbered as entry (1) or (2), as there is no particular sequence for workpaper entries. Workpaper entry (4) debits the noncontrolling interest, thus adjusting the balance as needed for prior year unrealized profit in inventory.

Observe that the consolidated balances in Illustration 6-16 are the same as those in Illustration 6-8 (cost method workpaper). However, when the parent company records its investment using the partial equity method, entry (1) in Illustration 6-16 replaces the cost method entries to establish reciprocity and to eliminate dividend income [entries (1) and (5) in Illustration 6-8]. Most importantly, a comparison of entries (2), (3), and (4) in Illustration 6-16 with entries (2), (3), and (4) in Illustration 6-8 demonstrates that the workpaper entries to eliminate intercompany sales and unrealized intercompany profit are the same regardless of whether the investment is recorded using the cost method or the partial equity method.

## 6.5 PARTIAL EQUITY METHOD—ANALYSIS OF CONSOLIDATED NET INCOME AND CONSOLIDATED RETAINED EARNINGS

The t-account calculation of the controlling and noncontrolling interests in consolidated net income is independent of the method used by the parent company to record its investment. As stated earlier, *consolidated net income is the parent company's income from its independent operations that has been realized in transactions with third parties plus (minus) reported subsidiary income (loss) that has been realized in transactions with third parties plus or minus adjustments for the period relating to the depreciation, amortization, and impairment differences between implied and book values.*



On the basis of Illustration 6-16, the t-account calculation of consolidated net income for the year ended December 31, 2015, is demonstrated in Illustration 6-17.

### ILLUSTRATION 6-17

#### Calculation of the Controlling and Noncontrolling Interest in Consolidated Income— Partial Equity Method for the Year Ended December 31, 2015

| Noncontrolling Interest in Consolidated Income                               |         |  |           |
|--|---------|--|-----------|
| Unrealized profit on <i>upstream</i> sales in ending inventory               | 125,000 | Net income reported by S Company   | \$140,000 |
| Depreciation of differences between implied and book values                  | 0       | Realized profit ( <i>upstream</i> sales) from beginning inventory                        | 100,000   |
|  |         | Subsidiary income included in consolidated income  | \$115,000 |
|  |         | Noncontrolling ownership percentage interest   | 20%       |
|  |         | Noncontrolling interest in consolidated income   | \$ 23,000 |
| Controlling Interest in Income   |         |  |           |
| Unrealized profit on <i>downstream</i> sales to S Company (ending inventory) | 0       | Net income internally generated by P Company (\$518,000 less \$112,000 equity income)    | \$406,000 |
|  |         | Realized profit ( <i>downstream</i> sales) from begin. inventory                         | 0         |
|  |         | P Company's percentage of S Company's income realized from third parties, .80(\$115,000) | 92,000    |
|  |         | Controlling Interest in Consolidated Income  | \$498,000 |

## ILLUSTRATION 6-18

**Calculation of Consolidated Retained Earnings—  
Partial Equity Method  
for the Year Ended December 31, 2015**

| Consolidated Retained Earnings  |         |   |
|---|---------|---|
| P Company's share of unrealized profit on <i>upstream</i> sales from S Company (in P's ending inventory), .8(\$125,000) | 100,000 |   |
| Unrealized profit on <i>downstream</i> sales to S Company (in S's ending inventory)                                     | 0       |   |
|   |         | P Company's Retained Earnings on 12/31/15 |
|   |         | \$2,248,000                               |
|   |         | Consolidated Retained Earnings            |
|   |         | \$2,148,000                               |

When the parent company uses the partial equity method to record its investment, the parent company's share of subsidiary income since acquisition is already included in the parent company's reported retained earnings. Consequently, ***consolidated retained earnings is calculated as the parent company's recorded partial equity basis retained earnings that has been realized in transactions with third parties plus or minus the cumulative effect of the adjustments to date relating to the depreciation, amortization, and impairment of differences between implied and book values.***

On the basis of Illustration 6-16, the t-account calculation of consolidated retained earnings on December 31, 2015, is shown in Illustration 6-18. There is no need to include adjustments for 12/31/14 ending inventory or 1/1/15 beginning inventory as they cancel out.

**TEST YOUR KNOWLEDGE**
**6.2**

**NOTE:** Solutions to *Test Your Knowledge* questions are found at the end of each chapter before the end-of-chapter questions.

**Multiple Choice**

- Peller owns 80% of Sando Company common stock. During the fourth quarter of 2012, Sando sold inventory to Peller for \$200,000. At the end of December 2012, half this inventory remained in Peller's ending inventory. For the year 2012, Peller's gross profit percentage was 30% while Sando's was 40%. How much unrealized profit should be eliminated from ending inventory on December 31, 2012?
  - \$80,000
  - \$40,000
  - \$32,000
  - \$30,000
- Pony owns 80% of Shetland. During 2013, Shetland sold \$100,000 of merchandise at a 25% gross profit to its parent. One-tenth of the goods remain unsold by Pony at the end of 2013. How much gross profit will the noncontrolling interest receive as a result of these sales?
  - \$22,500
  - \$4,500
  - \$5,000
  - \$25,000

## 6.6 CONSOLIDATED STATEMENTS WORKPAPER—COMPLETE EQUITY METHOD

**LO 6** Consolidated workpapers—complete equity method.



COMPLETE

The balances reported by the parent company in income, in retained earnings, and in the investment account differ depending on the method used by the parent company to record its investment. As illustrated in Chapters 4 and 5, however, the method used by the parent company to record its investment has no effect on the consolidated balances. To illustrate consolidation procedures when the parent company records its investment using the complete equity method, assume the following:

- P Company acquired an 80% interest in S Company on January 1, 2014, for \$1,360,000, at which time S Company had capital stock of \$1,000,000 and retained earnings of \$700,000.
- In 2014, S Company reported net income of \$125,000 and declared dividends of \$20,000.
- In 2015, S Company reported net income of \$140,000 and declared dividends of \$60,000.

4. P Company uses the complete equity method to account for its investment in S Company.
5. The purchase price equals 80% of both the book values and fair values of S Company's net assets on the date of acquisition. Thus, implied value of S equals the book value and the fair value of S net assets.
6. S Company sells merchandise to P Company as follows (upstream sales):



|      | <i>Total Sales<br/>of S Company<br/>to P Company</i> | <i>Intercompany<br/>Merchandise<br/>in 12/31 Inventory<br/>of P Company</i> | <i>Unrealized<br/>Intercompany<br/>Profit (25%<br/>of Selling Price)</i> |
|------|--|---|--|
| 2014 | \$ 700,000   | \$400,000   | \$100,000  |
| 2015 | 1,000,000  | 500,000   | 125,000  |

### Entries on Books of P Company—Complete Equity Method

Entries recorded on the books of P Company under the complete equity method are as follows:

| <b>2014—Year of Acquisition—Complete Equity Method</b> |  |           |           |
|--|--|-----------|-----------|
| (1)  | Investment in S Company  | 1,360,000 |           |
|  | Cash   |           | 1,360,000 |
|  | To record purchase of 80% interest in S Company.   |           |           |
| (2)  | Cash   | 16,000    |           |
|  | Investment in S Company  |           | 16,000    |
|  | To record dividends received (.80 × \$20,000).   |           |           |
| (3)  | Investment in S Company  | 100,000   |           |
|  | Equity in Subsidiary Income  |           | 100,000   |
|  | To record equity in subsidiary income (.80 × \$125,000).   |           |           |
| (4)  | Equity in Subsidiary Income  | 80,000    |           |
|  | Investment in S Company  |           | 80,000    |
|  | To adjust equity in subsidiary income for P Company's share of unrealized intercompany profit (.80 × \$100,000) in ending inventory. |           |           |

Entries (3) and (4) can be collapsed into one entry.

| <b>2015—Year Subsequent to Acquisition—Complete Equity Method</b> |  |         |         |
|---|--|---------|---------|
| (5)   | Cash   | 48,000  |         |
|   | Investment in S Company  |         | 48,000  |
|   | To record dividends received (.80 × \$60,000).   |         |         |
| (6)   | Investment in S Company  | 112,000 |         |
|   | Equity in Subsidiary Income  |         | 112,000 |
|   | To record equity in subsidiary income (.80 × \$140,000).   |         |         |
| (7)   | Investment in S Company  | 80,000  |         |
|   | Equity in Subsidiary Income  |         | 80,000  |
|   | To adjust equity in subsidiary income for realized intercompany profit in beginning inventory (.80 × \$100,000). |         |         |
| (8)   | Equity in Subsidiary Income  | 100,000 |         |
|   | Investment in S Company  |         | 100,000 |
|   | To adjust equity in subsidiary income for unrealized intercompany profit in ending inventory (.80 × \$125,000).  |         |         |

After these entries are posted, the investment account will appear as follows:



| <b>Investment in S Company</b>          |                  |                                      |                     |
|---|------------------|--------------------------------------|---------------------|
| (1) Cost                                | 1,360,000        | (2) Dividends                        | 16,000              |
| (3) Subsidiary Income                   | 100,000          | (4) Profit in Ending Inventory (80%) | 80,000              |
| <b>12/31/14 Balance</b>                 | <b>1,364,000</b> | (5) Dividends                        | 48,000              |
| (6) Subsidiary Income                   | 112,000          | (8) Profit in Ending Inventory (80%) | (125,000) = 100,000 |
| (7) Profit in Beginning Inventory (80%) | 80,000           |                                      |                     |
| <b>12/31/15 Balance</b>                 | <b>1,408,000</b> |                                      |                     |

**Workpaper Entries—2015—Complete Equity Method** Consolidated workpapers under the complete equity method for the years ended December 31, 2014 and 2015, are presented in Illustrations 6-19 and 6-20. Workpaper entries in Illustration 6-20 (the year subsequent to acquisition) are presented in general journal form as follows:

|     |  |           |           |
|-----|--|-----------|-----------|
| (1) | Equity in Subsidiary Income<br>(\$112,000 + \$80,000 – \$100,000)  | 92,000    |           |
|     | Dividends Declared   |           | 48,000    |
|     | Investment in S Company  |           | 44,000    |
|     | To reverse the effect of parent company entries during the year for subsidiary dividends and income (adjusted for parent's share of gross profit realized/unrealized as needed).   |           |           |
| (2) | Sales  | 1,000,000 |           |
|     | Purchases (Cost of Sales)  |           | 1,000,000 |
|     | To eliminate intercompany sales.   |           |           |
| (3) | 12/31 Inventory—Income Statement (Cost of Sales)   | 125,000   |           |
|     | Inventory—Balance Sheet  |           | 125,000   |
|     | To eliminate unrealized intercompany profit in ending inventory.   |           |           |
| (4) | Investment in S Company (.80 × \$100,000)  | 80,000    |           |
|     | NCI in Equity (.20 × \$100,000)  | 20,000    |           |
|     | 1/1 Inventory—Income Statement (Cost of Sales)   |           | 100,000   |
|     | To recognize intercompany profit in beginning inventory realized during the year in the proper accounts for presentation on the consolidated financial statements; that is, even though the parent has adjusted its equity in subsidiary income, the effect must be shown in the cost of sales account (as the equity in subsidiary income is eliminated). |           |           |

Entries (2), (3), and (4) are the same as the corresponding entries in Illustration 6-8 (investment recorded using cost method) with one exception, shown in bold in entry (4). The exception is that the debit to Investment in S Company in entry (4) above replaces the debit to Beginning Retained Earnings—P Company under the cost or partial equity methods. The difference is that under the complete equity method, P Company had appropriately adjusted the investment account for its share of unrealized gross profit in inventory at the end of 2014. But now the entire investment account must be eliminated.



COMPLETE

|     |   |           |           |
|-----|---|-----------|-----------|
| (5) | Beginning Retained Earnings—S Company                 | 805,000   |           |
|     | Capital Stock—S Company                               | 1,000,000 |           |
|     | Investment in S Company                               |           | 1,444,000 |
|     | NCI in Equity (\$340,000 + .2(\$805,000 – \$700,000)) |           | 361,000   |
|     | To eliminate the investment account.                  |           |           |

This entry is the same as entry (5) in Illustration 6-16 (partial equity method) or entry (6) in Illustration 6-8 (cost method). Workpaper entry (5) creates the balance in the noncontrolling interest account reflective of the sum of the 20% interest at acquisition plus the noncontrolling share of changes in Retained Earnings of S since acquisition. This entry could just as easily be numbered as entry (1) or (2), as there is no particular sequence for workpaper entries. Workpaper entry (4) debits the noncontrolling interest, thus adjusting the balance as needed for prior year unrealized profit in inventory.

Observe that the consolidated balances in Illustration 6-20 are also the same as those in Illustration 6-8 (cost method workpaper) or in Illustration 6-16 (partial equity workpaper). However, when the parent company records its investment using the complete equity method, entry (1) in Illustration 6-20 replaces the cost method entries to establish reciprocity and to eliminate dividend income [entries (1) and (5) in Illustration 6-8]. Most importantly, a comparison of entries (2), (3), and (4) in Illustration 6-20 with entries (2), (3), and (4) in Illustration 6-8 or in Illustration 6-16 demonstrates that the workpaper entries to eliminate intercompany sales and unrealized intercompany profit differ in only one respect. That is, the parent company's retained earnings account needs no adjustment under the complete equity method. Any adjusting/eliminating entries made to that account under the other two methods are replaced by an entry to the Investment account under the complete equity method.

## Complete Equity Method

## ILLUSTRATION 6-19

80% Owned Subsidiary

## Consolidated Statements Workpaper

Upstream Sale of Inventory

## P Company and Subsidiary

Year of Acquisition

## for the Year Ended December 31, 2014

| <i>Income Statement</i>                     | <i>P Company</i> | <i>S Company</i> | <i>Eliminations</i> |                  | <i>Noncontrolling Interest</i> | <i>Consolidated Balances</i> |
|---|------------------|------------------|---------------------|------------------|--------------------------------|------------------------------|
|   |                  |                  | <i>Dr.</i>          | <i>Cr.</i>       |                                |                              |
| Sales                                       | 3,104,000        | 2,200,000        | (2) 700,000         |                  |                                | 4,604,000                    |
| Equity in Subsidiary Income                 | 20,000           |                  | (1) 20,000          |                  |                                |                              |
| Total Revenue                               | <u>3,124,000</u> | <u>2,200,000</u> |                     |                  |                                | <u>4,604,000</u>             |
| Inventory 1/1                               | 500,000          | 300,000          |                     |                  |                                | 800,000                      |
| Purchases                                   | 1,680,000        | 1,370,000        |                     | (2) 700,000      |                                | 2,350,000                    |
|   | 2,180,000        | 1,670,000        |                     |                  |                                | 3,150,000                    |
| Inventory 12/31                             | 480,000          | 310,000          | (3) 100,000         |                  |                                | 690,000                      |
| Cost of Goods Sold                          | 1,700,000        | 1,360,000        |                     |                  |                                | 2,460,000                    |
| Other Expenses                              | 1,124,000        | 715,000          |                     |                  |                                | 1,839,000                    |
| Total Cost and Expense                      | <u>2,824,000</u> | <u>2,075,000</u> |                     |                  |                                | <u>4,299,000</u>             |
| Net/Consolidated Income                     | 300,000          | 125,000          |                     |                  |                                | 305,000                      |
| Noncontrolling Interest in Income           |                  |                  |                     |                  | 5,000*                         | 5,000                        |
| Net Income to Retained Earnings             | <u>300,000</u>   | <u>125,000</u>   | <u>820,000</u>      | <u>700,000</u>   | <u>5,000</u>                   | <u>300,000</u>               |
| <i>Retained Earnings Statement</i>          |                  |                  |                     |                  |                                |                              |
| 1/1 Retained Earnings                       |                  |                  |                     |                  |                                |                              |
| P Company                                   | 1,650,000        |                  |                     |                  |                                | 1,650,000                    |
| S Company                                   |                  | 700,000          | (4) 700,000         |                  |                                |                              |
| Net Income from above                       | 300,000          | 125,000          | 820,000             | 700,000          | 5,000                          | 300,000                      |
| Dividends Declared                          |                  |                  |                     |                  |                                |                              |
| P Company                                   | (150,000)        |                  |                     |                  |                                | (150,000)                    |
| S Company                                   |                  | (20,000)         |                     | (1) 16,000       | (4,000)                        |                              |
| 12/31 Retained Earnings to Balance Sheet    | <u>1,800,000</u> | <u>805,000</u>   | <u>1,520,000</u>    | <u>716,000</u>   | <u>1,000</u>                   | <u>1,800,000</u>             |
| <i>Balance Sheet</i>                        |                  |                  |                     |                  |                                |                              |
| Inventory                                   | 480,000          | 310,000          |                     | (3) 100,000      |                                | 690,000                      |
| Investment in S Company                     | 1,364,000        |                  |                     | (1) 4,000        |                                |                              |
|   |                  |                  |                     | (4) 1,360,000    |                                |                              |
| Other Assets (net)                          | 5,090,000        | 2,310,000        |                     |                  |                                | 7,400,000                    |
| Total                                       | <u>6,934,000</u> | <u>2,620,000</u> |                     |                  |                                | <u>8,090,000</u>             |
| Liabilities                                 | 2,134,000        | 815,000          |                     |                  |                                | 2,949,000                    |
| Capital Stock                               |                  |                  |                     |                  |                                |                              |
| P Company                                   | 3,000,000        |                  |                     |                  |                                | 3,000,000                    |
| S Company                                   |                  | 1,000,000        | (4) 1,000,000       |                  |                                |                              |
| Retained Earnings from above                | 1,800,000        | 805,000          | 1,520,000           | 716,000          | 1,000                          | 1,800,000                    |
| 1/1 Noncontrolling Interest in Net Assets   |                  |                  |                     | (4) 340,000      | 340,000                        |                              |
| 12/31 Noncontrolling Interest in Net Assets |                  |                  |                     |                  | <u>341,000</u>                 | <u>341,000</u>               |
| Total Liabilities and Equity                | <u>6,934,000</u> | <u>2,620,000</u> | <u>2,520,000</u>    | <u>2,520,000</u> |                                | <u>8,090,000</u>             |

\* .20(\$125,000 - \$100,000) = \$5,000.

(1) To reverse the effect of parent company entries during the year for subsidiary dividends and income.

(2) To eliminate intercompany sales.

(3) To eliminate unrealized intercompany profit in ending inventory.

(4) To recognize profit realized during year and to reduce the controlling and noncontrolling interests for their shares of unrealized intercompany profit at beginning of year.

(5) To eliminate investment account and create noncontrolling interest account.

| Complete Equity Method                      |                  | ILLUSTRATION 6-20                    |                  |                  |                             |                  |
|---|------------------|--------------------------------------|------------------|------------------|-----------------------------|------------------|
| 80% Owned Subsidiary                        |                  | Consolidated Statements Workpaper    |                  |                  |                             |                  |
| Upstream Sale of Inventory                  |                  | P Company and Subsidiary             |                  |                  |                             |                  |
| Year Subsequent to Acquisition              |                  | for the Year Ended December 31, 2015 |                  |                  |                             |                  |
| Income Statement                            | P                | S                                    | Eliminations     |                  | Noncontrolling Consolidated |                  |
|   | Company          | Company                              | Dr.              | Cr.              | Interest                    | Balances         |
| Sales                                       | 3,546,000        | 2,020,000                            | (2)              | 1,000,000        |                             | 4,566,000        |
| Equity in Subsidiary Income                 | 92,000           |                                      | (1)              | 92,000           |                             |                  |
| Total Revenue                               | <u>3,638,000</u> | <u>2,020,000</u>                     |                  |                  |                             | <u>4,566,000</u> |
| Inventory 1/1                               | 480,000          | 310,000                              |                  | (4) 100,000      |                             | 690,000          |
| Purchases                                   | <u>2,070,000</u> | <u>1,250,000</u>                     |                  | (2) 1,000,000    |                             | <u>2,320,000</u> |
|   | 2,550,000        | 1,560,000                            |                  |                  |                             | 3,010,000        |
| Inventory 12/31                             | <u>510,000</u>   | <u>360,000</u>                       | (3)              | 125,000          |                             | <u>745,000</u>   |
| Cost of Goods Sold                          | 2,040,000        | 1,200,000                            |                  |                  |                             | 2,265,000        |
| Other Expenses                              | <u>1,100,000</u> | <u>680,000</u>                       |                  |                  |                             | <u>1,780,000</u> |
| Total Cost and Expense                      | <u>3,140,000</u> | <u>1,880,000</u>                     |                  |                  |                             | <u>4,045,000</u> |
| Net/Consolidated Income                     | 498,000          | 140,000                              |                  |                  |                             | 521,000          |
| Noncontrolling Interest in Income           |                  |                                      |                  |                  | 23,000*                     | 23,000           |
| Net Income to Retained Earnings             | <u>498,000</u>   | <u>140,000</u>                       | <u>1,217,000</u> | <u>1,100,000</u> | <u>23,000</u>               | <u>498,000</u>   |
| <b>Retained Earnings Statement</b>          |                  |                                      |                  |                  |                             |                  |
| 1/1 Retained Earnings                       |                  |                                      |                  |                  |                             |                  |
| P Company                                   | 1,800,000        |                                      |                  |                  |                             | 1,800,000        |
| S Company                                   |                  | 805,000                              | (5)              | 805,000          |                             |                  |
| Net Income from above                       | 498,000          | 140,000                              | 1,217,000        | 1,100,000        | 23,000                      | 498,000          |
| Dividends Declared                          |                  |                                      |                  |                  |                             |                  |
| P Company                                   | (150,000)        |                                      |                  |                  |                             | (150,000)        |
| S Company                                   |                  | (60,000)                             |                  | (1) 48,000       | (12,000)                    |                  |
| 12/31 Retained Earnings to Balance Sheet    | <u>2,148,000</u> | <u>885,000</u>                       | <u>2,022,000</u> | <u>1,148,000</u> | <u>11,000</u>               | <u>2,148,000</u> |
| <b>Balance Sheet</b>                        |                  |                                      |                  |                  |                             |                  |
| Inventory                                   | 510,000          | 360,000                              |                  | (3) 125,000      |                             | 745,000          |
| Investment in S Company                     | 1,408,000        |                                      | (4)              | 80,000           | (1) 44,000                  |                  |
|   |                  |                                      |                  |                  | (5) 1,444,000               |                  |
| Other Assets (net)                          | <u>5,450,000</u> | <u>2,330,000</u>                     |                  |                  |                             | <u>7,780,000</u> |
| Total                                       | <u>7,368,000</u> | <u>2,690,000</u>                     |                  |                  |                             | <u>8,525,000</u> |
| Liabilities                                 | <u>2,220,000</u> | <u>805,000</u>                       |                  |                  |                             | <u>3,025,000</u> |
| Capital Stock                               |                  |                                      |                  |                  |                             |                  |
| P Company                                   | 3,000,000        |                                      |                  |                  |                             | 3,000,000        |
| S Company                                   |                  | 1,000,000                            | (5)              | 1,000,000        |                             |                  |
| Retained Earnings from above                | 2,148,000        | 885,000                              | 2,022,000        | 1,148,000        | 11,000                      | 2,148,000        |
| 1/1 Noncontrolling Interest in Net Assets** |                  |                                      | (4)              | 20,000           | (5) 361,000                 | <u>341,000</u>   |
| 12/31 Noncontrolling Interest in Net Assets |                  |                                      |                  |                  |                             | <u>352,000</u>   |
| Total Liabilities and Equity                | <u>7,368,000</u> | <u>2,690,000</u>                     | <u>3,122,000</u> | <u>3,122,000</u> |                             | <u>8,525,000</u> |

\*  $20(\$140,000 - \$125,000 + \$100,000) = \$23,000$ .

\*\*  $\$340,000 + .2(\$805,000 - \$700,000) = \$361,000$ .

(1) To reverse the effect of parent company entries during the year for subsidiary dividends and income.

(2) To eliminate intercompany sales.

(3) To eliminate unrealized intercompany profit in ending inventory.

(4) To recognize profit realized during year and to reduce the controlling and noncontrolling interests for their shares of unrealized intercompany profit at beginning of year.

(5) To eliminate investment account and create noncontrolling interest account.

## 6.7 COMPLETE EQUITY METHOD—ANALYSIS OF CONSOLIDATED NET INCOME AND CONSOLIDATED RETAINED EARNINGS

*Consolidated net income* is the sum of the following components: *the parent company's net income from its independent operations that has been realized in transactions with third parties plus (minus) reported subsidiary income (loss) that has been realized in transactions with third parties plus or minus adjustments for the period relating to the depreciation, amortization, and impairment of differences between implied and book values.* See Illustration 6-17.

Under the complete equity method, no formal calculation of the controlling interest in consolidated net income is needed. The parent company has already made adjustments for realized/unrealized gross profit depending upon whether or not such profit has been confirmed through transactions with outsiders. Thus, the controlling interest in *consolidated net income equals the parent company's recorded income.*

When the parent company uses the complete equity method to record its investment, the parent company's share of subsidiary income (including any needed adjustments for intercompany profits) since acquisition is already included in the parent company's reported retained earnings. Consequently, *consolidated retained earnings is equal to the parent company's recorded complete equity basis retained earnings.*

## 6.8 SUMMARY OF WORKPAPER ENTRIES RELATING TO INTERCOMPANY SALES OF INVENTORY

Consolidated statement workpaper eliminating entries for intercompany sales of inventory are summarized in Illustration 6-21. The entries are the same whether the parent company uses the cost method or the partial equity method to record its investment. However, the form of the workpaper entry for unrealized profit in beginning inventories differs between upstream and downstream sales and between the complete equity method and the other two.

ILLUSTRATION 6-21

### Intercompany Profit—Inventories Summary of Workpaper Elimination Entries

|  | Selling Affiliate Is the Parent<br>(Downstream Sales)   |   | Selling Affiliate Is a Subsidiary<br>(Upstream Sales)  |   |
|--|---|---|--|---|
| <i>To eliminate intercompany sales:</i>  |   |   |  |   |
| All Methods  | Sales   | X | Sales  | X |
|  | Purchases (Cost of Sales)   | X | Purchases (Cost of Sales)  | X |
| <i>To eliminate intercompany profit in ending inventory:</i>                             |   |   |  |   |
| All Methods  | Ending Inventory (Cost of Sales)<br>Inventory (Balance Sheet)                                     | X | Ending Inventory (Cost of Sales)<br>Inventory (Balance Sheet)  | X |
|  |   | X |  | X |
| <i>To recognize intercompany profit in beginning inventory realized during the year:</i> |   |   |  |   |
| Cost or Partial<br>Equity Methods  | Beginning Retained Earnings—P<br>Beginning Inventory— <i>Income<br/>Statement (Cost of Sales)</i> | X | Beginning Retained Earnings—P<br>NCI in Equity<br>Beginning Inventory— <i>Income<br/>Statement (Cost of Sales)</i> | X |
|  |   | X |  | X |
| Complete Equity<br>Method  | Investment in S Company<br>Beginning Inventory— <i>Income<br/>Statement (Cost of Sales)</i>       | X | Investment in S Company<br>NCI in Equity<br>Beginning Inventory— <i>Income<br/>Statement (Cost of Sales)</i>       | X |
|  |   | X |  | X |

## 6.9 INTERCOMPANY PROFIT PRIOR TO PARENT-SUBSIDIARY AFFILIATION

**Lo 7** Intercompany profit prior to affiliation.

Generally accepted accounting standards are silent as to the appropriate treatment of unrealized profit on assets that result from sales between companies prior to affiliation (preaffiliation profit). The question is whether preaffiliation profit should be eliminated in

consolidation. In our opinion, workpaper entries eliminating preaffiliation profit are inappropriate.

If the selling company is the new subsidiary, the profit recognized by it prior to its acquisition is implicitly considered in determining the book value of the interest acquired by the parent company. Accordingly, such profit is automatically eliminated from consolidated retained earnings in the investment elimination entry. A second elimination would therefore result in a double reduction of the amount of preaffiliation profit from consolidated retained earnings on the date of acquisition. When the assets are sold to third parties in subsequent years, consolidated net income would be increased by a corresponding amount, thus restoring the amount of the second reduction to consolidated retained earnings. The net result is to make an unwarranted reduction of consolidated retained earnings on the date of acquisition in order to report preacquisition profit in consolidated net income in years subsequent to affiliation that has already been reported by the subsidiary prior to affiliation. In our opinion such effects lack both conceptual and practical merit.

If the selling company is the parent, the preaffiliation profit will ultimately be included in consolidated retained earnings in any case. However, a reduction of such profit from consolidated retained earnings on the date of affiliation simply results in the inclusion of the profit in the consolidated net income of subsequent years. Again, the effect of the elimination would be to report the profit twice, once before affiliation and once after affiliation. Support for the elimination of preaffiliation profit is based primarily on the application of conservatism to the valuation of consolidated assets on the date of acquisition.

## SUMMARY

- 1 *Describe the financial reporting objectives for intercompany sales of inventory.* Intercompany sales of inventory are eliminated, and adjustments made, to report sales revenue, cost of sales, and inventory balances as if the intercompany sale had not occurred. Thus, consolidated sales reflects only sales with “outsiders,” consolidated cost of sales reflects the cost to the consolidated entity, and consolidated inventory is reported at its cost to the consolidated entity (affiliated group).
- 2 *Determine the amount of intercompany profit, if any, to be eliminated from the consolidated statements.* Intercompany sales (and selling prices) do affect the allocation of profits to the controlling and noncontrolling interests, once the profit is realized through sales to outsiders. Thus, intercompany profit needs to be eliminated *only if* assets are still on the books of the consolidated entity (one of the members of the affiliated group). In such cases, the amount of profit to be eliminated may be calculated using the selling affiliate’s gross profit rate, which may be stated as a percentage of either sales or costs. (The amount of profit to be eliminated is the same, regardless of how the percentage is stated.)
- 3 *Understand the concept of eliminating 100% of intercompany profit not realized in transactions with outsiders, and know the authoritative position.* Proponents of 100% elimination regard *all* the intercompany profit associated with assets remaining in the affiliated group to be unrealized. Proponents of partial elimination regard *only* the parent company’s share of the profit recognized by the selling affiliate to be unrealized. Both current and past GAAP require 100% elimination of intercompany profit in the preparation of consolidated financial statements.
- 4 *Distinguish between upstream and downstream sales of inventory.* Sales from a parent company to one or more of its subsidiaries are referred to as **downstream sales**. Sales from subsidiaries to the parent company are referred to as **upstream sales**.
- 5 *Compute the noncontrolling interest in consolidated net income for upstream and downstream sales, when not all the inventory has been sold to outsiders.* For downstream sales, no modification to the calculation of the noncontrolling interest in consolidated income is needed. For upstream or horizontal sales, however, the noncontrolling interest in income must be adjusted. The reported income of the subsidiary (the selling affiliate) is *reduced* by the amount of gross profit remaining in ending inventory of the purchasing affiliate before multiplying by the noncontrolling percentage interest; *it is increased for gross profit realized from beginning inventory*.
- 6 *Prepare consolidated workpapers for firms with upstream and downstream sales using the cost, partial equity, and complete equity methods.* In the consolidated workpapers, eliminating and adjusting entries serve to eliminate intercompany sales and adjust both beginning and ending inventories for the effects of any gross profit included from intercompany sales. The noncontrolling interest in consolidated income reflects the adjustment described in the preceding learning objective for upstream (or horizontal) sales. The final column of the workpapers is identical, regardless of whether the parent uses the cost, partial equity, or complete equity method for consolidated investments.
- 7 *Discuss the treatment of intercompany profit earned prior to the parent-subsidiary affiliation.* Generally accepted accounting standards are silent as to the appropriate treatment of unrealized profit on assets that result from sales between companies prior to affiliation (preaffiliation profit). The question is whether preaffiliation profit should be eliminated in consolidation. In our opinion, workpaper entries eliminating preaffiliation profit are inappropriate.



Appendix 6A, “Deferred Taxes and Intercompany Sales of Inventory,” is available online at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter).

### TEST YOUR KNOWLEDGE SOLUTIONS

6.1 1. b. 2. c 3. c    6.2 1. b 2. b

### QUESTIONS

(The letter A indicated for a question, exercise, or problem refers to the appendix.)

- LO 2** 1. Does the elimination of the effects of intercompany sales of merchandise always affect the amount of reported consolidated net income? Explain.
- LO 2** 2. Why is the gross profit on intercompany sales, rather than profit after deducting selling and administrative expenses, ordinarily eliminated from consolidated inventory balances?
- LO 2** 3. P Company sells inventory costing \$100,000 to its subsidiary, S Company, for \$150,000. At the end of the current year, one-half of the goods remains in S Company’s inventory. Applying the lower of cost or market rule, S Company writes down this inventory to \$60,000. What amount of intercompany profit should be eliminated on the consolidated statements workpaper?
- LO 5** 4. Are the adjustments to the noncontrolling interest for the effects of intercompany profit eliminations illustrated in this text necessary for fair presentation in accordance with generally accepted accounting principles? Explain.
- LO 5** 5. Why are adjustments made to the calculation of the noncontrolling interest for the effects of intercompany profit in upstream but not in downstream sales?
- LO 5** 6. What procedure is used in the consolidated statements workpaper to adjust the noncontrolling interest in consolidated net assets at the beginning of the year for the effects of intercompany profits?
- LO 5** 7. What is the essential procedural difference between workpaper eliminating entries for unrealized intercompany profit made when the selling affiliate is a less than wholly owned subsidiary and those made when the selling affiliate is the parent company or a wholly owned subsidiary?
8. Define the controlling interest in consolidated net income using the t-account or analytical approach. **LO 1**
9. Why is it important to distinguish between upstream and downstream sales in the analysis of intercompany profit eliminations? **LO 4**
10. In what period and in what manner should profits relating to the intercompany sale of merchandise be recognized in the consolidated financial statements? **LO 1**

#### Business Ethics

One issue concerning Enron’s collapse centered on the amount of non-audit fees paid by Enron to its external auditor, Arthur Andersen. For each of the following items, discuss the potential ethical issues between the firm and its auditor. For each item, list at least one reason why the statement might be viewed as a threat to the auditor’s independence, and at least one reason why it might not be viewed as such a threat.

1. The firm’s auditor is heavily involved in non-audit services.
2. The audit partner’s compensation depends on both audit and non-audit fees from the same client.
3. In 1995, Congress passed the Private Securities Litigation Reform Act. This act reduced plaintiffs’ ability to sue auditors.

### ANALYZING FINANCIAL STATEMENTS

#### AFS6-1 Medianet Intercompany Eliminations **LO 2** **LO 3**

On December 16, 2010, Medianet Group’s CFO and Company’s Board of Directors concluded that the previously issued financial statements contained in the Company’s Quarterly Reports on Form 10-Q for each of the three quarters during the year ended September 30, 2010, should not be relied upon because of the following errors that require a restatement of such financial statements:

*Intercompany eliminations.* Certain intercompany eliminations were not made during each of the quarters during the year ended September 30, 2010, and for the fiscal year ended September 30, 2009. In this connection, Medianet determined that during the periods referred to above, insufficient personnel resources were available to perform review and monitoring controls within the accounting function.

*Enrollment fees.* The Company determined that revenue from the sale of its eBiz kits was erroneously recorded for each of the quarters during the year ended September 30, 2010, and for the fiscal year ended September 30, 2009. The Company’s nonrefundable eBiz kits fee revenue was previously recognized when collected. Based on a review of Staff Accounting Bulletin (“SAB”) 104, the Company revised its revenue recognition of nonrefundable eBiz kits to recognize them on a straight-line basis over the term of the renewal period (12 months).

**Balance Sheet (12/30/2009)**  
**(as reported)**

| <i>Assets</i>                      |                  | <i>Liabilities</i>            |                    |
|------------------------------------|------------------|-------------------------------|--------------------|
| <i>Current Assets:</i>             |                  | <i>Current Liabilities:</i>   |                    |
| Cash and cash equivalents          | 2,499,237        | Accounts payable              | 121,461            |
| Restricted cash                    | 722,230          | Accrued and other liabilities | 585,715            |
| Accounts receivable                | 72,998           | Accrued incentive             | 644,292            |
| Inventories                        | 401,141          | Loyalty points payable        | 209,025            |
| Prepaid customer acquisition costs |                  | Commissions payable           | 1,876,605          |
| Prepaid expenses                   | 127,209          | Income taxes payable          | 287,838            |
| Deposits                           | 94,070           | Customer deposits             | 18,348             |
| Total Current Assets               | <u>3,916,885</u> | Deferred revenue              | 2,626,835          |
|                                    |                  | Note payable—related party    | 191,355            |
|                                    |                  | Total Current Liabilities     | <u>6,561,474</u>   |
| Property and equipment, net        | 94,139           | Common stock                  | 27,304             |
| Other Assets                       | 32,222           | Additional paid-in capital    | (768,528)          |
| Total Assets                       | <u>4,043,246</u> | Other comprehensive (loss)    | (14,176)           |
|                                    |                  | Retained earnings (deficit)   | <u>(1,762,828)</u> |
|                                    |                  | Total Stockholders' Equity    | <u>(2,518,228)</u> |
|                                    |                  | Total Liabilities and         |                    |
|                                    |                  | Stockholders' Equity          | <u>4,043,246</u>   |

**Income Statement**  
**(as reported)**

| <i>For the Year Ended</i>           | <i>12/30/2009</i>  |
|-------------------------------------|--------------------|
| Revenues                            | 16,974,449         |
| Direct cost of revenues             | <u>11,804,157</u>  |
| Gross profit                        | 5,170,292          |
| Selling, general and administrative | <u>5,905,788</u>   |
| Income (loss) from operations       | (735,496)          |
| Interest income (expense)—net       | <u>(3,245)</u>     |
| Income (loss) from continuing       |                    |
| operations before income taxes      | (738,741)          |
| Income taxes—benefit (expense)      | <u>(287,838)</u>   |
| Income (loss) from continuing       |                    |
| operations                          | (1,026,579)        |
| (Loss) from discontinued segment    | (1,980,285)        |
| Gain from sale of subsidiary        | 74,990             |
| Net Income (loss)                   | <u>(2,931,874)</u> |

**Required:**

- A. Intercompany sales of inventory of \$862,677 were not eliminated from the consolidated income statement. What impact did this have on net income and on revenues? Why are intercompany sales eliminated during consolidation?
- B. The error for the enrollment fees meant that unearned revenues were understated by \$2,934,794. What impact did this error have on revenue? Does this error have an impact on cash flows? What impact did this error have on the Company's working capital, current ratio, and total liabilities-to-equity ratio?

**AFS6-2 Green Mountain Coffee Roasters LO 2**

Assessing whether an accounting error is material is addressed in FASB ASC paragraph 250–10–S55-1 (also paragraph 250-10-S99-1) and in FASB Concepts Statement No. 2. In concept 2, FASB states:

The omission or misstatement of an item in a financial report is material if, in the light of surrounding circumstances, the magnitude of the item is such that it is probable that the judgment of a reasonable person relying upon the report would have been changed or influenced by the inclusion or correction of the item.

In the Codification, FASB states that materiality cannot be reduced to a numerical formula. The SEC argues that evaluation of materiality requires a registrant and its auditor to consider all relevant circumstances and believes that qualitative factors may cause misstatements of relatively small amounts to be material. The SEC lists several considerations that may cause a small misstatement to be material. Some of these include whether the misstatement hides a failure to meet analysts' consensus expectations or whether the misstatement changes a loss into income. Furthermore, the SEC states that in determining whether multiple misstatements cause the financial statements to be materially misstated, registrants and its auditors should consider each misstatement separately and in the aggregate.

Green Mountain Coffee Roasters announced in an 8-K that the SEC was conducting an informal investigation of its financial statements. Initially, Green Mountain determined that the errors (primarily from failure to eliminate intercompany inventory correctly) were immaterial, but later decided to restate prior statements. The first error resulted in an overstatement of ending inventory in the first three quarters of 2010 or \$5.792 million. A second error resulted in over-eliminating intercompany sales of \$15.200 million.

Also, included in the second-quarter earnings ending on March 28, 2010, were acquisition-related expenses of \$5 million, or \$3,070 after tax. Earnings for the second quarter as reported were \$24.702 million and the number of shares used for diluted earnings per share were 45.943 million. Diluted EPS is \$0.54 per share. Second-quarter earnings, after the restatement, were \$24.108 million.

**Required:**

- A. Prepare journal entries to correct the two errors.
- B. Generally, analysts forecast earnings excluding certain expenses. In the second quarter, the analysts' forecast of earnings, excluding the acquisition-related expenses, was \$0.60 per share. Did Green Mountain beat the analysts' expectations of earnings before and after the restatement?

## EXERCISES

### EXERCISE 6-1 Downstream Sales LO2

P Company owns 80% of the outstanding stock of S Company. During 2014, S Company reported net income of \$525,000 and declared no dividends. At the end of the year, S Company's inventory included \$487,500 in unrealized profit on purchases from P Company. Intercompany sales for 2014 totaled \$2,700,000.

**Required:**

Prepare in general journal form all consolidated financial statement workpaper entries necessary at the end of the year to eliminate the effects of the 2014 intercompany sales.

### EXERCISE 6-2 Noncontrolling Interest, Downstream Sales LO5

Refer to Exercise 6-1. Calculate the amount of the noncontrolling interest to be deducted from consolidated income in arriving at 2014 controlling interest in consolidated net income.

### EXERCISE 6-3 Noncontrolling Interest, Upstream Sales LO5

Peabody Company owns 90% of the outstanding capital stock of Sloane Company. During 2014 and 2015 Sloane Company sold merchandise to Peabody Company at a markup of 25% of selling price. The selling price of the merchandise sold during the two years was \$20,800 and \$25,000, respectively. At the end of each year, Peabody Company had in its inventory one-fourth of the goods purchased that year from Sloane Company. Sloane Company reported net income of \$30,000 in 2014 and \$35,000 in 2015.

**Required:**

Determine the amount of the noncontrolling interest in consolidated income to be reported for 2014 and 2015.

### EXERCISE 6-4 Controlling Interest, Downstream Sales LO2

On January 1, 2014, Pearce Company purchased an 80% interest in the capital stock of Searl Company for \$2,460,000. At that time, Searl Company had capital stock of \$1,500,000 and retained earnings of \$300,000. The difference between book of value Searl equity and the value implied by the purchase price was attributed to specific assets of Searl Company as follows:

|             |   |
|-------------|---|
| 375,000     | to equipment of Searl Company with a five-year remaining life.                              |
| 187,500     | to land held by Searl Company.  |
| 112,500     | to inventory of Searl Company. Searl uses the FIFO assumption in pricing its inventory, and |
| 600,000     | that could not be assigned to specific assets or liabilities of Searl Company.              |
| \$1,275,000 | Total   |

At year-end 2014 and 2015, Searl had in its inventory merchandise that it had purchased from Pearce at a 25% markup on cost during each year in the following amounts:

|      |           |
|------|-----------|
| 2014 | \$ 90,000 |
| 2015 | \$105,000 |

During 2014, Pearce reported net income from independent operations (including sales to affiliates) of \$1,500,000, while Searle reported net income of \$600,000. In 2015, Pearce's net income from independent operations (including sales to affiliates) was \$1,800,000 and Searl's was \$750,000.

**Required:**

Calculate the controlling interest in consolidated net income for 2014 and 2015.

**EXERCISE 6-5 Controlling Interest, Upstream Sales LO2**

Refer to Exercise 6-4. Using the same figures, assume that the merchandise mentioned was included in Pearce's inventory, having been purchased from Searl.

**Required:**

Calculate the controlling interest in consolidated net income for 2014 and 2015.

**EXERCISE 6-6 Controlling Interest, Upstream Sales LO2**

Payne Company owns all the outstanding common stock of Sierra Company and 80% of the outstanding common stock of Santa Fe Company. The amount of intercompany profit included in the inventories of Payne Company on December 31, 2014, and December 31, 2015, is indicated here:

|                     | <i>Intercompany Profit on<br/>Goods Purchased From</i> |                             |              |
|---------------------|--|-----------------------------|--------------|
|                     | <i>Sierra<br/>Company</i>                              | <i>Santa Fe<br/>Company</i> | <i>Total</i> |
| Inventory, 12/31/14 | \$3,800  | \$4,600                     | \$8,400      |
| Inventory, 12/31/15 | 4,800  | 2,300                       | 7,100        |

The three companies reported net income from their independent operations (including sales to affiliates) for the year ended December 31, 2015, as follows:

|                  |           |
|------------------|-----------|
| Payne Company    | \$280,000 |
| Sierra Company   | 172,000   |
| Santa Fe Company | 120,000   |

**Required:**

Calculate the controlling interest in consolidated net income for the year ended December 31, 2015.

**EXERCISE 6-7 Workpaper Entries, Downstream Sales LO2**

Perkins Company owns 85% of Sheraton Company. Perkins Company sells merchandise to Sheraton Company at 20% above cost. During 2014 and 2015, such sales amounted to \$450,000 and \$486,000, respectively. At the end of each year, Sheraton Company had in its inventory one-third of the amount of goods purchased from Perkins during that year.

**Required:**

Prepare the workpaper entries necessary to eliminate the effects of the intercompany sales for 2014 and 2015.

**EXERCISE 6-8 Workpaper Entries, Upstream Sales LO2**

Refer to Exercise 6-7. Using the same figures, assume that the sales were upstream instead of downstream.

**Required:**

Prepare the workpaper entries necessary to eliminate the effects of the intercompany sales for 2014 and 2015.

**EXERCISE 6-9 Upstream and Downstream Sales LO2**

Peat Company owns a 90% interest in Seaton Company. The consolidated income statement drafted by the controller of Peat Company appeared as follows:

| <b>Peat Company and Subsidiary<br/>Consolidated Income Statement<br/>for Year Ended December 31, 2015</b> |                  |                     |
|---|------------------|---------------------|
| Sales   |                  | \$14,000,000        |
| Cost of Sales   | \$9,200,000      |                     |
| Operating Expense   | <u>1,800,000</u> | <u>11,000,000</u>   |
| Consolidated Income   |                  | 3,000,000           |
| Less Noncontrolling Interest in Consolidated Income   |                  | <u>200,000</u>      |
| Controlling Interest in Consolidated Net Income   |                  | <u>\$ 2,800,000</u> |

During your audit you discover that intercompany sales transactions were not reflected in the controller's draft of the consolidated income statement. Information relating to intercompany sales and unrealized intercompany profit is as follows:

|                           | <i>Cost</i> | <i>Selling<br/>Price</i> | <i>Unsold at<br/>Year-End</i> |
|---------------------------|-------------|--------------------------|-------------------------------|
| 2014 Sales—Seaton to Peat | \$1,500,000 | \$1,800,000              | 1/3                           |
| 2015 Sales—Peat to Seaton | 900,000     | 1,400,000                | 2/5                           |

**Required:**

Prepare a corrected consolidated income statement for Peat Company and Seaton Company for the year ended December 31, 2015.

**ASC EXERCISES:** For all ASC exercises indicate as part of your answer: the Codification topic, subtopic, section, and/or paragraph upon which your answer is based (unless otherwise specified). All ASC questions require access to the FASB Codification.

- ASC6-1** **Presentation** If a firm uses the LIFO method to account for inventories, is the firm required to disclose the excess of replacement or current cost over the stated LIFO value?
- ASC6-2** **Presentation** Suppose that a firm would like to adopt the LIFO method to account for its inventories, but it is not practical to determine the amounts assigned to major classes of inventories. Can the firm use the LIFO method? If so, what option is available?
- ASC6-3** **Glossary** Define an extraordinary item.
- ASC6-4** **SEC** A company that manufactures and sells a product excludes depreciation expense from the computation of cost of goods sold. The company computes the gross margin by subtracting this cost-of-goods-sold number from sales. Is this a violation of current GAAP?
- ASC6-5** **SEC** There are 21 required line items to be reported on the income statement as determined by the SEC. Is a firm required to report its *gross margin* on the income statement?

**PROBLEMS**

**PROBLEM 6-1** **Upstream Sales** **LO 2** **LO 5**

Peel Company owns 90% of the common stock of Seacore Company. Seacore Company sells merchandise to Peel Company at 20% above cost. During 2014 and 2015, such sales amounted to \$436,000 and \$532,000, respectively. At the end of each year, Peel Company had in its inventory one-fourth of the goods purchased from Seacore Company during that year.

Peel Company reported \$300,000 in net income from its independent operations in 2014 and 2015. Seacore Company reported net income of \$130,000 in each year and did not declare any dividends in any year. There were no intercompany sales prior to 2014.

**Required:**

- Prepare in general journal form all entries necessary on the consolidated financial statements worksheet to eliminate the effects of the intercompany sales for each of the years 2014 and 2015.
- Calculate the amount of noncontrolling interest to be deducted from consolidated income in the consolidated income statement for 2015.
- Calculate controlling interest in consolidated income for 2015.

**PROBLEM 6-2** **Upstream Sales** **LO 2** **LO 5**

Shell Company, an 85% owned subsidiary of Plaster Company, sells merchandise to Plaster Company at a markup of 20% of selling price. During 2014 and 2015, intercompany sales amounted to \$442,500 and \$386,250, respectively. At the end of 2014, Plaster had one-half of the goods that it purchased that year from Shell in its ending inventory. Plaster's 2015 ending inventory contained one-fifth of that year's purchases from Shell. There were no intercompany sales prior to 2014.

Plaster had net income in 2014 of \$750,000 from its own operations and in 2015 its independent income was \$780,000. Shell reported net income of \$322,500 and \$335,400 for 2014 and 2015, respectively.

**Required:**

- A. Prepare in general journal form all entries necessary on the consolidated financial statement workpapers to eliminate the effects of the intercompany sales for each of the years 2014 and 2015.
- B. Calculate the amount of noncontrolling interest to be deducted from consolidated income in the consolidated income statement for 2015.
- C. Calculate controlling interest in consolidated income for 2015.

**PROBLEM 6-3****Downstream Sales LO2 LO5**

Peer Company owns 80% of the common stock of Seacrest Company. Peer Company sells merchandise to Seacrest Company at 25% above its cost. During 2014 and 2015 such sales amounted to \$265,000 and \$475,000, respectively. The 2014 and 2015 ending inventories of Seacrest Company included goods purchased from Peer Company for \$125,000 and \$170,000, respectively.

Peer Company reported net income from its independent operations (including intercompany profit on inventory sales to affiliates) of \$450,000 in 2014 and \$480,000 in 2015. Seacrest reported net income of \$225,000 in 2014 and \$275,000 in 2015 and did not declare dividends in either year. There were no intercompany sales prior to 2014.

**Required:**

- A. Prepare in general journal form all entries necessary in the consolidated financial statements workpapers to eliminate the effects of the intercompany sales for each of the years 2014 and 2015.
- B. Calculate the amount of noncontrolling interest to be deducted from consolidated income in the consolidated income statements for 2014 and 2015.
- C. Calculate controlling interest in consolidated income for 2015.

**PROBLEM 6-4****Upstream and Downstream Sales LO2 LO5**

Pace Company owns 85% of the outstanding common stock of Sand Company and all the outstanding common stock of Star Company. During 2015, the affiliates engaged in intercompany sales as follows:

| <i>Sales of Merchandise</i> |                  |
|-----------------------------|------------------|
| Pace to Sand                | \$ 40,000        |
| Sand to Pace                | 60,000           |
| Sand to Star                | 75,000           |
| Star to Pace                | 50,000           |
|                             | <u>\$225,000</u> |

The following amounts of intercompany profits were included in the December 31, 2014, and December 31, 2015, inventories of the individual companies:

| <i>Selling Company</i> | <i>Intercompany Profit in<br/>December 31, 2014, Inventory of</i> |                |                |                 |
|------------------------|---|----------------|----------------|-----------------|
|                        | <i>Pace</i>   | <i>Sand</i>    | <i>Star</i>    | <i>Total</i>    |
| Pace Company           |   | \$7,000        |                | \$ 7,000        |
| Sand Company           | \$ 5,000  |                | \$3,000        | 8,000           |
| Star Company           | 8,000   |                |                | 8,000           |
| Total                  | <u>\$13,000</u>   | <u>\$7,000</u> | <u>\$3,000</u> | <u>\$23,000</u> |

| <i>Selling Company</i> | <i>Intercompany Profit in<br/>December 31, 2015, Inventory of</i> |                |                |                 |
|------------------------|---|----------------|----------------|-----------------|
|                        | <i>Pace</i>   | <i>Sand</i>    | <i>Star</i>    | <i>Total</i>    |
| Pace Company           |   | \$2,000        |                | \$ 2,000        |
| Sand Company           | \$ 6,000  |                | \$9,000        | 15,000          |
| Star Company           | 4,000   |                |                | 4,000           |
| Total                  | <u>\$10,000</u>   | <u>\$2,000</u> | <u>\$9,000</u> | <u>\$21,000</u> |

Income from each company's independent operations (including sales to affiliates) for the year ended December 31, 2015, is presented here:

|              |           |
|--------------|-----------|
| Pace Company | \$200,000 |
| Sand Company | 150,000   |
| Star Company | 125,000   |

**Required:**

- A. Prepare in general journal form the workpaper entries necessary to eliminate intercompany sales and intercompany profit in the December 31, 2015, consolidated financial statements workpaper.
- B. Calculate the balance to be reported in the consolidated income statement for the following line items:  
 Consolidated income  
 Noncontrolling interest in consolidated income  
 Controlling interest in consolidated income

**PROBLEM 6-5 Intercompany Downstream Sales, Cost Method LO 6**

Pruitt Corporation owns 90% of the common stock of Sedbrook Company. The stock was purchased for \$625,500 on January 1, 2012, when Sedbrook Company's retained earnings were \$95,000. Preclosing trial balances for the two companies at December 31, 2016, are presented here:

|                            | <i>Pruitt<br/>Corporation</i> | <i>Sedbrook<br/>Company</i> |
|----------------------------|-------------------------------|-----------------------------|
| Cash                       | \$ 90,800                     | \$ 96,000                   |
| Accounts Receivable (net)  | 243,300                       | 135,000                     |
| Inventory 1/1              | 165,000                       | 132,000                     |
| Investment in Sedbrook Co. | 625,500                       |                             |
| Other Assets               | 550,000                       | 480,000                     |
| Dividends Declared         | 110,000                       | 35,000                      |
| Purchases                  | 935,000                       | 420,000                     |
| Other Expenses             | 198,000                       | 165,000                     |
| Total                      | <u>\$2,917,600</u>            | <u>\$1,463,000</u>          |
| Accounts Payable           | \$ 77,000                     | \$ 36,000                   |
| Other Liabilities          | 120,700                       | 47,000                      |
| Common Stock               | 880,000                       | 600,000                     |
| Retained Earnings (1/1)    | 598,400                       | 144,000                     |
| Sales                      | 1,210,000                     | 636,000                     |
| Dividend Income            | 31,500                        | —                           |
| Total                      | <u>\$2,917,600</u>            | <u>\$1,463,000</u>          |
| Ending Inventory           | <u>\$ 220,000</u>             | <u>\$ 144,000</u>           |

The January 1, 2016, inventory of Sedbrook Company includes \$25,000 of profit recorded by Pruitt Corporation on 2015 sales. During 2016, Pruitt Corporation made intercompany sales of \$250,000 with a markup of 20% on cost. The ending inventory of Sedbrook Company includes goods purchased in 2016 from Pruitt for \$60,000.

**Required:**

- A. Prepare the consolidated statements workpaper for the year ended December 31, 2016.
- B. Calculate consolidated retained earnings on December 31, 2016, using the analytical or t-account approach.

**PROBLEM 6-6 Trial Balance Workpaper—Cost Method LO 6**

Using the information in Problem 6-5, prepare a consolidated statements workpaper using the trial balance format.

**PROBLEM 6-7 Upstream Workpaper—Cost Method LO 6**

Paque Corporation owns 90% of the common stock of Segal Company. The stock was purchased for \$810,000 on January 1, 2012, when Segal Company's retained earnings were \$150,000.

Financial data for 2016 are presented here:

|                              | <i>Paque<br/>Corporation</i> | <i>Segal<br/>Company</i> |
|------------------------------|------------------------------|--------------------------|
| Sales                        | \$1,650,000                  | \$795,000                |
| Dividend Income              | 54,000                       |                          |
| Total Revenue                | <u>1,704,000</u>             | <u>795,000</u>           |
| Cost of Goods Sold:          |                              |                          |
| Beginning Inventory          | 225,000                      | 165,000                  |
| Purchases                    | 1,275,000                    | 525,000                  |
| Cost of Goods Available      | <u>1,500,000</u>             | <u>690,000</u>           |
| Less: Ending Inventory       | 210,000                      | 172,500                  |
| Cost of Goods Sold           | <u>1,290,000</u>             | <u>517,500</u>           |
| Other Expenses               | 310,500                      | 206,250                  |
| Total Cost and Expense       | <u>1,600,500</u>             | <u>723,750</u>           |
| Net Income                   | <u>\$ 103,500</u>            | <u>\$ 71,250</u>         |
| 1/1 Retained Earnings        | 811,500                      | 180,000                  |
| Net Income                   | 103,500                      | 71,250                   |
| Dividends Declared           | <u>(150,000)</u>             | <u>(60,000)</u>          |
| 12/31 Retained Earnings      | <u>\$ 765,000</u>            | <u>\$ 191,250</u>        |
| Cash                         | \$ 93,000                    | \$ 75,000                |
| Accounts Receivable          | 319,500                      | 168,750                  |
| Inventory                    | 210,000                      | 172,500                  |
| Investment in Segal Company  | 810,000                      |                          |
| Other Assets                 | <u>750,000</u>               | <u>630,000</u>           |
| Total Assets                 | <u>\$2,182,500</u>           | <u>\$1,046,250</u>       |
| Accounts Payable             | \$ 105,000                   | \$ 45,000                |
| Other Current Liabilities    | 112,500                      | 60,000                   |
| Capital Stock                | 1,200,000                    | 750,000                  |
| Retained Earnings            | <u>765,000</u>               | <u>191,250</u>           |
| Total Liabilities and Equity | <u>\$2,182,500</u>           | <u>\$1,046,250</u>       |

The January 1, 2016, inventory of Paque Corporation includes \$45,000 of profit recorded by Segal Company on 2015 sales. During 2016, Segal Company made intercompany sales of \$300,000 with a markup of 20% of selling price. The ending inventory of Paque Corporation includes goods purchased in 2016 from Segal Company for \$75,000.

**Required:**

- A. Prepare the consolidated statements workpaper for the year ended December 31, 2016.
- B. Prepare a t-account calculation of controlling interest in consolidated net income for the year ended December 31, 2016.

**PROBLEM 6-8**

**Upstream Eliminating Entries and Consolidated Net Income, Comprehensive Problem LO 6**

On January 2, 2014, Patten Company purchased a 90% interest in Sterling Company for \$1,400,000. At that time Sterling Company had capital stock outstanding of \$800,000 and retained earnings of \$425,000. The difference between book value of equity acquired and the value implied by the purchase price was allocated to the following assets:

|                           |           |
|---------------------------|-----------|
| Inventory                 | \$ 41,667 |
| Plant and Equipment (net) | 200,000   |
| Goodwill                  | 88,889    |

The inventory was sold in 2014. The plant and equipment had a remaining useful life of 10 years on January 2, 2014.

During 2014 Sterling sold merchandise with a cost of \$950,000 to Patten at a 20% markup above cost. At December 31, 2014, Patten still had merchandise in its inventory that it purchased from Sterling for \$576,000.

In 2014, Sterling Company reported net income of \$410,000 and declared no dividends.



COMPREHENSIVE



**Required:**

- A. Prepare in general journal form all entries necessary on the consolidated financial statements workpaper to eliminate the effects of the intercompany sales, to eliminate the investment account, and allocate the difference between book value of equity acquired and the value implied by the purchase price.
- B. Assume that Patten Company reports net income of \$2,000,000 from its independent operations. Calculate controlling interest in consolidated net income.
- C. Calculate noncontrolling interest in consolidated income.

**PROBLEM 6-9**

COMPREHENSIVE

**Upstream and Downstream Workpaper, Comprehensive Problem, Cost Method LO 6**

On January 1, 2012, Perry Company purchased 80% of Selby Company for \$990,000. At that time Selby had capital stock outstanding of \$350,000 and retained earnings of \$375,000.

The fair value of Selby Company's assets and liabilities is equal to their book value except for the following:

|                                    | <i>Fair Value</i> | <i>Book Value</i> |
|------------------------------------|-------------------|-------------------|
| Inventory                          | \$210,000         | \$160,000         |
| Plant and Equipment (10-year life) | 780,000           | 630,000           |

One-half of the inventory was sold in 2012, the remainder was sold in 2013.

At the end of 2012, Perry Company had in its ending inventory \$60,000 of merchandise it had purchased from Selby Company during the year. Selby Company sold the merchandise at 25% above cost. During 2013, Perry Company sold merchandise to Selby Company for \$310,000 at a markup of 20% of the selling price. At December 31, 2013, Selby still had merchandise that it purchased from Perry Company for \$82,000 in its inventory.

Financial data for 2013 are presented here:

|                              | <i>Perry Company</i> | <i>Selby Company</i> |
|------------------------------|----------------------|----------------------|
| Sales                        | \$1,400,000          | \$ 800,000           |
| Dividend Income              | 20,000               | —                    |
| Total Revenue                | <u>1,420,000</u>     | <u>800,000</u>       |
| Cost of Goods Sold:          |                      |                      |
| Beginning Inventory          | 230,000              | 145,000              |
| Purchases                    | 900,000              | 380,000              |
| Cost of Goods Available      | 1,130,000            | 525,000              |
| Less: Ending Inventory       | <u>450,000</u>       | <u>200,000</u>       |
| Cost of Goods Sold           | 680,000              | 325,000              |
| Other Expenses               | 250,000              | 195,000              |
| Total Cost and Expense       | <u>930,000</u>       | <u>520,000</u>       |
| Net Income                   | <u>\$ 490,000</u>    | <u>\$ 280,000</u>    |
| 1/1 Retained Earnings        | \$1,500,000          | \$ 480,000           |
| Net Income                   | 490,000              | 280,000              |
| Dividends Declared           | <u>(50,000)</u>      | <u>(25,000)</u>      |
| 12/31 Retained Earnings      | <u>\$1,940,000</u>   | <u>\$ 735,000</u>    |
| Cash                         | \$ 95,000            | \$ 70,000            |
| Accounts Receivable (net)    | 302,000              | 90,000               |
| Inventory                    | 450,000              | 200,000              |
| Investment in Selby Company  | 990,000              |                      |
| Plant and Equipment (net)    | 850,000              | 585,000              |
| Other Assets (net)           | 390,000              | 230,000              |
| Total Assets                 | <u>\$3,077,000</u>   | <u>\$1,175,000</u>   |
| Accounts Payable             | \$ 75,000            | \$ 30,000            |
| Other Liabilities            | 102,000              | 60,000               |
| Common Stock                 | 960,000              | 350,000              |
| Retained Earnings            | <u>1,940,000</u>     | <u>735,000</u>       |
| Total Liabilities and Equity | <u>\$3,077,000</u>   | <u>\$1,175,000</u>   |

**Required:**

- A. Prepare the consolidated statements workpaper for the year ended December 31, 2013.
- B. Calculate consolidated retained earnings on December 31, 2013, using the analytical or t-account approach.

**PROBLEM 6-10 Controlling and Noncontrolling Interest LO2 LO5**

Penn Company owns a 90% interest in Salvador Company and an 80% interest in Sencal Company. Profit remaining in ending inventories from intercompany sales for 2014 and 2015 is indicated below.

| Selling Company | Intercompany Profit in Ending Inventory of |         |          |          |
|-----------------|--|---------|----------|----------|
|                 | 2014                                       |         | 2015     |          |
|                 | Salvador                                   | Sencal  | Salvador | Sencal   |
| Penn            | \$8,000                                    | \$4,000 | \$5,000  | \$ 9,000 |
| Salvador        |  | 6,000   |          | 10,000   |
| Sencal          | 5,000                                      |         | 2,000    |          |

Salvador Company reported net income of \$50,000 in 2014 and \$45,000 in 2015, whereas Sencal Company's net income was \$60,000 and \$75,000 in 2014 and 2015, respectively.

Penn Company's net income from its own operations (including sales to affiliates) for 2014 and 2014 was \$600,000 and \$400,000, respectively.

**Required:**

- Determine noncontrolling interest in consolidated income for 2014 and 2015.
- Calculate the controlling interest in consolidated income for 2014 and 2015.

**PROBLEM 6-11 Downstream Workpaper—Partial Equity Method LO6**

Pruitt Corporation owns 90% of the common stock of Sedbrook Company. The stock was purchased for \$540,000 on January 1, 2012, when Sedbrook Company's retained earnings were \$100,000. Preclosing trial balances for the two companies at December 31, 2016, are presented here:

|                             | Pruitt Corporation | Sedbrook Company   |
|-----------------------------|--------------------|--------------------|
| Cash                        | \$ 83,000          | \$ 80,000          |
| Accounts Receivable (net)   | 213,000            | 112,500            |
| Inventory 1/1               | 150,000            | 110,000            |
| Investment in Sedbrook Co.  | 578,250            |                    |
| Other Assets                | 500,000            | 400,000            |
| Dividends Declared          | 100,000            | 30,000             |
| Purchases                   | 850,000            | 350,000            |
| Other Expenses              | 180,000            | 137,500            |
|                             | <u>\$2,654,250</u> | <u>\$1,220,000</u> |
| Accounts Payable            | \$ 70,000          | \$ 30,000          |
| Other Liabilities           | 75,000             | 40,000             |
| Common Stock                | 800,000            | 500,000            |
| Retained Earnings           | 562,000            | 120,000            |
| Sales                       | 1,100,000          | 530,000            |
| Equity in Subsidiary Income | 47,250             |                    |
|                             | <u>\$2,654,250</u> | <u>\$1,220,000</u> |
| Ending Inventory            | <u>\$ 200,000</u>  | <u>\$ 120,000</u>  |

The January 1, 2016, inventory of Sedbrook Company includes \$30,000 of profit recorded by Pruitt Corporation on 2015 sales. During 2016, Pruitt Corporation made intercompany sales of \$200,000 with a markup of 25% on cost. The ending inventory of Sedbrook Company includes goods purchased in 2016 from Pruitt for \$50,000. Pruitt Corporation uses the partial equity method to record its investment in Sedbrook Company.

**Required:**

- Prepare the consolidated statements workpaper for the year ended December 31, 2016.
- Calculate consolidated retained earnings on December 31, 2016, using the analytical or t-account approach.

**PROBLEM 6-12 Downstream Trial Balance Workpaper LO6**

Using the information in Problem 6-11, prepare a consolidated statements workpaper using the trial balance format.

**PROBLEM 6-13 Upstream Workpaper—Partial Equity Method LO 6**

(Note: This is the same problem as Problem 6-7, but assuming the use of the partial equity method.)

Paque Corporation owns 90% of the common stock of Segal Company. The stock was purchased for \$810,000 on January 1, 2012, when Segal Company's retained earnings were \$150,000.

Financial data for 2016 are presented here:

|                              | <i>Paque Corporation</i> | <i>Segal Company</i> |
|------------------------------|--------------------------|----------------------|
| Sales                        | \$1,650,000              | \$ 795,000           |
| Equity in Subsidiary Income  | 64,125                   |                      |
| Total Revenue                | <u>1,714,125</u>         | <u>795,000</u>       |
| Cost of Goods Sold:          |                          |                      |
| Beginning Inventory          | 225,000                  | 165,000              |
| Purchases                    | 1,275,000                | 525,000              |
| Cost of Goods Available      | 1,500,000                | 690,000              |
| Less: Ending Inventory       | 210,000                  | 172,500              |
| Cost of Goods Sold           | 1,290,000                | 517,500              |
| Other Expenses               | 310,500                  | 206,250              |
| Total Cost and Expense       | <u>1,600,500</u>         | <u>723,750</u>       |
| Net Income                   | <u>\$ 113,625</u>        | <u>\$ 71,250</u>     |
| 1/1 Retained Earnings        | 838,500                  | 180,000              |
| Net Income                   | 113,625                  | 71,250               |
| Dividends Declared           | (150,000)                | (60,000)             |
| 12/31 Retained Earnings      | <u>\$ 802,125</u>        | <u>\$ 191,250</u>    |
| Cash                         | \$ 93,000                | \$ 75,000            |
| Accounts Receivable          | 319,500                  | 168,750              |
| Inventory                    | 210,000                  | 172,500              |
| Investment in Segal Company  | 847,125                  |                      |
| Other Assets                 | 750,000                  | 630,000              |
| Total Assets                 | <u>\$2,219,625</u>       | <u>\$1,046,250</u>   |
| Accounts Payable             | \$ 105,000               | \$ 45,000            |
| Other Current Liabilities    | 112,500                  | 60,000               |
| Capital Stock                | 1,200,000                | 750,000              |
| Retained Earnings            | 802,125                  | 191,250              |
| Total Liabilities and Equity | <u>\$2,219,625</u>       | <u>\$1,046,250</u>   |

The January 1, 2016, inventory of Paque Corporation includes \$45,000 of profit recorded by Segal Company on 2015 sales. During 2016, Segal Company made intercompany sales of \$300,000 with a markup of 20% of selling price. The ending inventory of Paque Corporation includes goods purchased in 2016 from Segal Company for \$75,000. Paque Corporation uses the partial equity method to record its investment in Segal Company.

**Required:**

- Prepare the consolidated statements workpaper for the year ended December 31, 2016.
- Calculate consolidated retained earnings on December 31, 2016, using the analytical or t-account approach.
- If you completed Problem 6-7, compare the consolidated balances obtained in requirement A with those obtained in Problem 6-7.

**PROBLEM 6-14 Upstream and Downstream Workpaper—Partial Equity Method LO 6**

On January 1, 2013, Perry Company purchased 80% of Selby Company for \$960,000. At that time Selby had capital stock outstanding of \$400,000 and retained earnings of \$400,000.

The fair value of Selby Company's assets and liabilities is equal to their book value except for the following:

|                                    | <i>Fair Value</i> | <i>Book Value</i> |
|------------------------------------|-------------------|-------------------|
| Inventory                          | \$230,000         | \$155,000         |
| Plant and Equipment (10-year life) | 800,000           | 600,000           |

One-half of the inventory was sold in 2013; the remainder was sold in 2014.

At the end of 2013, Perry Company had in its ending inventory \$54,000 of merchandise it had purchased from Selby Company during the year. Selby Company sold the merchandise at 20% above cost. During 2014, Perry Company sold merchandise to Selby Company for \$300,000 at a markup of 20% of the selling price. At December 31, 2014, Selby still had merchandise that it purchased from Perry Company for \$78,000 in its inventory.



Financial data for 2014 are presented here:

|                              | <i>Perry Company</i> | <i>Selby Company</i> |
|------------------------------|----------------------|----------------------|
| Sales                        | \$1,385,000          | \$ 720,000           |
| Equity in Subsidiary Income  | 208,000              |                      |
| Total Revenue                | <u>1,593,000</u>     | <u>720,000</u>       |
| Cost of Goods Sold:          |                      |                      |
| Beginning Inventory          | 210,000              | 155,000              |
| Purchases                    | 875,000              | 360,000              |
| Cost of Goods Available      | <u>1,085,000</u>     | <u>515,000</u>       |
| Less: Ending Inventory       | <u>400,000</u>       | <u>225,000</u>       |
| Cost of Goods Sold           | 685,000              | 290,000              |
| Other Expenses               | 225,000              | 170,000              |
| Total Cost and Expense       | <u>910,000</u>       | <u>460,000</u>       |
| Net Income                   | <u>\$ 683,000</u>    | <u>\$ 260,000</u>    |
| 1/1 Retained Earnings        | \$1,472,700          | \$ 450,000           |
| Net Income                   | 683,000              | 260,000              |
| Dividends Declared           | <u>(40,000)</u>      | <u>(30,000)</u>      |
| 12/31 Retained Earnings      | <u>\$2,115,700</u>   | <u>\$ 680,000</u>    |
| Cash                         | \$ 90,000            | \$ 65,000            |
| Accounts Receivable (net)    | 297,000              | 85,000               |
| Inventory                    | 400,000              | 225,000              |
| Investment in Selby Company  | 1,184,000            |                      |
| Plant and Equipment (net)    | 880,000              | 540,000              |
| Other Assets (net)           | <u>384,000</u>       | <u>230,000</u>       |
| Total Assets                 | <u>\$3,235,000</u>   | <u>\$1,145,000</u>   |
| Accounts Payable             | \$ 24,300            | \$ 25,000            |
| Other Liabilities            | 95,000               | 40,000               |
| Common Stock                 | 1,000,000            | 400,000              |
| Retained Earnings            | <u>2,115,700</u>     | <u>680,000</u>       |
| Total Liabilities and Equity | <u>\$3,235,000</u>   | <u>\$1,145,000</u>   |

**Required:**

- A. Prepare the consolidated statements workpaper for the year ended December 31, 2014.
- B. Calculate consolidated retained earnings on December 31, 2014, using the analytical or t-account approach.

**PROBLEM 6-15 Upstream and Downstream Sales, Journal Entries, and Controlling and Noncontrolling Interests LO2 LO5**

On January 1, 2012, Paul Company purchased 80% of the voting stock of Simon Company for \$1,360,000 when Simon Company had retained earnings and capital stock in the amounts of \$450,000 and \$1,000,000, respectively. The difference between implied and book value is allocated to a franchise and is amortized over 25 years. Simon Company's retained earnings amount to \$780,000 on January 1, 2015, and \$960,000 on December 31, 2015. In 2015, Simon Company reported net income of \$270,000 and declared dividends of \$90,000. Paul Company reported net income from independent operations in 2015 in the amount of \$700,000 and retained earnings on December 31, 2015, of \$1,500,000. During 2015, intercompany sales of merchandise from Paul to Simon amounted to \$70,000 and from Simon to Paul were \$50,000. Unrealized profits on January 1 and on December 31, 2015, resulting from intercompany sales are as summarized here:

| <i>Resulting From</i>                  | <i>Unrealized Intercompany Profit on</i> |                 |
|--|--|-----------------|
|  | <i>1/1/15</i>                            | <i>12/31/15</i> |
| Sales by Simon Company to Paul Company | \$20,000                                 | \$10,000        |
| Sales by Paul Company to Simon Company | 30,000                                   | 5,000           |

There were no intercompany sales prior to 2014.

**Required:**

- A. Prepare in general journal form the entries necessary in the December 31, 2015, consolidated statements workpaper to eliminate the effects of the intercompany sales.

- B. Calculate controlling interest in consolidated net income for the year ended December 31, 2015.  
 C. Calculate consolidated retained earnings on December 31, 2015.  
 D. Calculate noncontrolling interest in consolidated income for the year ended December 31, 2015.

**PROBLEM 6-16 Complete Equity with Downstream Sales LO6**

(Note: This is the same problem as Problem 6-11, but assuming the use of the complete equity method.)

Pruitt Corporation owns 90% of the common stock of Sedbrook Company. The stock was purchased for \$540,000 on January 1, 2012, when Sedbrook Company's retained earnings were \$100,000. Preclosing trial balances for the two companies at December 31, 2016, are presented here:

|                             | <i>Pruitt<br/>Corporation</i> | <i>Sedbrook<br/>Company</i> |
|-----------------------------|-------------------------------|-----------------------------|
| Cash                        | \$ 83,000                     | \$ 80,000                   |
| Accounts Receivable (net)   | 213,000                       | 112,500                     |
| Inventory 1/1               | 150,000                       | 110,000                     |
| Investment in Sedbrook Co.  | 568,250                       |                             |
| Other Assets                | 500,000                       | 400,000                     |
| Dividends Declared          | 100,000                       | 30,000                      |
| Purchases                   | 850,000                       | 350,000                     |
| Other Expenses              | 180,000                       | 137,500                     |
|                             | <u>\$2,644,250</u>            | <u>\$1,220,000</u>          |
| Accounts Payable            | \$ 70,000                     | \$ 30,000                   |
| Other Liabilities           | 75,000                        | 40,000                      |
| Common Stock                | 800,000                       | 500,000                     |
| Retained Earnings, 1/1      | 532,000                       | 120,000                     |
| Sales                       | 1,100,000                     | 530,000                     |
| Equity in Subsidiary Income | 67,250                        |                             |
|                             | <u>\$2,644,250</u>            | <u>\$1,220,000</u>          |
| Ending Inventory            | <u>\$ 200,000</u>             | <u>\$ 120,000</u>           |

The January 1, 2016, inventory of Sedbrook Company includes \$30,000 of profit recorded by Pruitt Corporation on 2015 sales. During 2016, Pruitt Corporation made intercompany sales of \$200,000 with a markup of 25% on cost. The ending inventory of Sedbrook Company includes goods purchased in 2016 from Pruitt for \$50,000. Pruitt Corporation uses the complete equity method to record its investment in Sedbrook Company.

**Required:**

- A. Prepare the consolidated statements workpaper for the year ended December 31, 2016.  
 B. Calculate consolidated retained earnings on December 31, 2016, using the analytical or t-account approach.  
 C. If you completed Problem 6-11, compare the consolidated balances obtained in requirement A with those obtained in that problem.

**PROBLEM 6-17 Complete Equity with Upstream Sales LO6**

(Note: This is the same problem as Problem 6-7 and Problem 6-13, but assuming the use of the complete equity method.)

Paque Corporation owns 90% of the common stock of Segal Company. The stock was purchased for \$810,000 on January 1, 2012, when Segal Company's retained earnings were \$150,000.

Financial data for 2016 are presented here:

|                             | <i>Paque<br/>Corporation</i> | <i>Segal<br/>Company</i> |
|-----------------------------|------------------------------|--------------------------|
| Sales                       | \$1,650,000                  | \$ 795,000               |
| Equity in Subsidiary Income | 91,125                       |                          |
| Total Revenue               | <u>1,741,125</u>             | <u>795,000</u>           |
| Cost of Goods Sold:         |                              |                          |
| Beginning Inventory         | 225,000                      | 165,000                  |
| Purchases                   | 1,275,000                    | 525,000                  |
| Cost of Goods Available     | 1,500,000                    | 690,000                  |
| Less: Ending Inventory      | 210,000                      | 172,500                  |
| Cost of Goods Sold          | 1,290,000                    | 517,500                  |
| Other Expenses              | 310,500                      | 206,250                  |
| Total Cost and Expense      | <u>1,600,500</u>             | <u>723,750</u>           |
| Net Income                  | <u>\$ 140,625</u>            | <u>\$ 71,250</u>         |

|                              | <i>Paque<br/>Corporation</i> | <i>Segal<br/>Company</i> |
|------------------------------|------------------------------|--------------------------|
| 1/1 Retained Earnings        | 798,000                      | 180,000                  |
| Net Income                   | 140,625                      | 71,250                   |
| Dividends Declared           | <u>(150,000)</u>             | <u>(60,000)</u>          |
| 12/31 Retained Earnings      | <u>\$ 788,625</u>            | <u>\$ 191,250</u>        |
| Cash                         | \$ 93,000                    | \$ 75,000                |
| Accounts Receivable          | 319,500                      | 168,750                  |
| Inventory                    | 210,000                      | 172,500                  |
| Investment in Segal Company  | 833,625                      |                          |
| Other Assets                 | <u>750,000</u>               | <u>630,000</u>           |
| Total Assets                 | <u>\$2,206,125</u>           | <u>\$1,046,250</u>       |
| Accounts Payable             | 105,000                      | 45,000                   |
| Other Current Liabilities    | 112,500                      | 60,000                   |
| Capital Stock                | 1,200,000                    | 750,000                  |
| Retained Earnings            | <u>788,625</u>               | <u>191,250</u>           |
| Total Liabilities and Equity | <u>\$2,206,125</u>           | <u>\$1,046,250</u>       |

The January 1, 2016, inventory of Paque Corporation includes \$45,000 of profit recorded by Segal Company on 2015 sales. During 2016, Segal Company made intercompany sales of \$300,000 with a markup of 20% of selling price. The ending inventory of Paque Corporation includes goods purchased in 2016 from Segal Company for \$75,000. Paque Corporation uses the complete equity method to record its investment in Segal Company.

**Required:**

- Prepare the consolidated statements worksheet for the year ended December 31, 2016.
- Calculate consolidated retained earnings on December 31, 2016, using the analytical or t-account approach.
- If you completed Problem 6-7 or Problem 6-13, compare the consolidated balances obtained in requirement A with those obtained in those problems.

**PROBLEM 6-18 Comprehensive Complete Equity Problem, Cost Greater Than Fair Value with Intercompany Sales of Inventory LO 6**

(Note: This is the same problem as Problem 6-14, but assuming the use of the complete equity method.)

On January 1, 2013, Perry Company purchased 80% of Selby Company for \$960,000. At that time Selby had capital stock outstanding of \$400,000 and retained earnings of \$400,000.

The fair value of Selby Company's assets and liabilities is equal to their book value except for the following:

|                                    | <i>Fair Value</i> | <i>Book Value</i> |
|------------------------------------|-------------------|-------------------|
| Inventory                          | \$230,000         | \$155,000         |
| Plant and Equipment (10-year life) | 800,000           | 600,000           |

One-half of the inventory was sold in 2013; the remainder was sold in 2014.

At the end of 2013, Perry Company had in its ending inventory \$54,000 of merchandise it had purchased from Selby Company during the year. Selby Company sold the merchandise at 20% above cost. During 2014, Perry Company sold merchandise to Selby Company for \$300,000 at a markup of 20% of the selling price. At December 31, 2014, Selby still had merchandise that it purchased from Perry Company for \$78,000 in its inventory.

Financial data for 2014 are presented here:

|                             | <i>Perry<br/>Company</i> | <i>Selby<br/>Company</i> |
|-----------------------------|--------------------------|--------------------------|
| Sales                       | \$1,385,000              | \$ 720,000               |
| Equity in Subsidiary Income | <u>153,600</u>           |                          |
| Total Revenue               | <u>1,538,600</u>         | <u>720,000</u>           |
| Cost of Goods Sold:         |                          |                          |
| Beginning Inventory         | 210,000                  | 155,000                  |
| Purchases                   | <u>875,000</u>           | <u>360,000</u>           |
| Cost of Goods Available     | 1,085,000                | 515,000                  |
| Less: Ending Inventory      | <u>400,000</u>           | <u>225,000</u>           |
| Cost of Goods Sold          | 685,000                  | 290,000                  |
| Other Expenses              | <u>225,000</u>           | <u>170,000</u>           |
| Total Cost and Expense      | <u>910,000</u>           | <u>460,000</u>           |
| Net Income                  | <u>\$ 628,600</u>        | <u>\$ 260,000</u>        |



COMPREHENSIVE

|                              | <i>Perry<br/>Company</i> | <i>Selby<br/>Company</i> |
|------------------------------|--------------------------|--------------------------|
| 1/1 Retained Earnings        | 1,419,500                | 450,000                  |
| Net Income                   | 628,600                  | 260,000                  |
| Dividends Declared           | (40,000)                 | (30,000)                 |
| 12/31 Retained Earnings      | <u>\$2,008,100</u>       | <u>\$ 680,000</u>        |
| Cash                         | \$ 90,000                | \$ 65,000                |
| Accounts Receivable          | 297,000                  | 85,000                   |
| Inventory                    | 400,000                  | 225,000                  |
| Investment in Selby Company  | 1,076,400                |                          |
| Plant and Equipment (net)    | 880,000                  | 540,000                  |
| Other Assets                 | 384,000                  | 230,000                  |
| Total Assets                 | <u>\$3,127,400</u>       | <u>\$1,145,000</u>       |
| Accounts Payable             | 24,300                   | 25,000                   |
| Other Current Liabilities    | 95,000                   | 40,000                   |
| Common Stock                 | 1,000,000                | 400,000                  |
| Retained Earnings            | <u>2,008,100</u>         | <u>680,000</u>           |
| Total Liabilities and Equity | <u>\$3,127,400</u>       | <u>\$1,145,000</u>       |

**Required:**

- A. Prepare the consolidated statements worksheet for the year ended December 31, 2014.
- B. Calculate consolidated retained earnings on December 31, 2014, using the analytical or t-account approach.
- C. If you completed Problem 6-14, compare the consolidated balances obtained in requirement A with those obtained in those problems.

**PROBLEM 6-19A** Deferred Taxes and Intercompany Sales of Inventory (See Appendix 6A online at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter))

Pearson Company owns 80% of the common stock of Sedbrook Company. Pearson Company sells merchandise to Sedbrook Company at 25% above its cost. During 2014 and 2015, such sales amounted to \$265,000 and \$475,000, respectively. The 2014 and 2015 ending inventories of Sedbrook Company included goods purchased from Pearson Company for \$150,000 and \$195,000, respectively.

Pearson Company reported net income from its independent operations (including sales to affiliates) of \$450,000 in 2014 and \$480,000 in 2015. Sedbrook reported net income of \$225,000 in 2014 and \$275,000 in 2015 and did not declare dividends in either year. There were no intercompany sales prior to 2014. The affiliated companies file separate income tax returns and have marginal income tax rates of 30%. Ignore the income tax consequences of undistributed subsidiary income.

**Required:**

- A. Prepare in general journal form all entries necessary in the consolidated financial statements workpapers to eliminate the effects of the intercompany sales for each of the years 2014 and 2015.
- B. Calculate the amount of noncontrolling interest to be reported in the consolidated income statements for 2014 and 2015.
- C. Calculate the controlling interest in consolidated net income for 2015.

**PROBLEM 6-20A** Deferred Taxes, Intercompany Sales of Inventory, Cost Method (See Appendix 6A online at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter))

Peek Corporation owns 70% of the common stock of Seacrest Company. The stock was purchased for \$420,000 on January 1, 2010, when Seacrest Company's retained earnings were \$100,000. Preclosing trial balances for the two companies at December 31, 2014, are presented here:

|                                | <i>Peck Corporation</i> | <i>Seacrest Company</i> |
|--------------------------------|-------------------------|-------------------------|
| Cash                           | \$ 35,000               | \$ 100,000              |
| Accounts Receivable (net)      | 211,000                 | 107,750                 |
| Inventory—1/1                  | 150,000                 | 110,000                 |
| Investment in Seacrest Company | 420,000                 |                         |
| Other Assets                   | 500,000                 | 400,000                 |
| Dividends Declared             | 100,000                 | 10,000                  |
| Purchases                      | 850,000                 | 350,000                 |
| Other Expenses                 | 180,000                 | 114,000                 |
| Income Tax Expense             | 27,000                  | 28,250                  |
| Total                          | <u>\$2,473,000</u>      | <u>\$1,220,000</u>      |
| Accounts Payable               | \$ 70,000               | \$ 30,000               |
| Other Liabilities              | 55,000                  | 35,000                  |
| Deferred Tax Liability         | 20,000                  | 5,000                   |
| Common Stock                   | 680,000                 | 500,000                 |
| Retained Earnings              | 541,000                 | 120,000                 |
| Sales                          | 1,100,000               | 530,000                 |
| Dividend Income                | 7,000                   |                         |
| Total                          | <u>\$2,473,000</u>      | <u>\$1,220,000</u>      |
| Inventory—12/31                | <u>\$ 140,000</u>       | <u>\$ 115,000</u>       |

The January 1, 2014, inventory of Peck Corporation includes \$10,000 of profit recorded by Seacrest Company on 2013 sales. During 2014, Seacrest Company made intercompany sales of \$100,000 with a markup of 25% on cost. The ending inventory of Peck Corporation includes goods purchased in 2014 from Seacrest Company for \$40,000.

The affiliates file separate tax returns, and the prior, current, and expected future marginal income tax rates for both companies are 40%. Dividends received from Seacrest Company are subject to an 80% dividends received exclusion.

**Required:**

- A. Prepare a consolidated statements workpaper for the year ended December 31, 2014.
- B. Calculate the controlling interest in consolidated net income for the year ended December 31, 2014, and consolidated retained earnings on December 31, 2014, using the analytical or t-account approach.

**PROBLEM 6-21A** Deferred Taxes, Intercompany Sales of Inventory, Partial Equity Method (See Appendix 6A online at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter))

Petra Corporation owns 70% of the common stock of Swain Company. The stock was purchased for \$420,000 on January 1, 2010, when Swain Company's retained earnings were \$100,000. Preclosing trial balances for the two companies at December 31, 2014, are presented here:



|                             | <i>Petra Corporation</i> | <i>Swain Company</i> |
|-----------------------------|--------------------------|----------------------|
| Cash                        | \$ 35,000                | \$ 100,000           |
| Accounts Receivable (net)   | 211,000                  | 107,750              |
| Inventory—1/1               | 150,000                  | 110,000              |
| Investment in Swain Company | 456,925                  |                      |
| Other Assets                | 500,000                  | 400,000              |
| Dividends Declared          | 100,000                  | 10,000               |
| Purchases                   | 850,000                  | 350,000              |
| Other Expenses              | 180,000                  | 114,000              |
| Income Tax Expense          | 27,000                   | 28,250               |
|                             | <u>\$2,509,925</u>       | <u>\$1,220,000</u>   |
| Accounts Payable            | \$ 70,000                | \$ 30,000            |
| Other Liabilities           | 55,000                   | 35,000               |
| Deferred Tax Liability      | 20,000                   | 5,000                |
| Common Stock                | 680,000                  | 500,000              |
| Retained Earnings           | 555,000                  | 120,000              |
| Sales                       | 1,100,000                | 530,000              |
| Equity in Subsidiary Income | 29,925                   |                      |
|                             | <u>\$2,509,925</u>       | <u>\$1,220,000</u>   |
| Inventory—12/31             | \$ 140,000               | \$ 115,000           |

The January 1, 2014, inventory of Petra Corporation includes \$10,000 of profit recorded by Swain Company on 2013 sales. During 2014, Swain Company made intercompany sales of \$100,000 with a markup of 25% on cost. The ending inventory of Petra Corporation includes goods purchased in 2014 from Swain Company for \$40,000.

The affiliates file separate tax returns, and the marginal income tax rate for both companies is 40%. Dividends received from Swain Company are subject to an 80% dividends received exclusion.

**Required:**

- A. Prepare a consolidated statements workpaper for the year ended December 31, 2014.
- B. Calculate the controlling interest in consolidated net income for the year ended December 31, 2014, and consolidated retained earnings on December 31, 2014, using the analytical or t-account approach.

# Chapter 6

## APPENDIX 6A – DEFERRED TAXES AND INTERCOMPANY SALES OF INVENTORY (ONLINE)

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### DEFERRED TAX CONSEQUENCES ARISING BECAUSE OF UNREALIZED INTERCOMPANY PROFIT

If the affiliated companies file consolidated income tax returns, profits from intercompany transactions are included in taxable income in the same years that they are included in the consolidated income statement. In that case, the amount at which the asset is reported in the consolidated financial statements and its tax basis are the same, and it is not necessary to consider deferred tax consequences.

However, when the affiliates file separate income tax returns, the tax basis for an asset sold between affiliates is based on the price paid by the purchasing affiliate. Thus, the tax basis of the asset will differ from the amount reported for that asset in the consolidated financial statements. Assuming that the selling affiliate recognized a profit on the intercompany sale, the amount of this difference is equal to the *unrealized* profit associated with that asset on the balance sheet date. This difference is a temporary difference that will result in deductible amounts on the tax return of the *purchasing affiliate* in a future year(s) when the profit is considered realized in the consolidated financial statements through the sale or depreciation of the asset.

However, under FASB ASC topic 740 [Income Taxes] the measurement of the tax benefit for temporary differences related to unrealized profit on intercompany sales is not subject to the basic principles that apply to other temporary differences that will result in deductible amounts in future years. Rather, the provisions of FASB ASC paragraph 810-10-45-8 relating to income taxes paid on intercompany profit are applied.

This standard requires deferral of income taxes *paid by the seller* on intercompany profits on assets remaining within the consolidated group. In effect, the taxes paid by the selling affiliate on these profits are treated as prepaid taxes in the consolidated financial statements, and the tax expense is reported in the consolidated financial statements in the same period that the profit is reported as realized. By adopting these provisions, deferred tax effects are based on the income taxes paid by the selling affiliate rather than on the future tax benefit to the purchasing affiliate. The amounts calculated under these two approaches would be different, for example, if the affiliates had different marginal tax rates or were in different tax jurisdictions, or when expected future tax rates differ from the tax rate used to determine the tax paid or accrued by the selling affiliate.

The balances reported by the parent company in income, retained earnings, and the investment account differ depending on the method used by the parent company to record its investment. As illustrated in previous chapters, however, the method used by the parent company to record its investment has no effect on the consolidated balances. Workpaper entries to record deferred tax consequences of unrealized intercompany profit and undistributed subsidiary income are also the same when the parent company records its investment using the partial equity method or the cost method to record its investment. Hence, these methods are illustrated jointly in the following section. The complete equity method differs slightly, however, as illustrated in the final section of this appendix.

## INTERCOMPANY SALES OF INVENTORY—COST AND PARTIAL EQUITY METHOD

To illustrate the treatment in the consolidated financial statements of deferred income taxes relating to intercompany sales of inventory assume that:

1. S Company is a 70% owned subsidiary of P Company.
2. The companies file separate income tax returns and the marginal income tax rates for both companies are 40%.
3. On December 31, 2013, there is \$500,000 of unrealized intercompany profit in the ending inventory of the purchasing affiliate.
4. S Company reports net income of \$900,000 in 2013 and \$600,000 in 2014.

Workpaper eliminating entries relating to the unrealized profit included in inventory of the purchasing affiliate differ depending on whether the selling affiliate is the parent company (downstream sale) or the subsidiary (upstream or horizontal sale). Entries in the December 31, 2013, and December 31, 2014, consolidated statements workpapers under each of these conditions are illustrated below:



PARTIAL



COST

### Consolidated Statements Workpaper Entries—Cost and Partial Equity Methods—December 31, 2013

| Downstream Sales  |         | Upstream Sales                         |         |
|---|---------|--|---------|
| 12/31 Inventory—<br>(Income Statement)  | 500,000 | 12/31 Inventory—<br>(Income Statement) | 500,000 |
| Inventory   | 500,000 | Inventory                              | 500,000 |
| To eliminate unrealized profit in ending inventory.   |         |  |         |
| Deferred Tax Asset  | 200,000 | Deferred Tax Asset                     | 200,000 |
| Tax Expense   | 200,000 | Tax Expense                            | 200,000 |
| To defer income tax paid or accrued by the selling affiliate on unrealized intercompany profit<br>(.4 × \$500,000 = \$200,000). |         |  |         |

Although the workpaper entries are the same, the computation of noncontrolling interest in consolidated net income is affected by upstream sales. The *after-tax* unrealized intercompany profit of \$300,000 [(\$500,000 – \$200,000) or (.60 × \$500,000)] must be subtracted from reported subsidiary income in computing subsidiary income included in consolidated net income. For example, if the sale is upstream and S Company reports net income of \$900,000 in 2013, the noncontrolling interest in consolidated net income is \$180,000 [.30 × (\$900,000 – (.60 × \$500,000))]. Alternatively, the following schedule illustrates the previous points.

#### Upstream Sales

|   | S Company (000s)               |                                   |
|---|--------------------------------|-----------------------------------|
|   | With<br>Intercompany<br>Profit | Without<br>Intercompany<br>Profit |
| Income from Independent Operations                    | \$1,000                        | \$1,000                           |
| Unrealized Profit in Ending Inventory                 | 500                            |                                   |
| Pretax Income   | \$1,500                        | \$1,000                           |
| Tax Expense (40%)                                     | 600                            | 400                               |
| Net Income  | 900                            | 600                               |
| Less: After-tax unrealized profit in inventory        |                                |                                   |
| Unrealized profit                                     | 500                            |                                   |
| Tax on unrealized profit (40%)                        | (200)                          | (300)                             |
| Subsidiary Income in Consolidated Net Income          | \$600                          | \$600                             |
| Noncontrolling Interest percentage                    | 30%                            | 30%                               |
| Noncontrolling Interest in Consolidated Net<br>Income | \$180                          | \$180                             |



PARTIAL

If the sale is downstream, the amount of subsidiary income included in consolidated net income is not affected by the elimination of unrealized intercompany profit and no adjustment is necessary in the calculation of the noncontrolling interest in consolidated net income.

Assume that in the next year, the inventory is sold.



COST

### Consolidated Statements Workpaper Entries—Cost and Partial Equity Methods—December 31, 2014

| <i>Downstream Sales</i>   |         | <i>Upstream Sales</i>                                   |         |
|---|---------|---|---------|
| 1/1 Retained Earnings—<br>P Company   | 500,000 | 1/1 Retained Earnings—<br>P Company<br>(.7 × \$500,000) | 350,000 |
|   |         | 1/1 NCI—<br>(.3 × \$500,000)                            | 150,000 |
| 1/1 Inventory<br>(Income Statement)   | 500,000 | 1/1 Inventory<br>(Income Statement)                     | 500,000 |
| To recognize intercompany profit realized during the year and to reduce the controlling and the noncontrolling interests for their share of unrealized intercompany profit at the beginning of the year.  |         |   |         |
| Tax Expense   | 200,000 | Tax Expense   | 200,000 |
| 1/1 Retained Earnings—<br>+P Company  | 200,000 | 1/1 Retained Earnings—<br>P Company<br>(.7 × \$200,000) | 140,000 |
|   |         | 1/1 NCI—<br>(.3 × \$200,000)                            | 60,000  |
| To recognize income tax expense on intercompany profit considered realized during the year and to adjust the controlling and noncontrolling interests for the tax consequence of unrealized intercompany profit eliminated in the previous entry. |         |   |         |

Note that since the inventory is now sold to outsiders, there are no longer any deferred tax items recorded on the consolidated balance sheet.

In the case of upstream sales, the net after-tax adjustment to the noncontrolling interest at the *beginning of the year* is \$90,000 (\$150,000 – \$60,000), which is the same amount by which the noncontrolling interest in consolidated net income was reduced for after-tax unrealized intercompany profit at the end of the prior year. [.3 × (\$500,000 – \$200,000) = \$90,000].

If the sale is upstream, the noncontrolling interest in consolidated net income for 2014 is calculated after adding the after-tax amount of intercompany profit that is included in consolidated net income in the current year (.60 × \$500,000 = \$300,000). For example, if the sale is upstream and S Company reports net income of \$600,000 in 2014, the noncontrolling interest in consolidated net income is \$270,000 [.30 × (\$600,000 + \$300,000)]. If the sale is downstream, no adjustment is necessary in the calculation of the noncontrolling interest in consolidated net income. These concepts are illustrated fully in the next section.



PARTIAL



COST

## UNDISTRIBUTED SUBSIDIARY INCOME—IMPACT OF UNREALIZED INTERCOMPANY PROFIT ON THE CALCULATION OF DEFERRED TAXES

### Cost and Partial Equity Methods

The workpaper entries needed to report the tax consequences of past and current undistributed earnings of a subsidiary were described in Appendix B in Chapter 4. Workpaper entries are necessary under the cost method when there is undistributed subsidiary income and the affiliates file separate income tax returns. Now that we have discussed the effects of unrealized intercompany profits, it is important to note that the calculation of the tax consequences of undistributed income is based on the undistributed income of the subsidiary that has been *included in consolidated net income*. Thus, before calculating the

deferred tax consequences relating to undistributed subsidiary income, the amount of undistributed income of the subsidiary must be adjusted for the *after-tax amount of* unrealized intercompany profit *recorded by the subsidiary* that has been recognized in the determination of consolidated net income.

To illustrate, assume that:



PARTIAL

1. P Company acquired 75% of the voting stock of S Company when S Company's retained earnings amounted to \$150,000.
2. S Company reported retained earnings of \$260,000 on January 1, 2014, and \$320,000 on December 31, 2014.
3. S Company reported net income of \$90,000 and declared dividends of \$30,000 in 2014.
4. P Company reported net income from independent operations in 2014 in the amount of \$700,000 and retained earnings on December 31, 2014, of \$3,500,000.
5. The affiliates file separate income tax returns.
6. Undistributed income is expected to be received in the form of future dividends.
7. The dividends received deduction is 80%, and past, current, and future expected marginal income tax rates are 40%.
8. There were no intercompany sales prior to 2013, and unrealized profits on January 1 and on December 31, 2014, resulting from intercompany sales are as summarized below:



COST

| Resulting From                  | Unrealized Intercompany Profit on |          |
|---------------------------------|-----------------------------------|----------|
|                                 | 1/1/14                            | 12/31/14 |
| Sales by S Company to P Company | \$10,000                          | \$ 5,000 |
| Sales by P Company to S Company | 15,000                            | 20,000   |

The calculation of the amounts of the undistributed income of S Company that is included in consolidated net income is presented in Illustration 6-22. Illustration 6-23 shows the calculation of the noncontrolling and controlling interests in consolidated net income for 2014.

## Complete Equity Method—Intercompany Sales of Inventory



COMPLETE

When the parent uses the complete equity method to account for the investment, the parent accounts for deferred taxes related to undistributed *adjusted* subsidiary income on its own books. This occurs because there is a difference between taxable income (dividends received from the subsidiary) and equity income (reported on the income statement) on the books of the parent, necessitating parent company entries for deferred taxes.

To illustrate the treatment in the consolidated financial statements of deferred income taxes relating to intercompany sales of inventory, assume that:

1. S Company is a 70% owned subsidiary of P Company.
2. The companies file separate income tax returns and the marginal income tax rates for both companies are 40%.
3. On December 31, 2013, there is \$500,000 of unrealized intercompany profit in the ending inventory of the purchasing affiliate.
4. S Company reports net income of \$900,000 in 2013 and \$600,000 in 2014.

On the books of the parent, the following entries are made to account for the effects of intercompany sales of inventory.

**ILLUSTRATION 6-22****Undistributed Income of S Company  
That Has Been Included in Consolidated Income**

| <i>S Company</i>  | <i>From<br/>Acquisition<br/>to 1/1/2014</i> | <i>For<br/>Calendar<br/>Year 2014</i> | <i>From<br/>Acquisition to<br/>12/31/2014</i> |
|---|---|---------------------------------------|---|
| Retained earnings 1/1/2014  | \$260,000                                   |                                       |   |
| Retained earnings 12/31/2014  |   |                                       | \$320,000                                     |
| Retained earnings date of acquisition                                 | (150,000)                                   |                                       | (150,000)                                     |
| Increase in retained earnings   | 110,000                                     |                                       | 170,000                                       |
| Net income 2014   |   | \$90,000                              |   |
| Dividends 2014  |   | (30,000)                              |   |
| After-tax unrealized profit on 1/1/2014<br>(.6 × \$10,000)            | (6,000)                                     | 6,000                                 |   |
| After-tax unrealized profit on 12/31/2014<br>(.6 × \$5,000)           |   | (3,000)                               | (3,000)                                       |
| Undistributed income that has been<br>included in consolidated income | \$104,000                                   | \$63,000                              | \$167,000                                     |

**ILLUSTRATION 6-23****Calculation of the Noncontrolling Interest and Controlling Interest in Consolidated Income  
for the Year Ended December 31, 2014**

| <b>Noncontrolling Interest in Consolidated Income</b>   |        |  |                 |
|---|--------|--|-----------------|
| After-tax unrealized profit on upstream sales in ending inventory (.6 × \$5,000)                | 3,000  | Net income reported by S Company   | \$ 90,000       |
| Amortization of the difference between implied and book value                                   | 0      | After-tax realized profit (upstream sales) from beginning inventory (.6 × \$10,000)      | 6,000           |
|   |        | Subsidiary income included in consolidated income  | \$ 93,000       |
|   |        | Noncontrolling ownership percentage interest   | 25%             |
|   |        | Noncontrolling interest in consolidated income   | <u>\$23,250</u> |
| <b>Controlling Interest in Income</b>   |        |  |                 |
| After-tax unrealized profit on downstream sales to S Company (ending inventory) (.6 × \$20,000) | 12,000 | Net income internally generated by P Company   | \$700,000       |
| Deferred taxes on undistributed income of S Company (\$93,000 - \$30,000)(.75)(.20)(.40)        | 3,780  | After-tax realized profit (downstream sales) from begin. Inventory (.6 × \$15,000)       | 9,000           |
|   |        | P Company's percentage of S Company's income realized from third parties, .75 (\$93,000) | 69,750          |
|   |        | Controlling Interest in Income   | \$762,970       |

75%

|   |         |         |
|---|---------|---------|
| Equity in Subsidiary Income   | 500,000 |         |
| Investment in S Company   |         | 500,000 |
| To adjust equity in subsidiary income for unrealized intercompany profit in ending inventory. |         |         |

|                    |         |         |
|--------------------|---------|---------|
| Deferred Tax Asset | 200,000 |         |
| Tax Expense        |         | 200,000 |

Workpaper eliminating entries relating to the unrealized profit included in inventory of the purchasing affiliate differ in subsequent years, depending on whether the selling affiliate is the parent company (downstream sale) or the subsidiary (upstream or horizontal sale).

Entries in the December 31, 2013, and December 31, 2014, consolidated statements workpapers under each of these conditions are illustrated below:

| <b>Consolidated Statements Workpaper Entries—Complete Equity</b> |         |   |         |
|--|---------|---|---------|
| <b>Method December 31, 2013</b>                                  |         |   |         |
| <i>Downstream Sales</i>  |         | <i>Upstream Sales</i>                   |         |
| Ending Inventory—<br>(Income Statement)                          | 500,000 | Ending Inventory—<br>(Income Statement) | 500,000 |
| Inventory (Balance Sheet)  | 500,000 | Inventory (Balance Sheet)               | 500,000 |
| To eliminate unrealized profit in ending inventory.              |         |   |         |

In the year 2014, the inventory is sold. The entry on the books of the parent to reflect the reversal of the deferred tax asset is as follows:

|                    |         |         |
|--------------------|---------|---------|
| Tax Expense        | 200,000 |         |
| Deferred Tax Asset |         | 200,000 |

Then the following entry is made on the workpaper:

| <b>Consolidated Statements Workpaper Entries—Complete Equity</b>   |         |                                     |         |
|--|---------|-------------------------------------|---------|
| <b>Method December 31, 2014</b>  |         |                                     |         |
| <i>Downstream Sales</i>  |         | <i>Upstream Sales</i>               |         |
| Investment in S  | 500,000 | Investment in S<br>(.7 × \$500,000) | 350,000 |
|  |         | NCI—<br>(.3 × \$500,000)            | 150,000 |
| 1/1 Inventory<br>(Income Statement)  | 500,000 | 1/1 Inventory<br>(Income Statement) | 500,000 |
| To recognize intercompany profit realized during the year and to reduce the controlling and the noncontrolling interests for their share of unrealized intercompany profit at the beginning of the year. |         |                                     |         |



COMPLETE

Note that since the inventory is now sold to outsiders, there are no longer any deferred tax items recorded on the consolidated balance sheet.

In the case of upstream sales, the net after-tax adjustment to the noncontrolling interest at the *beginning of the year* is \$90,000 (\$150,000 – \$60,000), the same amount by which the noncontrolling interest in consolidated net income was reduced for after-tax unrealized intercompany profit at the end of the prior year (2013) [ $.3 \times (\$500,000 - \$200,000) = \$90,000$ ].

If the sale is upstream, the noncontrolling interest in consolidated income is calculated after adding the after-tax amount of intercompany profit that is included in consolidated net income in the current year ( $.60 \times \$500,000 = \$300,000$ ). For example, if the sale is upstream and S Company reports net income of \$600,000 in 2014, the noncontrolling interest in consolidated net income is \$270,000 [ $.30 \times (\$600,000 + \$300,000)$ ]. If the sale is downstream, no adjustment is necessary in the calculation of the noncontrolling interest in consolidated net income.

## Chapter 6 – Review Questions

The review questions accompanying this course are designed to assist you in achieving the course learning objectives. The review section is not graded; do not submit it in place of your qualified assessment. While completing the review questions, it may be helpful to study any unfamiliar terms in the glossary in addition to course content. After completing the review questions, proceed to the review question answers and rationales.

39. Which of the following is accurate regarding the financial reporting objectives of intercompany sales?
- Transactions recorded on subsidiary and parent books should reflect the cost without the profit component.
  - The selling company must recognize profit from intercompany sales but the acquiring company must reduce the cost down to the affiliates original cost in order to properly reflect cost of goods sold.
  - The selling company must not recognize profit on intercompany sales on their own company books.
  - Consolidated cost of sales includes only the cost to the affiliated group for goods that have been sold to parties outside the affiliated group.
40. Which of the following statements is accurate regarding the impact of a failure to eliminate intercompany sales for the consolidated entity (assuming that all goods bought through intercompany activity are sold to third parties by year-end)?
- Failing to eliminate an intercompany sale will result in an incorrect consolidated gross profit.
  - The gross profit percentage will be wrong.
  - Consolidate net income will be incorrect.
  - Cost of goods sold will be understated.
41. Which of the following is accurate regarding the differences between the three methods as it relates to intercompany sales?
- Under the partial method, parent company retained earnings does not need to be adjusted in year 2 for any activity from year 1.
  - Under the cost method, the year 1 entries will not have any impact on year 2.
  - Under the complete method, the retained earnings account on the separate company books of the parent is the same as consolidated retained earnings.
  - Under both the partial method and the complete method, beginning retained earnings of the parent company equals ending consolidated retained earnings.



42. In which of the following situations would the noncontrolling interest in consolidated net income need to be adjusted for intercompany sales?
- Downstream sales.
  - Subsidiary sales to another affiliate (not the parent).
  - Parent sells to the subsidiary.
  - Subsidiary purchases from the parent.
43. In comparing the cost method and the partial equity method, which of the following entries will be different depending on which method you use?
- The entry to eliminate intercompany sales.
  - The entry to eliminate intercompany profit.
  - The entry to establish reciprocity.
  - The entry to recognize intercompany profit in beginning inventory realized during the year.
44. All of the following statements regarding the complete equity method are accurate with the **EXCEPTION** of:
- Under the complete equity method, no formal calculation of the controlling interest in consolidated net income is needed.
  - Under the complete equity method, consolidated retained earnings is equal to the parent company's recorded complete equity basis retained earnings.
  - Under the complete equity method, consolidated net income equals the parent company's recorded income.
  - Under the complete equity method, intercompany profits will have to be adjusted out of the parent company's retained earnings.
45. Which of the following is accurate regarding the elimination of intercompany profits realized prior to the affiliation?
- It is required under GAAP to eliminate such intercompany profit if the selling company is the new subsidiary.
  - It is required under GAAP to eliminate such intercompany profit if the purchasing company is the new subsidiary.
  - GAAP is silent as to the appropriate treatment of intercompany profits prior to acquisition.
  - GAAP requires that profits be eliminated only when the selling company is the subsidiary.

## **Chapter 7 – Elimination of Unrealized Gains or Losses on Intercompany Sales of Property and Equipment**

### **Learning Objectives**

After completing this section of the course, you will be able to:

- Identify the reporting objectives in accounting for intercompany sales of depreciable and non-depreciable assets, noting the accounting treatment of gains or losses on these assets.
- Recognize differences between upstream and downstream sales and calculate their impacts on consolidation for both depreciable and non-depreciable asset sales under the cost, partial equity, and complete equity methods.
- Choose the requirements for recording or eliminating intercompany interest, rent, and service fees.
- Identify income tax impacts of intercompany transactions and determine the appropriate accounting treatment for them.

## ELIMINATION OF UNREALIZED GAINS OR LOSSES ON INTERCOMPANY SALES OF PROPERTY AND EQUIPMENT

### CHAPTER CONTENTS

- 7.1 INTERCOMPANY SALES OF LAND (NONDEPRECIABLE PROPERTY)
- 7.2 INTERCOMPANY SALES OF DEPRECIABLE PROPERTY (MACHINERY, EQUIPMENT, AND BUILDINGS)
- 7.3 CONSOLIDATED STATEMENTS WORKPAPER—COST AND PARTIAL EQUITY METHODS
- 7.4 CALCULATION OF CONSOLIDATED NET INCOME AND CONSOLIDATED RETAINED EARNINGS
- 7.5 CONSOLIDATED STATEMENTS WORKPAPER—COMPLETE EQUITY METHOD
- 7.6 CALCULATION AND ALLOCATION OF CONSOLIDATED NET INCOME; CONSOLIDATED RETAINED EARNINGS: COMPLETE EQUITY METHOD
- 7.7 SUMMARY OF WORKPAPER ENTRIES RELATING TO INTERCOMPANY SALES OF EQUIPMENT
- 7.8 INTERCOMPANY INTEREST, RENTS, AND SERVICE FEES

#### IN THE NEWS

The Irish arm of Symantec, the Internet security company, returned to profit in 2010 after a pretax loss of 6.6 million euro in 2009. It recorded profits of 73 million euro in spite of a decline in revenue. The U.S.-owned company's revenues last year declined by 125 million euro. The chief factor behind the increase in pretax profits was a foreign currency gain of 50 million euro on intercompany transactions in 2010.<sup>1</sup>

<sup>1</sup> Irishtimes.com, "Symantec's Irish Division Reports 73 Million Euro Pretax Profit," by G. Deegan, 10/1/11.

Affiliated companies often recognize gains or losses on intercompany sales of property or equipment. They also may recognize revenue or expense in connection with intercompany loans, intercompany service fees, or intercompany operating leases. As with intercompany sales of inventory discussed in Chapter 6, workpaper entries are also necessary in these situations in order to present related balances in the consolidated financial statements as if the intercompany transactions had never occurred.

In this chapter, the effects on the preparation of consolidated financial statements of intercompany transactions involving property and equipment, loans, services, and operating leases are described and illustrated.

Certain complications (specifically, those related to accounting for the difference between the value implied by the acquisition cost and book value) are avoided in all illustrations by assuming: (1) all acquisitions are made at the book value of the acquired interest in net assets, and (2) the book value of the subsidiary net assets equals their fair value on the date the parent company's interest is acquired. It is further assumed that the affiliates file consolidated income tax returns.

## 7.1 INTERCOMPANY SALES OF LAND (NONDEPRECIABLE PROPERTY)

### RELATED CONCEPTS

To recognize gains or losses on PPE sales before the assets are sold to outside parties would violate the *revenue recognition principle* from the perspective of the consolidated economic entity.

When there have been intercompany sales of *nondepreciable* property, workpaper entries are necessary to accomplish the following financial reporting objectives in the consolidated financial statements:

- To include gains or losses on the sale of nondepreciable property in consolidated net income only at the time such property is *sold to parties outside the affiliated group* and in an amount equal to the difference between the cost of the property to the affiliated group and the proceeds received from outsiders.
- To present nondepreciable property in the consolidated balance sheet at *its cost to the affiliated group*.

Workpaper procedures to accomplish these objectives are presented here. In addition, for firms using the cost or partial equity methods to account for the investments in subsidiaries, the workpaper entries serve to equate beginning consolidated retained earnings with the amount of consolidated retained earnings reported at the end of the prior reporting period. For all firms, the entries (in the case of upstream sales) also serve to equate beginning NCI (in equity) with ending NCI (in equity) at the end of the prior period.

Assume that S Company (an 80% owned subsidiary) sells land to P Company for \$500,000 that cost S Company \$300,000 (an upstream sale of land). Entries made on the books of each affiliate to record this intercompany sale are presented below.

| <i>Entry on Books of S Company</i> |         | <i>Entry on Books of P Company</i>                                       |         |
|------------------------------------|---------|--|---------|
| Cash                               | 500,000 | Land   | 500,000 |
| Land                               | 300,000 | Cash   | 500,000 |
| Gain on Sale of Land               | 200,000 | <i>Additional Entry for Complete Equity Method Only: P Company Books</i> |         |
|                                    |         | Equity in Subsidiary   | 160,000 |
|                                    |         | Income   |         |
|                                    |         | Investment in S Company  | 160,000 |

If P Company uses the complete equity method to account for its investment in S Company, the additional entry shown above is needed on the books of P Company to reduce its income from subsidiary by its share (80%) of the intercompany gain. Under this method, the amount of income reported on the books of the parent is its share of the subsidiary's reported income that has been realized in transactions with third parties.

In the year of the intercompany sale, a workpaper entry is necessary to eliminate the \$200,000 gain reported by S Company and to reduce the land balance from the \$500,000

**LO 1** Financial reporting objectives—nondepreciable property.

recorded on the books of P Company to its \$300,000 cost to the affiliated group. Both objectives are accomplished in one workpaper entry as follows:

| Workpaper Entry in Year of Intercompany Sale |         |         |
|--|---------|---------|
| Gain on Sale of Land                         | 200,000 |         |
| Land   |         | 200,000 |

If S Company reported \$900,000 in income, the noncontrolling interest in consolidated net income is \$140,000 [ $.20 \times (\$900,000 - \$200,000) = \$140,000$ ]. The noncontrolling interest in consolidated income is based on the amount of income of S Company that was realized in transactions with third parties (\$900,000 in reported income less \$200,000 unrealized gain on sale of land). Stated another way, the noncontrolling interest in consolidated income is based on the amount of income from the subsidiary included in consolidated net income (after all workpaper adjustments). Since \$200,000 of subsidiary income is excluded from consolidated net income, the noncontrolling interest in consolidated income is reduced by \$40,000 ( $.2 \times \$200,000$ ).

In subsequent years, so long as P Company owns the land, it will be reported in the *statements of P Company* at the intercompany selling price of \$500,000. However, in the *consolidated balance sheet*, the land should continue to be reported at its cost to the affiliated group of \$300,000. Since in the year of the sale consolidated income was reduced by \$200,000, the controlling interest in net income and consolidated retained earnings were reduced by \$160,000 ( $.8 \times \$200,000$ ) in that year. The workpaper entry necessary in all subsequent years, until the land is disposed of by P Company, is as follows:

| Workpaper Entry in Subsequent Years   |         |         |                         |         |
|---------------------------------------|---------|---------|-------------------------|---------|
| Cost or Partial Equity                |         |         | Complete Equity         |         |
| Beginning Retained Earnings—P Company | 160,000 |         | Investment in S Company | 160,000 |
| Beginning NCI                         | 40,000  |         | Beginning NCI           | 40,000  |
| Land                                  |         | 200,000 | Land                    | 200,000 |

Because the subsidiary is the intercompany seller, the \$200,000 of unrealized profit is allocated between the controlling interest ( $\$160,000 = .8 \times \$200,000$ ) and the noncontrolling interest ( $\$40,000 = .2 \times \$200,000$ ) based on their percentage interests in the selling affiliate. As in Chapter 6, the workpaper procedure to adjust the controlling interest (consolidated retained earnings) is to debit the beginning retained earnings of the parent company (or investment account, if P Company uses the complete equity method). The workpaper procedure to adjust the noncontrolling interest is to debit the beginning NCI in equity. *If the intercompany seller had been the parent (downstream sale), the entire \$200,000 would go to the controlling interest, resulting in a \$200,000 debit to the beginning retained earnings of the parent company under the cost or partial equity method.*

If and when the land is sold by P Company to a nonaffiliate, P company will use the \$500,000 carrying value of the land on its books to calculate any gain or loss. For example, if P Company sells the land it purchased for \$500,000 from S Company to an outside party for \$550,000, P company will record a gain on the sale of \$50,000 ( $\$550,000 - \$500,000$ ). However, the cost of the land to the affiliated group is \$300,000, and the gain to the affiliated group confirmed by its sale for \$550,000 to a nonaffiliate is \$250,000 ( $\$550,000 - \$300,000$ ). The workpaper entry to adjust the \$50,000 gain reported by P Company to the \$250,000 gain realized on the sale by the affiliated group is as follows:

| Cost or Partial Equity                |         |         | Complete Equity         |         |
|---------------------------------------|---------|---------|-------------------------|---------|
| Beginning Retained Earnings—P Company | 160,000 |         | Investment in S Company | 160,000 |
| Beginning NCI                         | 40,000  |         | Beginning NCI           | 40,000  |
| Gain on Sale of Land                  |         | 200,000 | Gain on Sale of Land    | 200,000 |

The debits are the same as if the sale to outsiders had not occurred. In the year of the sale of the land to outsiders, it is still necessary to adjust *beginning* consolidated retained

earnings (or the investment account, under the complete equity method) and beginning NCI. This entry under the cost and partial equity methods serves to equate *beginning* consolidated retained earnings in the year of sale with the consolidated retained earnings reported at the end of the prior year. Under the complete equity method, as previously stated, the retained earnings of the parent company always equals the correct consolidated retained earnings; thus no adjustment is needed. Instead a debit to the investment account facilitates the elimination of the investment account.<sup>2</sup>

In the year of the sale of the land to outsiders, consolidated net income is increased by \$200,000, and consolidated net income, consolidated retained earnings, and noncontrolling interest in consolidated income are increased accordingly.

To the consolidated entity, the sales price (to third parties) of \$550,000 exceeds the cost (to the consolidated entity) of \$300,000, resulting in a gain of \$250,000 to be included in consolidated income in the year of the sale to a third party.

At the end of the year of the sale to outsiders, the amount of *cumulative* profit on the sale of the land recorded on the books of the affiliates and the amount of profit on the sale of the land recognized in the consolidated financial statements are equal, as shown below.

*Cumulative Profit Recorded on the Individual Books of Affiliates*

|                                   |                  |                            |
|-----------------------------------|------------------|----------------------------|
| S Company on sale to P Company    | \$200,000        | (year sold to affiliate)   |
| P Company on sale to nonaffiliate | <u>50,000</u>    | (year sold to third party) |
| Total                             | <u>\$250,000</u> |                            |

*Profit Reported in Consolidated Income Statement in Year of Sale*

|                                     |                  |                            |
|-------------------------------------|------------------|----------------------------|
| Reported by P Company               | \$ 50,000        | (year sold to third party) |
| Workpaper adjustment                | <u>200,000</u>   | (year sold to third party) |
| Reported in consolidated net income | <u>\$250,000</u> |                            |

Retained earnings is thus correct in future years without adjustment, and no further workpaper entries relating to the intercompany sale of land are necessary in subsequent periods.

## 7.2 INTERCOMPANY SALES OF DEPRECIABLE PROPERTY (MACHINERY, EQUIPMENT, AND BUILDINGS)

### Realization through Usage

**LO 4** Intercompany gain realized through usage.

A firm may sell property or equipment to an affiliate for a price that differs from its book value. In the year of the sale, the amount of intercompany gain (loss) recorded by the selling affiliate must be eliminated in consolidation. After the sale, the purchasing affiliate will calculate depreciation on the basis of its cost, which is the intercompany selling price. The depreciation recorded by the purchasing affiliate will, therefore, be excessive (deficient) from a consolidated point of view and will also require adjustment.

From the view of the consolidated entity, the intercompany gain (loss) is considered to be realized from the use of the property or equipment in the generation of revenue. Because such use is measured by depreciation, the recognition of the realization of intercompany profit (loss) is accomplished through depreciation adjustments.

**LO 3** Recognition of gains (losses) through depreciation adjustments.

To contrast the intercompany sale of a depreciable asset to the intercompany sale of land, consider the following. Parental Guidance Company sells property with a book value of \$2,000 to its fully owned subsidiary, Subservient Recipient Company, for \$5,000.

<sup>2</sup> The investment account is reduced on the parent's books at the same time that the unrealized income is deducted from the parent's income under the complete equity method. Thus, the usual workpaper entry to eliminate the investment account against the underlying subsidiary equity accounts eliminates an amount greater than the actual beginning investment account balance. That entry, combined with the entry above, however, will eliminate the investment to exactly zero.

Assume first that the property is nondepreciable land. When will the \$3,000 gain be recognized in the consolidated financial statements?

The answer is: not until it is sold to outsiders. If the property is sold immediately by Subservient Recipient Company for \$5,000, the \$3,000 gain will be recognized immediately by the consolidated entity. If, on the other hand, it isn't sold until year 4, the gain will not be realized to the consolidated entity until year 4. Now suppose instead that the property (with a book value of \$2,000) is depreciable equipment, with a remaining life of three years. Again it is sold to Subservient Recipient Company for \$5,000. When will the \$3,000 gain be recognized in the consolidated financial statements?

The answer might at first seem to be: not until it is sold to outsiders. But consider the combined effect on consolidated income of the intercompany sale and the depreciation adjustments needed on the consolidated workpaper. On the books of Subservient Recipient Company, depreciation expense is based on a purchase price of \$5,000 (straight-line depreciation over three years). But to the consolidated entity, depreciation expense should be based on the book value of \$2,000 (also over three years). The difference is \$1,000 per year (equal to the \$3,000 gain on the intercompany sale spread over three years). Thus, as the depreciation expense is adjusted downward, consolidated income is increased to realize a portion of the gain each year. The depreciation adjustment in such a case is often referred to as gain or revenue *realization through usage*.

When there have been intercompany sales of depreciable property, workpaper entries are necessary to accomplish the following financial reporting objectives in the consolidated financial statements:

**LO 2** Financial reporting objectives—depreciable property.

- To report as gains or losses in the consolidated income statement only those that result from the sale of depreciable property *to parties outside the affiliated group*.
- To present property in the consolidated balance sheet at *its cost to the affiliated group*.
- To present accumulated depreciation in the consolidated balance sheet based on the *cost to the affiliated group* of the related assets.
- To present depreciation expense in the consolidated income statement based on the *cost to the affiliated group* of the related assets.

Workpaper procedures to accomplish these objectives are presented next. For firms using the cost or partial equity method, an additional objective is to equate beginning consolidated retained earnings with the amount of consolidated retained earnings reported at the end of the prior reporting. For firms using the complete equity method, this final objective is not necessary because the parent's retained earnings already reflects all adjustments accurately. For upstream sales, the entries also serve to equate current period beginning NCI and prior period ending NCI.

## Illustration of Basic Workpaper Elimination Entries—Downstream Sales

The basic workpaper eliminating entries required because of intercompany sales of depreciable property are illustrated using the following simplifying assumptions. We first illustrate a downstream sale of depreciable property; the parent is the intercompany seller. Upstream sales are illustrated later in the chapter.

1. On January 1, 2014, P Company sells to S Company, a 90% owned subsidiary, equipment with a book value of \$750,000 (original cost \$1,350,000 and accumulated depreciation of \$600,000) for \$900,000.
2. On the date of the sale, the equipment has an estimated remaining useful life of three years, has no residual value, and is depreciated using the straight-line method.
3. No other equipment is owned by S Company or P Company.

The entries on the books of P Company and S Company to record the intercompany sale are summarized in general journal form shown on the next page.

| P Company Books           |         |           |
|---------------------------|---------|-----------|
| Cash                      | 900,000 |           |
| Accumulated Depreciation  | 600,000 |           |
| Equipment                 |         | 1,350,000 |
| Gain on Sale of Equipment |         | 150,000   |

| S Company Books          |         |         |
|--------------------------|---------|---------|
| Equipment                | 900,000 |         |
| Cash                     |         | 900,000 |
| Depreciation Expense     | 300,000 |         |
| Accumulated Depreciation |         | 300,000 |

### Workpaper Entries—Year of the Intercompany Sale

Balances on December 31, 2014, of the accounts of the affiliated companies affected by these transactions are presented in Illustration 7-1. Workpaper entries in the year of the sale are presented below in general journal form.

|   |         |         |
|---|---------|---------|
| (1) Equipment (\$1,350,000 – \$900,000)   | 450,000 |         |
| Gain on Sale of Equipment   | 150,000 |         |
| Accumulated Depreciation  |         | 600,000 |
| To eliminate the intercompany gain and restore equipment to its original cost to the consolidated entity (along with its accumulated depreciation at the point of the intercompany sale). |         |         |

P Company recorded a gain of \$150,000 on the intercompany sale and S Company recorded the equipment at \$900,000. From the point of view of the consolidated entity, however, no gain should be reported on the intercompany sale, and equipment should be reported at cost to the affiliated group. The effect of this entry is to decrease consolidated net income by \$150,000. It also restores equipment and accumulated depreciation to their amounts prior to the intercompany sale. Without this entry, equipment would be reported in the consolidated balance sheet at its intercompany selling price of \$900,000 instead of its historical cost of \$1,350,000. Further, without the entry, accumulated depreciation on the equipment would commence from the point of the intercompany sale instead of from the original acquisition by the consolidated entity.

|  |        |        |
|--|--------|--------|
| (2) Accumulated Depreciation   | 50,000 |        |
| Depreciation Expense   |        | 50,000 |
| To adjust depreciation expense to the correct amount to the consolidated entity, thus realizing a portion of the gain through usage. |        |        |

The purchasing affiliate (S Company) will record depreciation in the amount of \$300,000 (\$900,000/3 years) each year. From the point of view of the consolidated entity,

#### ILLUSTRATION 7-1

##### Partial Consolidated Statements Workpaper, Elimination of Intercompany Sale of Equipment, Year of Intercompany Sale, December 31, 2014

| Income Statement          | P Company | S Company | Eliminations |             | Consolidated Balances |
|---------------------------|-----------|-----------|--------------|-------------|-----------------------|
|                           |           |           | Dr.          | Cr.         |                       |
| Gain on Sale of Equipment | (150,000) |           | (1) 150,000  |             |                       |
| Depreciation Expense      |           | 300,000   |              | (2) 50,000  | 250,000               |
| <b>Balance Sheet</b>      |           |           |              |             |                       |
| Equipment                 |           | 900,000   | (1) 450,000  |             | 1,350,000             |
| Accumulated Depreciation  |           | (300,000) | (2) 50,000   | (1) 600,000 | (850,000)             |

(1) To eliminate the intercompany gain and restore equipment to its original cost to the consolidated entity.

(2) To adjust depreciation expense to the correct amount to the consolidated entity.



only \$250,000 (\$750,000/3 years) in depreciation on the equipment should be recognized. The effect of entry (2) is to increase consolidated net income by \$50,000 and thus treat an equivalent amount of intercompany profit as realized through the use of the equipment.

The net effect of entries (1) and (2) is to reduce consolidated income by \$100,000 (the original \$150,000 of intercompany gain recorded by P Company for the sale less the \$50,000 of intercompany gain that is considered realized during the year through the utilization of the equipment by S Company).

### Workpaper Entries—Years Subsequent to the Year of the Intercompany Sale



Balances of the affected accounts of the affiliated companies on December 31, 2015, are presented in Illustration 7-2. In years subsequent to the year of the intercompany sale, the basic workpaper elimination entries related to the intercompany sale are presented below. As indicated, some entries differ slightly depending on whether the firm accounts for its investment using the cost, partial equity, or complete equity method. In the context of this chapter, the cost and partial equity entries are the same, while the complete equity entries differ with one respect; that is, entries to Beginning Retained Earnings—P Company are replaced by entries to Investment in S Company under the complete equity method.

#### 2015 Workpaper Entries

| Cost or Partial Equity   |         | Complete Equity          |         |
|--|---------|--------------------------|---------|
| (1) Equipment  | 450,000 | Equipment                | 450,000 |
| Beginning Retained Earnings—P Company  | 150,000 | Investment in S          | 150,000 |
| Accumulated Depreciation   | 600,000 | Accumulated Depreciation | 600,000 |
| To eliminate the prior period intercompany gain and restore equipment to its original cost to the consolidated entity (along with its accumulated depreciation at the point of the intercompany sale). |         |                          |         |

In entry (1), the first entry from the prior year (2014) is repeated, with the debit to gain now replaced by a debit to the beginning retained earnings of the parent under the cost or partial equity methods. The debit to the equipment account and the credit to the accumulated depreciation account are for the same amount each year. This entry is necessary again (with any income statement accounts, e.g., gain, replaced by beginning retained earnings in subsequent years) because workpaper entries are not posted. If P Company uses the complete equity method, the debit to Beginning Retained Earnings—P Company is not needed, as the prior year income was adjusted for all unrealized amounts. The debit in this workpaper entry is replaced by a debit to the investment account to facilitate its elimination. Later in this chapter, both methods are illustrated in their entirety.

#### ILLUSTRATION 7-2

#### Partial Consolidated Statements Workpaper, Elimination of Unrealized Profit on Intercompany Sale of Equipment, Year Subsequent to Intercompany Sale, December 31, 2015

|  | P Company | S Company | Eliminations |             | Consolidated Balances |
|--|-----------|-----------|--------------|-------------|-----------------------|
|  |           |           | Dr.          | Cr.         |                       |
| <b>Income Statement</b>                        |           |           |              |             |                       |
| Depreciation Expense                           |           | 300,000   |              | (2) 50,000  | 250,000               |
| <b>Retained Earnings Statement</b>             |           |           |              |             |                       |
| 1/1 Retained Earnings—P Company (Consolidated) | 2,000,000 |           | (1) 150,000  | (2) 50,000  | 1,900,000             |
| <b>Balance Sheet</b>                           |           |           |              |             |                       |
| Equipment                                      |           | 900,000   | (1) 450,000  |             | 1,350,000             |
| Accumulated Depreciation                       |           | (600,000) | (2) 100,000  | (1) 600,000 | (1,100,000)           |

(1) To eliminate the intercompany gain and restore equipment to its original cost to the consolidated entity.  
 (2) To adjust depreciation expense to the correct amount to the consolidated entity.

| 2015 Workpaper Entries  |         |                                     |         |
|---|---------|-------------------------------------|---------|
| Cost or Partial Equity  |         | Complete Equity                     |         |
| (2) Accumulated Depreciation  | 100,000 | Accumulated Depreciation            | 100,000 |
| Depreciation Expense (current year)   | 50,000  | Depreciation Expense (current year) | 50,000  |
| Beginning Retained Earnings—P Company (prior year)                                    | 50,000  | Investment in S                     | 50,000  |
| To adjust depreciation for the current and prior year on equipment sold to affiliate. |         |                                     |         |

The explanation for entry (2) is the same as the preceding year with two modifications. Accumulated depreciation is adjusted for two years now, and the income statement account “depreciation expense” from the first year is now replaced by a credit to beginning retained earnings of P Company (or by a credit to Investment, for firms using the complete equity method).

As a result of these entries, consolidated depreciation expense (\$250,000), consolidated equipment (\$1,350,000), and consolidated accumulated depreciation (\$1,100,000) are all based on the cost of the equipment to the affiliated companies. The net effect of these workpaper entries is to increase consolidated income by \$50,000, which is the amount of gain recorded on the intercompany sale that is considered realized from a consolidated point of view through the utilization of the equipment during the current year.

The entries in the December 31, 2016, consolidated statements workpaper to eliminate the effects of the intercompany sale are as follows:

| 2016 Workpaper Entries   |         |                                     |         |
|--|---------|-------------------------------------|---------|
| Cost or Partial Equity   |         | Complete Equity                     |         |
| (1) Equipment  | 450,000 | Equipment                           | 450,000 |
| Beginning Retained Earnings—P Company  | 150,000 | Investment in S                     | 150,000 |
| Accumulated Depreciation   | 600,000 | Accumulated Depreciation            | 600,000 |
| To reduce consolidated retained earnings for gain on intercompany sale and to restore equipment to its original cost to the consolidated entity (along with its accumulated depreciation at the point of the intercompany sale). |         |                                     |         |
| (2) Accumulated Depreciation (\$50,000 × 3 year)   | 150,000 | Accumulated Depreciation            | 150,000 |
| Depreciation Expense (current year)  | 50,000  | Depreciation Expense (current year) | 50,000  |
| Beginning Retained Earnings—P Company (prior years)  | 100,000 | Investment in S (prior years)       | 100,000 |
| To reverse amount of excess depreciation recorded during current year and to recognize amounts of intercompany gain realized in current and prior periods through usage (two prior years of depreciation expense since sale).    |         |                                     |         |

Over the life of the equipment, the amount of gain recognized in the consolidated income statement will be the same as the amount of gain recorded by the selling affiliate, and no further adjustments will be necessary in the consolidated statements workpaper. The recognition of the gain on the sale of the equipment on the books of the selling affiliate and in the consolidated income statement may be compared as follows:

|                                    | <i>On Books of<br/>Selling Affiliate</i> | <i>In Consolidated<br/>Income Statement</i> |
|------------------------------------|--|---|
| Gain on Sale of Equipment—2012     | \$150,000                                |   |
| Reduction of Depreciation Expense: |  |   |
| 2014                               |  | \$ 50,000                                   |
| 2015                               |  | 50,000                                      |
| 2016                               |  | 50,000                                      |
|                                    | <u>\$150,000</u>                         | <u>\$150,000</u>                            |

## Determination of Noncontrolling Interest

**LO 6** Subsidiary vs. parent as the seller.

**Subsidiary as Intercompany Seller (Upstream Sale)** In the preceding example, the selling affiliate was the parent company (downstream sale). Accordingly, even though 100% of the unrealized intercompany gain was eliminated, no modification in the calculation of the noncontrolling interest in consolidated income or consolidated net assets was necessary. Had the selling affiliate been a less than wholly owned subsidiary (upstream sale), however, workpaper modifications in the determination of the noncontrolling interest would have been necessary if the controlling and noncontrolling interests were to be adjusted in proportion to their interest in the amount of unrealized intercompany profit eliminated.

**LO 7** Computing the noncontrolling interest.

Intercompany sales of property, plant, and equipment, as in the case of intercompany inventory sales, necessitate adjustments to the calculation of the distribution of income to the controlling and noncontrolling interests. Whether the adjustments directly affect the noncontrolling interest (or only the controlling interest) depends on *who is the intercompany seller*. If the intercompany seller is the subsidiary, it is the subsidiary's income that needs adjustment, hence directly affecting the noncontrolling interest, as shown in Illustration 7-3.

Procedurally, the steps needed differ slightly between the year of the intercompany sale and subsequent years. To calculate the noncontrolling interest in consolidated income, begin as always with the subsidiary's reported income. As always, subtract any excess depreciation, amortization, or impairment charges related to differences between implied and book values. In the year of the intercompany upstream sale (subsidiary is the intercompany seller), adjust the subsidiary's reported income by subtracting the unrealized gain

### ILLUSTRATION 7-3

#### Calculation of the Noncontrolling Interest in Consolidated Income, Upstream Sales of Equipment

| Noncontrolling Interest in Consolidated Income—Year of Sale—2014            |         |   |           |
|---|---------|---|-----------|
| Unrealized gain on upstream sales of equipment                              | 150,000 | Net income reported by S Company                      | \$300,000 |
| Amortization and depreciation of difference between implied and book value  | 0       | Depreciation adjustment (gain realized through usage) | 50,000    |
|   |         | Subsidiary Income included in Consolidated Income     | \$200,000 |
|   |         | Noncontrolling Ownership percentage interest          | 10%       |
|   |         | Noncontrolling Interest in Consolidated Income        | \$ 20,000 |
| Noncontrolling Interest in Consolidated Income—Year Subsequent to Sale—2015 |         |   |           |
| Amortization and depreciation of difference between implied and book value  | 0       | Net income reported by S Company                      | \$175,000 |
|   |         | Depreciation adjustment (gain realized through usage) | 50,000    |
|   |         | Subsidiary Income included in Consolidated Income     | \$225,000 |
|   |         | Noncontrolling Ownership percentage interest          | 10%       |
|   |         | Noncontrolling Interest in Consolidated Income        | \$ 22,500 |
| Noncontrolling Interest in Consolidated Income—Year Subsequent to Sale—2016 |         |   |           |
| Amortization and depreciation of difference between implied and book value  | 0       | Net income reported by S Company                      | \$200,000 |
|   |         | Depreciation adjustment (gain realized through usage) | 50,000    |
|   |         | Subsidiary Income included in Consolidated Income     | \$250,000 |
|   |         | Noncontrolling Ownership percentage interest          | 10%       |
|   |         | Noncontrolling Interest in Consolidated Income        | \$ 25,000 |

on the intercompany sale (or adding an unrealized loss, as appropriate). Next, subtract (add) the portion of the intercompany gain (loss) that is considered *realized through usage* (i.e., the depreciation adjustment for the year of the sale). This is shown in Illustration 7-3 for the year 2014 in t-account form.

For example, assume that S Company is 90% owned, was the selling affiliate in the previous illustration, and reports \$300,000 in income (including the \$150,000 intercompany gain) in the year 2014, \$175,000 of income in 2015, and \$200,000 in 2016. The calculation of the noncontrolling interest in consolidated income in each of the respective years is presented in Illustration 7-3.

The calculations are the same in subsequent years except that the intercompany gain (or loss) does not need to be subtracted (or added) since it is not included in the subsidiary's reported income in those years. Realization through usage, however, occurs as long as the property is being used by the intercompany buyer (the parent, in the case of an upstream sale). Note, however, that the *adjustment for realization through usage* appears on the t-account to compute the *noncontrolling interest* in the case of upstream sales.

The adjustments shown in Illustration 7-3 are needed only if we assume the subsidiary is the intercompany seller. With this assumption, adjustments are also needed to the workpaper eliminating/adjusting entries presented in the previous section of this chapter. Specifically, the workpaper entries to Beginning Retained Earnings—P Company in the preceding example for firms using the cost or partial equity method are replaced by entries to *both* Beginning Retained Earnings—P Company (controlling interest percentage) and Beginning NCI in equity (noncontrolling interest percentage). No other changes are needed. If P Company uses the complete equity method, any debits or credits to Beginning Retained Earnings—P Company are not needed, as prior years' income is adjusted on the books of the parent for unrealized gains and for any amount realized through usage. Thus any debits or credits to beginning retained earnings of the parent in workpaper entries are replaced by debits or credits to the investment account, once more facilitating its elimination.

If S Company were the selling affiliate, entry (1) in Illustration 7-2 for 2015 would be modified as follows in order to adjust the controlling and the noncontrolling interests in net assets at the beginning of the year:

#### Upstream Sale

| Cost or Partial Equity  |         | Complete Equity                 |         |
|---|---------|---------------------------------|---------|
| (1) Equipment   | 450,000 | Equipment                       | 450,000 |
| Beginning Retained Earnings—P Company   | 135,000 | Investment in S Company         | 135,000 |
| Beginning NCI (.10 × \$150,000)   | 15,000  | Beginning NCI (.10 × \$150,000) | 15,000  |
| Accumulated Depreciation  | 600,000 | Accumulated Depreciation        | 600,000 |
| To reduce the controlling and noncontrolling interests for their respective shares of the unrealized intercompany gain at the date of the intercompany sale, and restore equipment and accumulated depreciation to original amounts to the consolidated entity. |         |                                 |         |

#### IN THE NEWS

For the fiscal year 2005, Fleetwood Enterprises, Inc. eliminated \$128 million

of intercompany sales from consolidated revenues. Moreover, it was difficult to compare the performance of the Housing Group because the company made \$27 million of sales to its own retail stores in the fourth quarter last year in which a majority of these stores were closed.<sup>3</sup>

As explained in the discussion of unrealized intercompany profit in inventory, as a matter of workpaper procedure, the noncontrolling interest in net assets (or equity) is adjusted for intercompany gains (losses) by debiting (decrease in noncontrolling interest) or crediting (increase in noncontrolling interest) the beginning NCI balance.

To reduce repetition and conserve space, we do not present the three methods (cost, partial equity, and complete equity) in standalone sections in Chapters 7 through 10 to the same extent as in earlier chapters. In Chapters 7 and 10, the cost and partial equity methods are quite similar (under the assumptions in our presentation), while the complete equity method is different. In Chapters 8 and 9, in contrast, the partial and complete equity methods are similar, while the cost method is different. Thus, in the following section, we combine the presentation of the cost and partial equity methods. Worksheets are presented separately.

<sup>3</sup> PRNewswire—FirstCall via COMTEX News Network, Riverside, California, 5/4/06.

## 7.3 CONSOLIDATED STATEMENTS WORKPAPER—COST AND PARTIAL EQUITY METHODS

### Subsidiary Is Intercompany Seller (Upstream Sale)



COST



PARTIAL

Assume that P Company acquires an 85% interest in S Company for \$1,190,000 in 2012, when the retained earnings and capital stock of S Company amount to \$400,000 and \$1,000,000, respectively. The retained earnings of S Company on January 1, 2014, are \$666,000. On January 1, 2014, S Company sells P Company equipment with a book value of \$500,000 (original cost of \$800,000 and accumulated depreciation of \$300,000) for \$600,000. On January 1, 2014, the equipment has an estimated remaining useful life of five years and is depreciated using the straight-line method. S Company will record a gain of \$100,000 on the sale of the equipment, and each year P Company will record depreciation that is \$20,000  $[(\$600,000 - \$500,000)/5 \text{ years}]$  greater than depreciation based on the cost of the equipment to the consolidated group. Consolidated statements workpapers for the years ended December 31, 2014, and December 31, 2015, are presented in Illustrations 7-4A and 7-5A, respectively, assuming the use of the *cost* method by P Company to account for its investment in S Company. Consolidated statements workpapers for the years ended December 31, 2014, and December 31, 2015, are presented in Illustrations 7-4B and 7-5B, respectively, assuming the use of the *partial equity* method by P Company to account for its investment in S Company.

**LO 6** Workpaper entries—upstream sales.

The balances reported by the parent company in income, in retained earnings, and in the investment account differ depending on the method used by the parent company to record its investment. As illustrated in prior chapters, however, the method used by the parent company to record its investment has no effect on the *consolidated* balances.

Also as illustrated in earlier chapters, when the parent company records its investment using the partial equity method, a workpaper entry to reverse the effect of parent company entries during the year for subsidiary dividends and income replaces the cost method entries to establish reciprocity (convert to equity) and to eliminate dividend income. However, as demonstrated in Chapters 5 and 6, the workpaper entries to allocate the difference between implied and book value, to record additional amortization, depreciation, and/or impairment on differences between market and book values, to eliminate intercompany sales, and to eliminate unrealized intercompany profit are the same regardless of whether the investment is recorded using the cost method or the partial equity method. The workpapers entries to eliminate the effects of intercompany sales of equipment are also the same when the parent uses the partial equity or the cost method. Therefore, to conserve space and avoid excessive repetition, we discuss the workpaper entries for the cost and partial equity methods together in the following section. When the investment is recorded using the complete equity method, however, the workpaper entries differ slightly, as illustrated in the next section.

### Consolidated Statements Workpaper Entries—December 31, 2014 (Year of Intercompany Sale)



COST



PARTIAL

Workpaper entries in Illustrations 7-4A and 7-4B are presented in general journal form as follows:

|  |         |         |
|--|---------|---------|
| (1) Investment in S Company  | 226,100 |         |
| Beginning Retained Earnings—P Company  |         | 226,100 |
| To convert to equity/establish reciprocity $[\.85 \times (\$666,000 - \$400,000) = \$226,100]$ . |         |         |

Entry (1) above is needed only for firms using the cost method to account for their investments in the subsidiary. This distinction is particularly easy to remember if the entry is thought of as the entry to convert to equity. If the parent is already using the equity method, there is no need to convert to equity. Thus, in Illustration 7-4B, entry (1) above is replaced with an entry eliminating the equity in subsidiary income of \$122,400  $(85\% \times \$144,000)$

against the investment account. Unless noted, the following workpaper entries are the same whether the parent uses the cost method or the partial equity method.

|     |  |           |           |
|-----|--|-----------|-----------|
| (2) | Gain on Sale of Equipment  | 100,000   |           |
|     | Property and Equipment (\$800,000 – 600,000)   | 200,000   |           |
|     | Accumulated Depreciation   |           | 300,000   |
|     | To eliminate the unrealized gain recorded on intercompany sale of equipment (\$100,000) and restore equipment to its original cost (and accumulated depreciation to its balance at the date of the intercompany sale). |           |           |
| (3) | Accumulated Depreciation   | 20,000    |           |
|     | Depreciation Expense   |           | 20,000    |
|     | To adjust depreciation on equipment sold to affiliate, thus realizing a portion of the gain through usage (\$100,000/5 years = \$20,000).  |           |           |
| (4) | Beginning Retained Earnings—S Company  | 666,000   |           |
|     | Capital Stock—S Company  | 1,000,000 |           |
|     | Investment in S Company (\$1,190,000 + \$226,100)  |           | 1,416,100 |
|     | NCI in Equity [\$210,000 + .15 (\$666,000 – \$400,000)]  |           | 249,000   |
|     | To eliminate investment account against underlying equity accounts of S Company, and recognize NCI.  |           |           |

Since the selling affiliate is a partially owned subsidiary (upstream sale), the calculation of the noncontrolling interest in consolidated net income is modified by subtracting the amount of the gain recognized by the subsidiary and adding the amount of the gain considered to be realized (through depreciation) to the reported net income of the subsidiary [ $.15 \times (\$144,000 - \$100,000 + \$20,000) = \$9,600$ ].

#### Noncontrolling Interest in Consolidated Net Income



|   |         |   |                 |
|---|---------|---|-----------------|
| Unrealized gain on intercompany (upstream) sale | 100,000 | Internally generated income of S Company              | \$144,000       |
|   |         | Gain realized through usage (depreciation adjustment) | <u>20,000</u>   |
|   |         | Adjusted income of subsidiary                         | \$ 64,000       |
|   |         | Noncontrolling percentage                             | × 15%           |
|   |         | Noncontrolling interest in income                     | <u>\$ 9,600</u> |

Note that the \$9,600 appears in Illustration 7-4A as the noncontrolling interest in income.

If the sale of the equipment had been *downstream* rather than *upstream*, the amount of subsidiary income included in consolidated net income would not be affected by the workpaper entries related to unrealized intercompany gain and no adjustment would be necessary in the calculation of the noncontrolling interest in consolidated net income. Instead the *controlling* interest would be affected as indicated in bold type in the following t-account:

#### Controlling Interest in Consolidated Net Income

|   |           |  |                  |
|---|-----------|--|------------------|
| Unrealized gain on intercompany (downstream) sale | <b>XX</b> | Internally generated income of P Company   | \$300,000        |
|   |           | <b>Realization of gain through usage (depreciation adjustment)</b>                                     | <b>XX</b>        |
|   |           | Other needed adjustments (see Chapters 5–6)  | XX               |
|   |           | Percentage of Subsidiary adjusted income or (ownership percentage) × (subsidiary income) .85(\$64,000) | \$ 54,400        |
|   |           | Controlling interest in income   | <u>\$354,400</u> |

(85%)  
(64,000)

| Cost Method                                 |                    | ILLUSTRATION 7-4A                    |                  |                  |                         |                       |
|---|--------------------|--------------------------------------|------------------|------------------|-------------------------|-----------------------|
| 85% Owned Subsidiary                        |                    | Consolidated Statements Workpaper    |                  |                  |                         |                       |
| Upstream Sale of Equipment                  |                    | P Company and Subsidiary             |                  |                  |                         |                       |
| Year of Sale                                |                    | for the Year Ended December 31, 2014 |                  |                  |                         |                       |
| Income Statement                            | P                  | S                                    | Eliminations     |                  | Noncontrolling Interest | Consolidated Balances |
|   | Company            | Company                              | Dr.              | Cr.              |                         |                       |
| Sales                                       | 3,500,000          | 2,000,000                            |                  |                  |                         | 5,500,000             |
| Gain on Sale of Equipment                   |                    | 100,000                              | (2)              | 100,000          |                         |                       |
| Total Revenue                               | <u>3,500,000</u>   | <u>2,100,000</u>                     |                  |                  |                         | <u>5,500,000</u>      |
| Cost of Sales                               | 1,800,000          | 1,130,000                            |                  |                  |                         | 2,930,000             |
| Depreciation Expense                        | 380,000            | 330,000                              |                  | (3)              | 20,000                  | 690,000               |
| Income Tax Expense                          | 200,000            | 96,000                               |                  |                  |                         | 296,000               |
| Other Expense                               | 820,000            | 400,000                              |                  |                  |                         | 1,220,000             |
| Total Cost and Expense                      | <u>3,200,000</u>   | <u>1,956,000</u>                     |                  |                  |                         | <u>5,136,000</u>      |
| Net/Consolidated Income                     | 300,000            | 144,000                              |                  |                  |                         | 364,000               |
| Noncontrolling Interest in Income           |                    |                                      |                  |                  |                         | 9,600*                |
| Net Income to Retained Earnings             | <u>300,000</u>     | <u>144,000</u>                       | <u>100,000</u>   | <u>20,000</u>    | <u>9,600</u>            | <u>354,400</u>        |
| <i>Retained Earnings Statement</i>          |                    |                                      |                  |                  |                         |                       |
| 1/1 Retained Earnings                       |                    |                                      |                  |                  |                         |                       |
| P Company                                   | 1,500,000          |                                      |                  | (1)              | 226,100                 | 1,726,100             |
| S Company                                   |                    | 666,000                              | (4)              | 666,000          |                         |                       |
| Net Income from above                       | <u>300,000</u>     | <u>144,000</u>                       | <u>100,000</u>   | <u>20,000</u>    | <u>9,600</u>            | <u>354,400</u>        |
| 12/31 Retained Earnings to Balance Sheet    | <u>1,800,000</u>   | <u>810,000</u>                       | <u>766,000</u>   | <u>246,100</u>   | <u>9,600</u>            | <u>2,080,500</u>      |
| <i>Balance Sheet</i>                        |                    |                                      |                  |                  |                         |                       |
| Current Assets                              | 1,000,000          | 570,000                              |                  |                  |                         | 1,570,000             |
| Investment in S Company                     | 1,190,000          |                                      | (1)              | 226,100          | (4)                     | 1,416,100             |
| Land  | 1,000,000          | 200,000                              |                  |                  |                         | 1,200,000             |
| Property and Equipment                      | 3,800,000          | 2,700,000                            | (2)              | 200,000          |                         | 6,700,000             |
| (Accumulated Depreciation)                  | <u>(1,520,000)</u> | <u>(960,000)</u>                     | (3)              | 20,000           | (2)                     | <u>300,000</u>        |
| Total Assets                                | <u>5,470,000</u>   | <u>2,510,000</u>                     |                  |                  |                         | <u>6,710,000</u>      |
| Liabilities                                 | 670,000            | 700,000                              |                  |                  |                         | 1,370,000             |
| Capital Stock                               |                    |                                      |                  |                  |                         |                       |
| P Company                                   | 3,000,000          |                                      |                  |                  |                         | 3,000,000             |
| S Company                                   |                    | 1,000,000                            | (4)              | 1,000,000        |                         |                       |
| Retained Earnings from above                | <u>1,800,000</u>   | <u>810,000</u>                       | <u>766,000</u>   | <u>246,100</u>   | <u>9,600</u>            | <u>2,080,500</u>      |
| 1/1 Noncontrolling Interest in Net Assets** |                    |                                      |                  |                  | (4)                     | 249,900               |
| 12/31 Noncontrolling Interest               |                    |                                      |                  |                  |                         | <u>259,500</u>        |
| Total Liabilities and Equity                | <u>5,470,000</u>   | <u>2,510,000</u>                     | <u>2,212,100</u> | <u>2,212,100</u> |                         | <u>6,710,000</u>      |

\*  $.15 \times (\$144,000 - \$100,000 + \$20,000) = \$9,600$ .

\*\*  $\$210,000 + .15 \times (\$666,000 - \$400,000) = \$249,900$ .

(1) To convert to equity/establish reciprocity [ $.85 \times (\$666,000 - \$400,000) = \$226,100$ ].

(2) To eliminate the unrealized gain recorded on intercompany sale of equipment (\$100,000) and restore equipment to its original cost (and accumulated depreciation to its balance at the date of the intercompany sale).

(3) To adjust depreciation on equipment sold to affiliate, thus realizing a portion of the gain through usage ( $\$100,000/5 \text{ years} = \$20,000$ ).

(4) To eliminate investment account against underlying equity accounts of S Company and create noncontrolling interest account.

## Partial Equity Method

## ILLUSTRATION 7-4B

85% Owned Subsidiary

## Consolidated Statements Workpaper

Upstream Sale of Equipment

## P Company and Subsidiary

Year of Sale

for Year Ended December 31, 2014

| Income Statement                               | P<br>Company       | S<br>Company     | Eliminations     |                  | Noncontrolling<br>Interest | Consolidated<br>Balances |
|--|--------------------|------------------|------------------|------------------|----------------------------|--------------------------|
|  |                    |                  | Dr.              | Cr.              |                            |                          |
| Sales  | 3,500,000          | 2,000,000        |                  |                  |                            | 5,500,000                |
| Equity in Subsidiary Income                    | 122,400            |                  | (1)              | 122,400          |                            |                          |
| Gain on Sale of Equipment                      |                    | 100,000          | (2)              | 100,000          |                            |                          |
| Total Revenue                                  | <u>3,622,400</u>   | <u>2,100,000</u> |                  |                  |                            | <u>5,500,000</u>         |
| Cost of Sales                                  | 1,800,000          | 1,130,000        |                  |                  |                            | 2,930,000                |
| Depreciation Expense                           | 380,000            | 330,000          |                  | (3)              | 20,000                     | 690,000                  |
| Income Tax Expense                             | 200,000            | 96,000           |                  |                  |                            | 296,000                  |
| Other Expense                                  | 820,000            | 400,000          |                  |                  |                            | 1,220,000                |
| Total Cost and Expense                         | <u>3,200,000</u>   | <u>1,956,000</u> |                  |                  |                            | <u>5,136,000</u>         |
| Net/Consolidated Income                        | 422,400            | 144,000          |                  |                  |                            | 364,000                  |
| Noncontrolling Interest in<br>Income           |                    |                  |                  |                  | 9,600*                     | 9,600                    |
| Net Income to Retained Earnings                | <u>422,400</u>     | <u>144,000</u>   | <u>222,400</u>   | <u>20,000</u>    | <u>9,600</u>               | <u>354,400</u>           |
| <i>Retained Earnings Statement</i>             |                    |                  |                  |                  |                            |                          |
| 1/1 Retained Earnings                          |                    |                  |                  |                  |                            |                          |
| P Company                                      | 1,726,100          |                  |                  |                  |                            | 1,726,100                |
| S Company                                      |                    | 666,000          | (4)              | 666,000          |                            |                          |
| Net Income from above                          | <u>422,400</u>     | <u>144,000</u>   | <u>222,400</u>   | <u>20,000</u>    | <u>9,600</u>               | <u>354,400</u>           |
| 12/31 Retained Earnings to<br>Balance Sheet    | <u>2,148,500</u>   | <u>810,000</u>   | <u>888,400</u>   | <u>20,000</u>    | <u>9,600</u>               | <u>2,080,500</u>         |
| <i>Balance Sheet</i>                           |                    |                  |                  |                  |                            |                          |
| Current Assets                                 | 1,000,000          | 570,000          |                  |                  |                            | 1,570,000                |
| Investment in S Company**                      | 1,538,500          |                  |                  | (1)              | 122,400                    |                          |
|  |                    |                  |                  | (4)              | 1,416,100                  |                          |
| Land   | 1,000,000          | 200,000          |                  |                  |                            | 1,200,000                |
| Property and Equipment                         | 3,800,000          | 2,700,000        | (2)              | 200,000          |                            | 6,700,000                |
| (Accumulated Depreciation)                     | <u>(1,520,000)</u> | <u>(960,000)</u> | (3)              | 20,000           | (2)                        | 300,000                  |
| Total Assets                                   | <u>5,818,500</u>   | <u>2,510,000</u> |                  |                  |                            | <u>6,710,000</u>         |
| Liabilities                                    | 670,000            | 700,000          |                  |                  |                            | 1,370,000                |
| Capital Stock                                  |                    |                  |                  |                  |                            |                          |
| P Company                                      | 3,000,000          |                  |                  |                  |                            | 3,000,000                |
| S Company                                      |                    | 1,000,000        | (4)              | 1,000,000        |                            |                          |
| Retained Earnings from above                   | <u>2,148,500</u>   | <u>810,000</u>   | <u>888,400</u>   | <u>20,000</u>    | <u>9,600</u>               | <u>2,080,500</u>         |
| 1/1 Noncontrolling Interest<br>in Net Assets** |                    |                  |                  | (4)              | 249,900                    | 249,900                  |
| 12/31 Noncontrolling Interest                  |                    |                  |                  |                  | <u>259,500</u>             | <u>259,500</u>           |
| Total Liabilities and Equity                   | <u>5,818,500</u>   | <u>2,510,000</u> | <u>2,108,400</u> | <u>2,108,400</u> |                            | <u>6,710,000</u>         |

\*  $.15 \times (\$144,000 - \$100,000 + \$20,000) = \$9,600$ .\*\* The investment account equals  $\$1,190,000 + 85\%$  of the increase in S Company's Retained Earnings from the date of acquisition to the beginning of the year  $(\$666,000 - 400,000)$  plus the current period's equity in subsidiary income  $(\$122,400)$ .\*\*\*  $\$210,000 + .15 \times (\$666,000 - \$400,000) = \$249,900$ .

(1) To eliminate equity in subsidiary income and intercompany dividends, if any.

(2) To eliminate the unrealized gain recorded on intercompany sale of equipment and restore equipment to its original cost (and accumulated depreciation to its balance at the date of the intercompany sale).

(3) To adjust depreciation on equipment sold to affiliate, thus realizing a portion of gain through usage  $(\$100,000/5 \text{ years} = \$20,000)$ .

(4) To eliminate investment account against the underlying equity accounts of S Company and create noncontrolling interest account.



## Consolidated Statements Workpaper Entries—December 31, 2015 (Year Subsequent to Intercompany Sale)

Workpaper entries in Illustrations 7-5A and 7-5B are presented in general journal form for the year subsequent to the intercompany sale as follows:

|  |         |         |
|--|---------|---------|
| (1) Investment in S Company  | 348,500 |         |
| Beginning Retained Earnings—P Company  |         | 348,500 |
| To convert to equity/establish reciprocity [ $.85 \times (\$810,000 - \$400,000)$ ]. |         |         |

As in the previous year, entry (1) above is needed only for firms using the cost method to account for their investments in the subsidiary. If the parent is already using the equity method, there is no need to convert to equity. In Illustration 7-5B, entry (1) is replaced by an entry once again eliminating equity in subsidiary income against the investment account.

|   |         |         |
|---|---------|---------|
| (2) Beginning Retained Earnings—P Company   |         |         |
| (100,000 $\times$ .85)  | 85,000  |         |
| Beginning NCI   |         |         |
| (100,000 $\times$ .15)  | 15,000  |         |
| Property and Equipment (800,000 – 600,000)  | 200,000 |         |
| Accumulated Depreciation  |         | 300,000 |
| To reduce the controlling and noncontrolling interests for their shares of unrealized intercompany gain (\$100,000), and to restore equipment and accumulated depreciation to their original balances at the date of the intercompany sale. |         |         |



COST



PARTIAL

|   |        |        |
|---|--------|--------|
| (3) Accumulated Depreciation  | 40,000 |        |
| Depreciation Expense (current year)   |        | 20,000 |
| Beginning Retained Earnings—P Company   |        |        |
| (20,000 $\times$ .85)   |        | 17,000 |
| Beginning NCI   |        |        |
| (20,000 $\times$ .15)   |        | 3,000  |
| To reverse amount of excess depreciation recorded during current year and prior year and to recognize intercompany gain realized through usage. |        |        |

|  |           |           |
|--|-----------|-----------|
| (4) Beginning Retained Earnings—S Company  | 810,000   |           |
| Capital Stock—S Company  | 1,000,000 |           |
| Investment in S Company  |           |           |
| (\$1,190,000 + \$348,500)  |           | 1,538,500 |
| NCI (210,000 + .15 (810,000 – 400,000))  |           | 271,500   |
| To eliminate investment account against the underlying equity accounts of S Company. |           |           |

The noncontrolling interest recognized in entry (4) above is calculated as the sum of the NCI at acquisition plus 15% of the increase in subsidiary retained earnings from acquisition to the beginning of the current year. The noncontrolling interest in consolidated income is calculated after adding the portion of the gain considered realized during the year to the net income reported by the subsidiary [ $.15 \times (\$162,000 + \$20,000) = \$27,300$ ].

### Noncontrolling Interest in Income (year subsequent to sale)

|   |                  |
|---|------------------|
| Internally generated income of S Company              | \$162,000        |
| Gain realized through usage (depreciation adjustment) | 20,000           |
|   | <u>182,000</u>   |
| Adjusted income of subsidiary                         | \$182,000        |
| Noncontrolling percentage                             | $\times 15\%$    |
| Noncontrolling interest in income                     | <u>\$ 27,300</u> |

## Cost Method

## ILLUSTRATION 7-5A

85% Owned Subsidiary

## Consolidated Statements Workpaper

Upstream Sale of Equipment

## P Company and Subsidiary

Year Subsequent to Sale

## for the Year Ended December 31, 2015

| Income Statement                               | P<br>Company | S<br>Company | Eliminations  |               | Noncontrolling<br>Interest | Consolidated<br>Balances |
|--|--------------|--------------|---------------|---------------|----------------------------|--------------------------|
|  |              |              | Dr.           | Cr.           |                            |                          |
| Sales  | 4,000,000    | 2,200,000    |               |               |                            | 6,200,000                |
| Cost of Sales                                  | 2,100,000    | 1,180,000    |               |               |                            | 3,280,000                |
| Depreciation Expense                           | 380,000      | 330,000      |               | (3) 20,000    |                            | 690,000                  |
| Income Tax Expense                             | 272,000      | 108,000      |               |               |                            | 380,000                  |
| Other Expense                                  | 840,000      | 420,000      |               |               |                            | 1,260,000                |
| Total Cost and Expense                         | 3,592,000    | 2,038,000    |               |               |                            | 5,610,000                |
| Net/Consolidated Income                        | 408,000      | 162,000      |               |               |                            | 590,000                  |
| Noncontrolling Interest<br>in Income           |              |              |               |               | 27,300*                    | 27,300                   |
| Net Income to Retained<br>Earnings             | 408,000      | 162,000      | —0—           | 20,000        | 27,300                     | 562,700                  |
| <i>Retained Earnings Statement</i>             |              |              |               |               |                            |                          |
| 1/1 Retained Earnings                          |              |              |               |               |                            |                          |
| P Company                                      | 1,800,000    |              | (2) 85,000    | (1) 348,500   |                            | 2,080,500                |
| S Company                                      |              | 810,000      | (4) 810,000   | (3) 17,000    |                            |                          |
| Net Income from above                          | 408,000      | 162,000      | —0—           | 20,000        | 27,300                     | 562,700                  |
| 12/31 Retained Earnings to<br>Balance Sheet    | 2,208,000    | 972,000      | 895,000       | 385,500       | 27,300                     | 2,643,200                |
| <i>Balance Sheet</i>                           |              |              |               |               |                            |                          |
| Current Assets                                 | 1,190,000    | 790,000      |               |               |                            | 1,980,000                |
| Investment in S Company                        | 1,190,000    |              | (1) 348,500   | (4) 1,538,500 |                            |                          |
| Land   | 1,600,000    | 200,000      |               |               |                            | 1,800,000                |
| Property and Equipment                         | 3,800,000    | 2,700,000    | (2) 200,000   |               |                            | 6,700,000                |
| (Accumulated Depreciation)                     | (1,900,000)  | (1,290,000)  | (3) 40,000    | (2) 300,000   |                            | (3,450,000)              |
| Total Assets                                   | 5,880,000    | 2,400,000    |               |               |                            | 7,030,000                |
| Liabilities                                    | 672,000      | 428,000      |               |               |                            | 1,100,000                |
| Capital Stock                                  |              |              |               |               |                            |                          |
| P Company                                      | 3,000,000    |              |               |               |                            | 3,000,000                |
| S Company                                      |              | 1,000,000    | (4) 1,000,000 |               |                            |                          |
| Retained Earnings from above                   | 2,208,000    | 972,000      | 895,000       | 385,500       | 27,300                     | 2,643,200                |
| 1/1 Noncontrolling Interest<br>in Net Assets** |              |              | (2) 15,000    | (4) 271,500   |                            |                          |
|  |              |              |               | (3) 3,000     | 259,500                    |                          |
| 12/31 Noncontrolling Interest<br>in Net Assets |              |              |               |               | 286,800                    | 286,800                  |
| Total Liabilities and Equity                   | 5,880,000    | 2,400,000    | 2,498,500     | 2,498,500     |                            | 7,030,000                |

\*  $.15 \times (\$162,000 + \$20,000) = \$27,300$ .\*\*  $\$210,000 + .15 \times (\$810,000 - \$400,000) = \$271,500$ .(1) To convert to equity/establish reciprocity as of 1/1/15 [ $.85 \times (\$810,000 - \$400,000)$ ].

(2) To reduce controlling and noncontrolling interests for their shares of unrealized intercompany gain and to restore equipment and accumulated depreciation to their original balances.

(3) To reverse amount of excess depreciation recorded during current year and prior year and to recognize intercompany gain realized through usage.

(4) To eliminate investment account and create noncontrolling interest account.

| Partial Equity Method                       |                    | ILLUSTRATION 7-5B                    |                  |                  |                         |                       |
|---|--------------------|--------------------------------------|------------------|------------------|-------------------------|-----------------------|
| 85% Owned Subsidiary                        |                    | Consolidated Statements Workpaper    |                  |                  |                         |                       |
| Upstream Sale of Equipment                  |                    | P Company and Subsidiary             |                  |                  |                         |                       |
| Year Subsequent to Sale                     |                    | for the Year Ended December 31, 2015 |                  |                  |                         |                       |
| Income Statement                            | P                  | S                                    | Eliminations     |                  | Noncontrolling Interest | Consolidated Balances |
|   | Company            | Company                              | Dr.              | Cr.              |                         |                       |
| Sales                                       | 4,000,000          | 2,200,000                            |                  |                  |                         | 6,200,000             |
| Equity Income                               | 137,700            |                                      | (1)              | 137,700          |                         |                       |
| Total Revenue                               | <u>4,137,700</u>   | <u>2,200,000</u>                     |                  |                  |                         | 6,200,000             |
| Cost of Sales                               | 2,100,000          | 1,180,000                            |                  |                  |                         | 3,280,000             |
| Depreciation Expense                        | 380,000            | 330,000                              |                  | (3) 20,000       |                         | 690,000               |
| Income Tax Expense                          | 272,000            | 108,000                              |                  |                  |                         | 380,000               |
| Other Expense                               | 840,000            | 420,000                              |                  |                  |                         | 1,260,000             |
| Total Cost and Expense                      | <u>3,592,000</u>   | <u>2,038,000</u>                     |                  |                  |                         | 5,610,000             |
| Net/Consolidated Income                     | 545,700            | 162,000                              |                  |                  |                         | 590,000               |
| Noncontrolling Interest in Income           |                    |                                      |                  |                  | 27,300*                 | 27,300                |
| Net Income to Retained Earnings             | <u>545,700</u>     | <u>162,000</u>                       | <u>137,700</u>   | <u>20,000</u>    | <u>27,300</u>           | <u>562,700</u>        |
| <b>Retained Earnings Statement</b>          |                    |                                      |                  |                  |                         |                       |
| 1/1 Retained Earnings                       |                    |                                      |                  |                  |                         |                       |
| P Company                                   | 2,148,500          |                                      | (2) 85,000       | (3) 17,000       |                         | 2,080,500             |
| S Company                                   |                    | 810,000                              | (4) 810,000      |                  |                         |                       |
| Net Income from above                       | <u>545,700</u>     | <u>162,000</u>                       | <u>137,700</u>   | <u>20,000</u>    | <u>27,300</u>           | <u>562,700</u>        |
| 12/31 Retained Earnings to Balance Sheet    | <u>2,694,200</u>   | <u>972,000</u>                       | <u>1,032,700</u> | <u>37,000</u>    | <u>27,300</u>           | <u>2,643,200</u>      |
| <b>Balance Sheet</b>                        |                    |                                      |                  |                  |                         |                       |
| Current Assets                              | 1,190,000          | 790,000                              |                  |                  |                         | 1,980,000             |
| Investment in S Company                     | 1,676,200          |                                      |                  | (1) 137,700      |                         |                       |
|   |                    |                                      |                  | (4) 1,538,500    |                         |                       |
| Land  | 1,600,000          | 200,000                              |                  |                  |                         | 1,800,000             |
| Property and Equipment                      | 3,800,000          | 2,700,000                            | (2) 200,000      |                  |                         | 6,700,000             |
| (Accumulated Depreciation)                  | <u>(1,900,000)</u> | <u>(1,290,000)</u>                   | (3) 40,000       | (2) 300,000      |                         | <u>(3,450,000)</u>    |
| Total Assets                                | <u>6,366,200</u>   | <u>2,400,000</u>                     |                  |                  |                         | <u>7,030,000</u>      |
| Liabilities                                 | 672,000            | 428,000                              |                  |                  |                         | 1,100,000             |
| Capital Stock                               |                    |                                      |                  |                  |                         |                       |
| P Company                                   | 3,000,000          |                                      |                  |                  |                         | 3,000,000             |
| S Company                                   |                    | 1,000,000                            | (4) 1,000,000    |                  |                         |                       |
| Retained Earnings from above                | 2,694,200          | 972,000                              | 1,032,700        | 37,000           | 27,300                  | 2,643,200             |
| 1/1 Noncontrolling Interest in Net Assets** |                    |                                      | (2) 15,000       | (4) 271,500      |                         |                       |
|   |                    |                                      |                  | (3) 3,000        | 259,500                 |                       |
| 12/31 Noncontrolling Interest in Net Assets |                    |                                      |                  |                  | <u>286,800</u>          | <u>286,800</u>        |
| Total Liabilities and Equity                | <u>6,366,200</u>   | <u>2,400,000</u>                     | <u>2,287,700</u> | <u>2,287,700</u> |                         | <u>7,030,000</u>      |

\*  $.15 \times (\$162,000 + \$20,000) = \$27,300$ .

\*\*  $\$210,000 + .15 \times (\$810,000 - \$400,000) = \$271,500$ .

(1) To eliminate equity in subsidiary income and intercompany dividends, if any.

(2) To reduce controlling and noncontrolling interests for their shares of unrealized intercompany gain and to restore equipment and accumulated depreciation to their original balances.

(3) To reverse amount of excess depreciation recorded during current and prior year and to recognize intercompany gain realized through usage.

(4) To eliminate investment account and create noncontrolling interest account.

**ILLUSTRATION 7-6****Calculation of the Noncontrolling Interest in Consolidated Net Assets**

|   |           |                |
|---|-----------|----------------|
| Capital Stock—S Company   |           | \$1,000,000    |
| Realized Retained Earnings—S Company                                      |           |                |
| Reported Retained Earnings  | \$972,000 |                |
| Unrealized Intercompany Profit on 12/31/15<br>(\$100,000 – \$20,000 ÷ 2)  | (60,000)  | <u>912,000</u> |
| Realized Net Assets—S Company   |           | \$1,912,000    |
| Noncontrolling Ownership Percentage                                       |           | <u>15%</u>     |
| Noncontrolling Interest in Consolidated Net<br>Assets (.15 × \$1,912,000) |           | \$ 286,800     |

The net effect of the adjustments to the noncontrolling interest in the income statement and retained earnings sections of the consolidated statements workpaper for upstream sales also serves to adjust the noncontrolling interest in consolidated net assets. The amount of the noncontrolling interest reported in the consolidated balance sheet is based on the net assets of the subsidiary that have been realized in transactions with third parties. For example, the amount of the noncontrolling interest in consolidated net assets shown in Illustrations 7-5A and 7-5B is calculated in Illustration 7-6.

**Disposal of Property and Equipment by Purchasing Affiliate****LO 9** Disposal of Property and Equipment by purchaser.

Assume that on January 1, 2016, P Company sells the equipment it purchased from S Company to a party outside the affiliated group for \$400,000. The recorded and consolidated book values of the equipment on January 1, 2016, are calculated in Illustration 7-7. P Company will record a \$40,000 gain on the sale of the equipment to the party outside the affiliated group, calculated as:



COST



PARTIAL

|                                      |                |
|--------------------------------------|----------------|
| Selling price                        | \$400,000      |
| Book value (on P Company's books)    | <u>360,000</u> |
| Gain on sale (recorded by P Company) | 40,000         |

The following entry is made on the books of P Company to record the sale:

**P Company Books (Cost or Partial Equity Method)**

|                           |         |               |
|---------------------------|---------|---------------|
| Cash                      | 400,000 |               |
| Accumulated Depreciation  | 240,000 |               |
| Property and Equipment    |         | 600,000       |
| Gain on Sale of Equipment |         | <u>40,000</u> |

**ILLUSTRATION 7-7****Calculation of Book Value of Equipment on January 1, 2016**

| <i>On Books of P Company</i>  |                  |
|---|------------------|
| Cost (to P Company)   | \$600,000        |
| Accumulated Depreciation [(\$600,000/5) × 2]                                  | <u>240,000</u>   |
| Recorded Book Value—January 1, 2016   | <u>\$360,000</u> |
| <i>Consolidated</i>   |                  |
| Cost (original cost to S Company)   | \$800,000        |
| Accumulated Depreciation [\$300,000 +<br>(((\$800,000 ÷ 2 \$300,000)/5) × 2)] | <u>500,000</u>   |
| Consolidated Book Value—January 1, 2016                                       | <u>\$300,000</u> |

**ILLUSTRATION 7-8****Reconciliation of Income Recorded on Books with Income Reported on Consolidated Financial Statements**

|  |                  |
|--|------------------|
| Amount of profit recorded by affiliates                        |                  |
| 2014—Gain on sale from S Company to P Company                  | \$100,000        |
| 2016—Gain on sale by P Company to nonaffiliate                 | 40,000           |
| Additional depreciation expense recorded by affiliates:        |                  |
| 2014   | (20,000)         |
| 2015   | (20,000)         |
| Net amount of profit recorded by affiliates                    | <u>\$100,000</u> |
| Amount of profit realized in the consolidated income statement |                  |
| Selling price to the consolidated entity                       | \$400,000        |
| Book value to the consolidated entity                          | 300,000          |
| Net amount of profit to the consolidated entity                | <u>\$100,000</u> |

However, the consolidated book value of the equipment on the date of the sale by P Company is only \$300,000, and from the point of view of the consolidated entity a \$100,000 gain on the sale (selling price of \$400,000 minus book value to consolidated entity of \$300,000) should be recognized. The entry on the December 31, 2016, consolidated statements workpaper necessary to achieve this result follows:



|   |        |        |
|---|--------|--------|
| Beginning Retained Earnings—P Company   |        |        |
| (.85 × \$60,000)  | 51,000 |        |
| Beginning NCI (.15 × \$60,000)  | 9,000  |        |
| Gain on Sale of Equipment   |        | 60,000 |
| To adjust reported gain on the sale of equipment by P Company to third party from \$40,000 recorded by P Company to \$100,000 to be reported on the consolidated statement. |        |        |

The above entry also serves to adjust the controlling and noncontrolling interests for their share of unrealized intercompany gain at beginning of year (\$100,000 original gain minus \$40,000 realized through usage [\$20,000 in 2014 and \$20,000 in 2015] = \$60,000).

Note that the entry does not include any adjustment to equipment or accumulated depreciation after the disposal, as these accounts are accurately reflected at zero. Also, it is not necessary to calculate the \$60,000 adjustment to the controlling and noncontrolling interests directly in the above entry as it will always equal the gain adjustment. From a consolidated point of view, the amount of gain recorded by the selling affiliate will always be understated (or the amount of loss recorded will always be overstated) by an amount that is equal to the unrealized intercompany gain associated with the equipment on the date of its premature disposal.

After December 31, 2016, no more book or workpaper entries relating to this equipment will be required, because by that date the amount of gain recorded by the affiliates is equal to the amount of gain considered realized in the consolidated financial statements. The equality of the recorded and consolidated amounts is confirmed in Illustration 7-8.

## 7.4 CALCULATION OF CONSOLIDATED NET INCOME AND CONSOLIDATED RETAINED EARNINGS

In Chapter 6, the t-account calculation of the controlling and noncontrolling interests in consolidated net income was refined to accommodate the effect of unrealized intercompany profit in inventory. We now refine it further to include unrealized gain or loss on intercompany sales of equipment.

## Consolidated Net Income

**LO 8** Consolidated net income—  
computation and allocation.

After modification for the effects of unrealized intercompany profit, consolidated net income was calculated in Chapter 6 as the parent company's income from its independent operations that has been realized in transactions with third parties plus (minus) subsidiary income (loss) that has been realized in transactions with third parties plus or minus adjustments for the period relating to the depreciation, amortization, or impairment of differences between implied and book values.

On the basis of Illustration 7-4A, the t-account calculations of the noncontrolling and controlling interests in consolidated net income for the year ended December 31, 2014, are demonstrated in Illustration 7-9. The amount of controlling interest in consolidated net income calculated in Illustration 7-9 is the same as that shown in the consolidated statements workpaper in Illustration 7-4A.

On the basis of Illustration 7-5A, the t-account allocation of consolidated net income for the year ended December 31, 2015, is presented in Illustration 7-10. The sum of the controlling and noncontrolling interests in consolidated net income calculated in Illustration 7-10 is, of course, the same as that shown as consolidated net income in the consolidated statements workpaper in Illustration 7-5A.

## Consolidated Retained Earnings

Consolidated retained earnings were calculated in Chapter 6 as the parent company's cost method retained earnings that have been realized in transactions with third parties plus (minus) the parent company's share of the increase (decrease) in subsidiary retained earnings that has been realized in transactions with third parties from the date of acquisition to the current date plus or minus the cumulative effect of adjustments to date relating to the depreciation, amortization, and impairment of differences between implied and book values.

### ILLUSTRATION 7-9

#### Calculation of Controlling and Noncontrolling Interests in Net Income for Year Ended December 31, 2014 Year of Intercompany Sale of Equipment

| Noncontrolling Interest in Consolidated Income—Year 2014                |         |   |                 |
|---|---------|---|-----------------|
|   |         | Internally generated income of S Company  | \$144,000       |
| Unrealized profit on upstream sales in ending inventory                 | 0       | Gain realized through usage (depreciation adjustment)                                   | 20,000          |
| Unrealized gain on 2014 intercompany sale of equipment (upstream sales) | 100,000 | Realized profit (upstream sales) from beginning inventory                               | 0               |
| Amortization of excess depreciation                                     | 0       |   |                 |
|   |         | Subsidiary Income included in Consolidated Income                                       | \$ 64,000       |
|   |         | Noncontrolling Ownership percentage interest  | 15%             |
|   |         | Noncontrolling Interest in Consolidated Income  | <u>\$ 9,600</u> |
| Controlling Interest in Consolidated Income—Year 2014                   |         |   |                 |
| Unrealized gain on intercompany sale (downstream sales)                 | 0       | Net income internally generated by P Company  | \$300,000       |
|   |         | Gain realized through usage (depreciation adjustment)                                   | 0               |
| Unrealized profit on downstream sales to S Company (ending inventory)   | 0       | Realized profit (downstream sales) from beginning inventory                             | 0               |
|   |         | P Company's percentage of S Company's income realized from third parties, .85(\$64,000) | 54,400          |
|   |         | Controlling Interest in Consolidated Income   | \$354,400       |

(85%)  
(64,000)

**ILLUSTRATION 7-10****Calculation of Controlling and Noncontrolling Interests in Net Income for Year Ended December 31, 2015 Year Subsequent to the Year of Intercompany Sale of Equipment**

| <b>Noncontrolling Interest in Consolidated Income—Year 2015</b>            |   |  |                      |
|--|---|--|----------------------|
|  |   | Internally generated income of S Company   | \$162,000            |
| Unrealized profit on upstream sales in ending inventory                    | 0 | Gain realized through usage (depreciation adjustment)                                    | 20,000               |
| Unrealized gain on 2015 intercompany sale of equipment (upstream sales)    | 0 | Realized profit (upstream sales) from beginning inventory                                | 0                    |
| Amortization of excess depreciation  | 0 |  |                      |
|  |   | Subsidiary Income included in Consolidated Income  | \$182,000            |
|  |   | Noncontrolling Ownership percentage interest   | 15%                  |
|  |   | Noncontrolling Interest in Consolidated Income   | <u>\$ 27,300</u>     |
|  |   |  | (85%)<br>(\$182,000) |
| <b>Controlling Interest in Consolidated Income—Year 2015</b>               |   |  |                      |
| Unrealized gain on 2015 intercompany sales of equipment (downstream sales) | 0 | Net income internally generated by P Company   | \$408,000            |
|  |   | Gain realized through usage (depreciation adjustment)                                    | 0                    |
| Unrealized profit on downstream sales to S Company (ending inventory)      | 0 | Realized profit (downstream sales) from beginning inventory                              | 0                    |
|  |   | P Company's percentage of S Company's income realized from third parties, .85(\$182,000) | 154,700              |
|  |   | Controlling Interest in Consolidated Income  | \$562,700            |

**ILLUSTRATION 7-11****Calculation of Consolidated Retained Earnings, December 31, 2015**

| <b>Consolidated Retained Earnings</b> |        |   |                |
|---------------------------------------|--------|---|----------------|
|                                       |        | P Company's Retained Earnings on 12/31/15   | \$2,208,000    |
| Inventory                             |        | P Company's Share of unrealized profit on upstream sales from S Company (in P's ending inventory)                 | 0              |
|                                       |        | Unrealized profit on downstream sales to S Company (in S's ending inventory)                                      | 0              |
| Equipment                             | 51,000 | P Company's share of unrealized gain on upstream sales of equipment from S Company (100,000 – 20,000 – 20,000).85 | 43,350         |
|                                       |        | Unrealized gain on downstream sales of equipment to S Company   | 0              |
|                                       |        | Less: cumulative amount of depreciation of the differences between implied and book values                        | 0              |
|                                       |        | Adjusted Increase   | 572,000        |
|                                       |        | P Company's share thereof   | 0.85           |
|                                       |        |   | <u>486,200</u> |
|                                       |        | Consolidated Retained Earnings  | \$2,643,200    |

On the basis of Illustration 7-5A, the t-account calculation of consolidated retained earnings on December 31, 2015, is demonstrated in Illustration 7-11.

As mentioned earlier, the workpaper entries to eliminate the effects of intercompany sales of equipment are the same when the parent uses the partial equity or the cost method, but differ slightly when the investment is recorded using the complete equity method. Therefore, we illustrate the complete equity method next.

## TEST YOUR KNOWLEDGE

7.1

NOTE: Solutions to *Test Your Knowledge* questions are found at the end of each chapter before the end-of-chapter questions.

## Multiple Choice

- Parting Ways owns all of the common stock of Smarts Inc. On January 1, 2011, Parting sold to Smarts for a \$5,000 gain a fixed asset that Smarts will use over the next five years. How should this gain be reflected in the consolidated financial statements?
  - Not be recorded
  - Be recognized over five years
  - Be recognized in its entirety in the year of sale
  - Be recognized only when the fixed asset is resold to outsiders after Smarts has finished using it
- Punn Corporation owns all the common stock of Prey Inc. On January 2, 2012, Punn sells a machine with a book value of \$30,000 to Prey for \$40,000. Prey uses straight-line depreciation and intends to use the machine for five years. The adjustments (net) needed to compute the consolidated net income (before tax) for the years 2012 and 2013 are:
  - \$(10,000), 2012; \$0, 2013
  - \$(10,000), 2012; \$2,000, 2013
  - \$(8,000), 2012; \$0, 2013
  - \$(8,000), 2012; \$2,000, 2013
- Price Corp. owns 80% of the common stock of Stairways to Heaven. Stairways sold an asset with a carrying value of \$10,000 to its parent for \$15,000 on January 1, 2011. Price intended to use the asset for five years but actually sold it on December 31, 2012, to a third party for \$17,000. If no adjustments were made for this intercompany transaction in the consolidating process, identify the amounts (and direction) of balance sheet misstatements at the end of 2012.
  - No misstatements occur.
  - The noncontrolling interest is overstated by \$600.
  - The noncontrolling interest is overstated by \$2,000.
  - Retained earnings and controlling interest are both overstated by \$2,400.

## 7.5 CONSOLIDATED STATEMENTS WORKPAPER—COMPLETE EQUITY METHOD

## Subsidiary Is Intercompany Seller (Upstream Sale)

LO 6 Upstream sales—complete equity method.

Assume that P Company acquires an 85% interest in S Company for \$1,190,000 in 2012, when the retained earnings and capital stock of S Company amount to \$400,000 and \$1,000,000, respectively. The retained earnings of S Company on January 1, 2014, are \$666,000. On January 1, 2014, S Company sells P Company equipment with a book value of \$500,000 (original cost of \$800,000 and accumulated depreciation of \$300,000) for \$600,000. On January 1, 2014, the equipment has an estimated remaining useful life of five years and is depreciated using the straight-line method. S Company will record a gain of \$100,000 on the sale of the equipment, and each year P Company will record depreciation that is \$20,000 [ $(\$600,000 - \$500,000)/5$  years] greater than depreciation based on the cost of the equipment to the consolidated group.

Under the complete equity method, P Company makes additional entries to adjust its equity in subsidiary income for amounts unrealized (and subsequently realized) in intercompany transactions. In this example, in 2014, P Company would make the following entries:



COMPLETE

**P Company Books (Complete Equity)**

|   |         |         |
|---|---------|---------|
| Investment in S Company   | 122,400 |         |
| Equity in Subsidiary Income   |         | 122,400 |
| To record the parent's 85% share of subsidiary reported net income in 2014.   |         |         |
| Equity in Subsidiary Income   | 85,000  |         |
| Investment in S Company   |         | 85,000  |
| To adjust subsidiary income downward for the unrealized gain on the intercompany sale of equipment ( $100,000 \times 85\%$ ). |         |         |



|  |        |        |
|--|--------|--------|
| Investment in S Company  | 17,000 |        |
| Equity in Subsidiary Income  |        | 17,000 |
| To adjust subsidiary income upward for the portion of the gain realized through usage ( $20,000 \times 85\%$ , or $85,000/5$ years). |        |        |

Consolidated statements workpapers for the years ended December 31, 2014, and December 31, 2015, are presented in Illustrations 7-12 and 7-13, respectively.

### Consolidated Statements Workpaper Entries—December 31, 2014

Workpaper entries in Illustration 7-12 are presented in general journal form as follows:

|  |           |           |
|--|-----------|-----------|
| (1) Equity in Subsidiary Income ( $\$122,400 - \$85,000 + \$17,000$ )  | 54,400    |           |
| Dividends Declared—S Company   |           | 0         |
| Investment in S Company  |           | 54,400    |
| To eliminate equity in subsidiary income and intercompany dividends, if any.   |           |           |
| (2) Gain on Sale of Equipment  | 100,000   |           |
| Property and Equipment   | 200,000   |           |
| Accumulated Depreciation   |           | 300,000   |
| To eliminate the unrealized gain recorded on intercompany sale of equipment and restore equipment to its original cost (and accumulated depreciation to its balance at the date of the intercompany sale). |           |           |
| (3) Accumulated Depreciation   | 20,000    |           |
| Depreciation Expense   |           | 20,000    |
| To adjust depreciation on equipment sold to affiliate, thus realizing a portion of gain through usage ( $\$100,000/5$ years = $\$20,000$ ).  |           |           |
| (4) Beginning Retained Earnings—S Company  | 666,000   |           |
| Capital Stock—S Company  | 1,000,000 |           |
| Investment in S Company ( $\$1,190,000 + \$226,100$ )  |           | 1,416,100 |
| NCI in Equity ( $\$210,000 + .15 (\$666,000 - \$400,000)$ )  |           | 249,900   |
| To eliminate investment account against underlying equity accounts of S Company, and recognize NCI.  |           |           |

Since the selling affiliate is a partially owned subsidiary (upstream sale), the calculation of the noncontrolling interest in consolidated net income is modified by subtracting the amount of the gain recognized by the subsidiary and adding the amount of the gain considered to be realized (through depreciation) to the reported net income of the subsidiary [ $.15 \times (\$144,000 - \$100,000 + \$20,000) = \$9,600$ ].

#### Noncontrolling Interest in Income

|                                      |           |   |                 |
|--------------------------------------|-----------|---|-----------------|
|                                      |           | Internally generated income of S Company              | \$144,000       |
| Unrealized gain on intercompany sale | \$100,000 | Gain realized through usage (depreciation adjustment) | 20,000          |
|                                      |           | Adjusted income of subsidiary                         | \$ 64,000       |
|                                      |           | Noncontrolling percentage                             | $\times 15\%$   |
|                                      |           | Noncontrolling interest in income                     | <u>\$ 9,600</u> |



If the sale of the equipment had been downstream rather than upstream, the amount of subsidiary income included in consolidated income would not be affected by the workpaper entries related to unrealized intercompany gain and no adjustment would be necessary in calculating the *noncontrolling interest* in consolidated income.

## Complete Equity Method

## ILLUSTRATION 7-12

85% Owned Subsidiary

## Consolidated Statements Workpaper

Upstream Sale of Equipment

## P Company and Subsidiary

Year of Sale

## for the Year Ended December 31, 2014

| Income Statement                             | P<br>Company     | S<br>Company     | Eliminations     |                             | Noncontrolling<br>Interest | Consolidated<br>Balances |
|--|------------------|------------------|------------------|-----------------------------|----------------------------|--------------------------|
|  |                  |                  | Dr.              | Cr.                         |                            |                          |
| Sales  | 3,500,000        | 2,000,000        |                  |                             |                            | 5,500,000                |
| Equity in Subsidiary Income                  | 54,400           |                  | (1)              | 54,400                      |                            |                          |
| Gain on Sale of Equipment                    |                  | 100,000          | (2)              | 100,000                     |                            |                          |
| Total Revenue                                | <u>3,554,400</u> | <u>2,100,000</u> |                  |                             |                            | <u>5,500,000</u>         |
| Cost of Sales                                | 1,800,000        | 1,130,000        |                  |                             |                            | 2,930,000                |
| Depreciation Expense                         | 380,000          | 330,000          |                  | (3) 20,000                  |                            | 690,000                  |
| Income Tax Expense                           | 200,000          | 96,000           |                  |                             |                            | 296,000                  |
| Other Expense                                | 820,000          | 400,000          |                  |                             |                            | 1,220,000                |
| Total Cost and Expense                       | <u>3,200,000</u> | <u>1,956,000</u> |                  |                             |                            | <u>5,136,000</u>         |
| Net/Consolidated Income                      | 354,400          | 144,000          |                  |                             |                            | 364,000                  |
| Noncontrolling Interest<br>in Income         |                  |                  |                  |                             | 9,600*                     | 9,600                    |
| Net Income to Retained<br>Earnings           | <u>354,400</u>   | <u>144,000</u>   | <u>154,400</u>   | <u>20,000</u>               | <u>9,600</u>               | <u>354,400</u>           |
| <i>Retained Earnings Statement</i>           |                  |                  |                  |                             |                            |                          |
| 1/1 Retained Earnings                        |                  |                  |                  |                             |                            |                          |
| P Company                                    | 1,726,100        |                  |                  |                             |                            | 1,726,100                |
| S Company                                    |                  | 666,000          | (4)              | 666,000                     |                            |                          |
| Net Income from above                        | <u>354,400</u>   | <u>144,000</u>   | <u>154,400</u>   | <u>20,000</u>               | <u>9,600</u>               | <u>354,400</u>           |
| 12/31 Retained Earnings to<br>Balance Sheet  | <u>2,080,500</u> | <u>810,000</u>   | <u>820,400</u>   | <u>20,000</u>               | <u>9,600</u>               | <u>2,080,500</u>         |
| <i>Balance Sheet</i>                         |                  |                  |                  |                             |                            |                          |
| Current Assets                               | 1,000,000        | 570,000          |                  |                             |                            | 1,570,000                |
| Investment in<br>S Company**                 | 1,470,500        |                  |                  | (1) 54,400<br>(4) 1,416,100 |                            |                          |
| Land   | 1,000,000        | 200,000          |                  |                             |                            | 1,200,000                |
| Property and Equipment                       | 3,800,000        | 2,700,000        | (2)              | 200,000                     |                            | 6,700,000                |
| (Accumulated<br>Depreciation)                | (1,520,000)      | (960,000)        | (3)              | 20,000                      | (2)                        | 300,000                  |
| Total Assets                                 | <u>5,750,500</u> | <u>2,510,000</u> |                  |                             |                            | <u>6,710,000</u>         |
| Liabilities                                  | 670,000          | 700,000          |                  |                             |                            | 1,370,000                |
| Capital Stock                                |                  |                  |                  |                             |                            |                          |
| P Company                                    | 3,000,000        |                  |                  |                             |                            | 3,000,000                |
| S Company                                    |                  | 1,000,000        | (4)              | 1,000,000                   |                            |                          |
| Retained Earnings<br>from above              | <u>2,080,500</u> | <u>810,000</u>   | <u>820,400</u>   | <u>20,000</u>               | <u>9,600</u>               | <u>2,080,500</u>         |
| 1/1 Noncontrolling Interest<br>in Net Assets |                  |                  |                  | (4)                         | 249,900                    | 249,900                  |
| 12/31 Noncontrolling Interest                |                  |                  |                  |                             | <u>259,500</u>             | <u>259,500</u>           |
| Total Liabilities and Equity                 | <u>5,750,500</u> | <u>2,510,000</u> | <u>2,040,400</u> | <u>2,040,400</u>            |                            | <u>6,710,000</u>         |

\*  $.15 \times (\$144,000 - \$100,000 + \$20,000) = \$9,600$ .

\*\* The investment account equals  $\$1,190,000 + 85\%$  of the increase in S Company's Retained Earnings from the date of acquisition to the beginning of the year  $(\$666,000 - 400,000)$  plus the current period's equity in subsidiary income  $(\$54,400)$ .

(1) To eliminate equity in subsidiary income and intercompany dividends, if any.

(2) To eliminate the unrealized gain recorded on intercompany sale of equipment and restore equipment to its original cost (and accumulated depreciation to its balance at the date of the intercompany sale).

(3) To adjust depreciation on equipment sold to affiliate, thus realizing a portion of the gain through usage  $(\$100,000/5 \text{ years} = \$20,000)$ .

(4) To eliminate investment account against the underlying equity accounts of S Company and create noncontrolling interest account.

| Complete Equity Method                        |             | ILLUSTRATION 7-13                    |              |           |  |                       |
|---|-------------|--------------------------------------|--------------|-----------|--|-----------------------|
| 85% Owned Subsidiary                          |             | Consolidated Statements Workpaper    |              |           |  |                       |
| Upstream Sale of Equipment                    |             | P Company and Subsidiary             |              |           |  |                       |
| Year Subsequent of Sale                       |             | for the Year Ended December 31, 2015 |              |           |  |                       |
| Income Statement                              | P           | S                                    | Eliminations |           | Noncontrolling Interest                    | Consolidated Balances |
|   | Company     | Company                              | Dr.          | Cr.       |  |                       |
| Sales   | 4,000,000   | 2,200,000                            |              |           |  | 6,200,000             |
| Equity Income                                 | 154,700     |                                      | (1)          | 154,700   |  |                       |
| Total Revenue                                 | 4,154,700   | 2,200,000                            |              |           |  | 6,200,000             |
| Cost of Sales                                 | 2,100,000   | 1,180,000                            |              |           |  | 3,280,000             |
| Depreciation Expense                          | 380,000     | 330,000                              |              | (3)       | 20,000                                     | 690,000               |
| Income Tax Expense                            | 272,000     | 108,000                              |              |           |  | 380,000               |
| Other Expense                                 | 840,000     | 420,000                              |              |           |  | 1,260,000             |
| Total Cost and Expense                        | 3,592,000   | 2,038,000                            |              |           |  | 5,610,000             |
| Net/Consolidated Income                       | 562,700     | 162,000                              |              |           |  | 590,000               |
| Noncontrolling Interest in Income             |             |                                      |              |           | 27,300*                                    | 27,300                |
| Net Income to Retained Earnings               | 562,700     | 162,000                              | 154,700      | 20,000    | 27,300                                     | 562,700               |
| <i>Retained Earnings Statement</i>            |             |                                      |              |           |  |                       |
| 1/1 Retained Earnings                         |             |                                      |              |           |  |                       |
| P Company                                     | 2,080,500   |                                      |              |           |  | 2,080,500             |
| S Company                                     |             | 810,000                              | (4)          | 810,000   |  |                       |
| Net Income from above                         | 562,700     | 162,000                              | 154,700      | 20,000    | 27,300                                     | 562,700               |
| 12/31 Retained Earnings to Balance Sheet      | 2,643,200   | 972,000                              | 964,700      | 20,000    | 27,300                                     | 2,643,200             |
| <i>Balance Sheet</i>                          |             |                                      |              |           |  |                       |
| Current Assets                                | 1,190,000   | 790,000                              |              |           |  | 1,980,000             |
| Investment in S Company                       | 1,625,200   |                                      | (2)          | 85,000    | (1) 154,700<br>(3) 17,000<br>(4) 1,538,500 |                       |
| Land  | 1,600,000   | 200,000                              |              |           |  | 1,800,000             |
| Property and Equipment                        | 3,800,000   | 2,700,000                            | (2)          | 200,000   |  | 6,700,000             |
| (Accumulated Depreciation)                    | (1,900,000) | (1,290,000)                          | (3)          | 40,000    | (2) 300,000                                | (3,450,000)           |
| Total Assets                                  | 6,315,200   | 2,400,000                            |              |           |  | 7,030,000             |
| Liabilities                                   | 672,000     | 428,000                              |              |           |  | 1,100,000             |
| Capital Stock                                 |             |                                      |              |           |  |                       |
| P Company                                     | 3,000,000   |                                      |              |           |  | 3,000,000             |
| S Company                                     |             | 1,000,000                            | (4)          | 1,000,000 |  |                       |
| Retained Earnings from above                  | 2,643,200   | 972,000                              | 964,700      | 20,000    | 27,300                                     | 2,643,200             |
| 1/1 Noncontrolling Interest in Net Assets     |             |                                      | (2)          | 15,000    | (4) 271,500<br>(3) 3,000                   | 259,500               |
| 12/31 Noncontrolling Interest in Net Assets** |             |                                      |              |           |  | 286,800               |
| Total Liabilities and Equity                  | 6,315,200   | 2,400,000                            | 2,304,700    | 2,304,700 |  | 7,030,000             |

\*  $.15 \times (\$162,000 + \$20,000) = \$27,300$ .

\*\*  $\$210,000 + .15 \times (\$810,000 - \$400,000) = \$271,500$ .

(1) To eliminate equity in subsidiary income and intercompany dividends, if any.

(2) To reduce controlling and noncontrolling interests for their shares of unrealized intercompany gain and to restore equipment and accumulated depreciation to their original balances.

(3) To reverse amount of excess depreciation recorded during current and prior year and to recognize intercompany gain realized through usage.

(4) To eliminate investment account and create noncontrolling interest account.

## Consolidated Statements Workpaper Entries—December 31, 2015

In the year 2015, P Company would again make an entry to adjust its equity in subsidiary income for the portion of the gain on the intercompany sale that is realized through usage. This entry may be recorded separately from the one to record P's share of subsidiary *reported* income, as shown below, or the two could be collapsed into one entry for \$154,700 (\$137,700 + \$17,000).

### P Company Books (Complete Equity Method)

|  |         |         |
|--|---------|---------|
| Investment in S Company  | 137,700 |         |
| Equity in Subsidiary Income  |         | 137,700 |
| To record the parent's 85% share of subsidiary reported net income in 2015.  |         |         |
| Investment in S Company  | 17,000  |         |
| Equity in Subsidiary Income  |         | 17,000  |
| To adjust subsidiary income upward for the portion of the gain realized through usage (20,000 × 85%, or 85,000/5 years). |         |         |

Workpaper entries in Illustration 7-13 are presented in general journal form as follows:

|  |         |         |
|--|---------|---------|
| (1) Equity in Subsidiary Income  | 154,700 |         |
| Dividends Declared—S Company   |         | 0       |
| Investment in S Company  |         | 154,700 |
| To eliminate equity in subsidiary income and intercompany dividends, if any. |         |         |

|  |         |         |
|--|---------|---------|
| (2) Investment in S Company (100,000 × .85)  | 85,000  |         |
| Beginning NCI  |         |         |
| (100,000 × .15)  | 15,000  |         |
| Property and Equipment   | 200,000 |         |
| Accumulated Depreciation   |         | 300,000 |
| To reduce the noncontrolling interest for its share of unrealized intercompany gain, to restore equipment and accumulated depreciation to their original balances at the date of the intercompany sale, and to facilitate the elimination of the investment account. |         |         |



COMPLETE

Consider the debit to the investment account in entry (2), recalling that the investment account is reduced on the parent's books when the unrealized income is deducted from the parent's equity in subsidiary income under the complete equity method. Thus, the usual workpaper entry to eliminate the investment account against the underlying subsidiary equity accounts [entry (4) below] eliminates an amount greater than the actual beginning investment account balance. That entry, combined with entries (2) and (3), however, will eliminate the investment to exactly zero.

|   |        |        |
|---|--------|--------|
| (3) Accumulated Depreciation  | 40,000 |        |
| Depreciation Expense  |        | 20,000 |
| Investment in S Company (20,000 × .85)  |        | 17,000 |
| Beginning Retained Earnings—S Company   |        |        |
| (20,000 × .15)  |        | 3,000  |
| To adjust depreciation recorded in current year and prior year, thus recognizing intercompany gain realized through usage (prior year adjustment for controlling interest to Investment account). |        |        |

|  |           |           |
|--|-----------|-----------|
| (4) Beginning Retained Earnings—S Company  | 810,000   |           |
| Capital Stock—S Company  | 1,000,000 |           |
| Investment in S Company  |           | 1,538,500 |
| NCI (210,000 + .15 (810,000 – 400,000))  |           | 271,500   |
| To eliminate investment account against underlying equity accounts of S Company and recognize NCI. |           |           |

The noncontrolling interest in consolidated net income is calculated after adding the portion of the gain considered realized during the year to the net income reported by the subsidiary [.15 × (\$162,000 + \$20,000) = \$27,300].

### Noncontrolling Interest in Income

|  |   |           |
|--|---|-----------|
|  | Internally generated income of S Company              | \$162,000 |
|  | Gain realized through usage (depreciation adjustment) | 20,000    |
|  | Adjusted income of subsidiary                         | \$182,000 |
|  | Noncontrolling percentage                             | × 15%     |
|  | Noncontrolling interest in income                     | \$ 27,300 |

## Disposal of Property and Equipment by Purchasing Affiliate

**LO 9** Disposal of property by purchaser—complete equity.

Assume that on January 1, 2016, P Company sells the equipment it purchased from S Company to a party outside the affiliated group for \$400,000. The recorded and consolidated book values of the equipment on January 1, 2016, are calculated in Illustration 7-14. P Company will record a \$40,000 gain on the sale of the equipment to the party outside the affiliated group, calculated as:

|                                      |           |
|--------------------------------------|-----------|
| Selling price                        | \$400,000 |
| Book value (on P Company's books)    | 360,000   |
| Gain on sale (recorded by P Company) | 40,000    |

The following entry is made on the books of P Company to record the sale:



COMPLETE

#### P Company Books—Complete Equity Method

|                           |         |
|---------------------------|---------|
| Cash                      | 400,000 |
| Accumulated Depreciation  | 240,000 |
| Property and Equipment    | 600,000 |
| Gain on Sale of Equipment | 40,000  |

In addition, P Company would make an entry to adjust its equity in subsidiary income for the amount of the intercompany gain realized in the current period (85% of: the original \$100,000 gain minus the depreciation adjustments of \$40,000 for 2014–2015; or \$51,000). This entry is made for 85% of the realized gain as the original intercompany transaction was an upstream sale, and thus the controlling interest in the realized gain is 85% of \$60,000, or \$51,000.

|                             |        |
|-----------------------------|--------|
| Investment in S Company     | 51,000 |
| Equity in Subsidiary Income | 51,000 |

However, the consolidated book value of the equipment on the date of the sale by P Company is only \$300,000, and from the point of view of the consolidated entity a \$100,000 gain on the sale (selling price of \$400,000 minus book value to consolidated entity of \$300,000) should be recognized. The entry on the December 31, 2016, consolidated statements workpaper necessary to achieve this result follows:

|   |        |
|---|--------|
| Investment in S Company (.85 × \$60,000)  | 51,000 |
| Beginning NCI (.15 × \$60,000)  | 9,000  |
| Gain on Sale of Equipment   | 60,000 |
| To adjust reported gain on the sale of equipment by P Company to third party from \$40,000 gain recorded by P Company to \$100,000 gain to the consolidated equity. |        |

### ILLUSTRATION 7-14

#### Calculation of Book Value of Equipment on January 1, 2016

| <i>On Books of P Company</i>   |           |
|--|-----------|
| Cost (to P Company)  | \$600,000 |
| Accumulated Depreciation [((\$600,000/5) × 2)]                         | 240,000   |
| Recorded Book Value—January 1, 2016                                    | \$360,000 |
| <i>Consolidated</i>  |           |
| Cost (original cost to S Company)                                      | \$800,000 |
| Accumulated Depreciation [\$300,000 + ((\$800,000 – \$300,000)/5) × 2] | 500,000   |
| Consolidated Book Value—January 1, 2016                                | \$300,000 |

The above entry also serves to adjust the noncontrolling interest for its share of unrealized intercompany gain at the beginning of year (\$100,000 original gain minus \$40,000 realized through usage [\$20,000 in 2014 and \$20,000 in 2015] = \$60,000  $\times$  15%), and to facilitate the elimination of the investment account (by debiting it for the controlling share \$60,000  $\times$  85%).



COMPLETE

Note that the entry does not include any adjustment to equipment or accumulated depreciation after the disposal, as these accounts are accurately reflected at zero. Also, it is not necessary to calculate the \$60,000 adjustment to the controlling and noncontrolling interests directly in the above entry as it will always equal the gain adjustment. From a consolidated point of view, the amount of gain recorded by the selling affiliate will always be understated (or the amount of loss recorded will always be overstated) by an amount that is equal to the unrealized intercompany profit associated with the equipment on the date of its premature disposal.

After December 31, 2016, no more book or workpaper entries relating to this equipment will be required. Under the complete equity method, entries are needed up through December 31, 2016, even though profit is accurately reflected in the books of P Company. Because the adjustments are reflected in P's books in the account Equity in Subsidiary Income and that account is eliminated in the consolidating process, it is still necessary to adjust the underlying accounts (gain, depreciation expense, etc.) until the asset is sold to outsiders and appropriately removed from the books entirely.

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## 7.6 CALCULATION AND ALLOCATION OF CONSOLIDATED NET INCOME; CONSOLIDATED RETAINED EARNINGS: COMPLETE EQUITY METHOD

**Lo 8** Consolidated net income—complete equity method.

For firms using the complete equity method, the controlling interest in consolidated net income will always equal the net income reported by the parent. Thus it is not necessary to reconcile the two. It is, nonetheless, useful to know how to check the amount of the controlling and noncontrolling interests in consolidated income using the t-account approach presented in Illustrations 7-9 and 7-10. Similarly, consolidated retained earnings will equal the retained earnings reported by the parent at any point, assuming the parent has correctly adjusted for any and all unrealized (and subsequently realized) intercompany profit. This amount may be verified using the t-account approach presented in Illustration 7-11.

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## 7.7 SUMMARY OF WORKPAPER ENTRIES RELATING TO INTERCOMPANY SALES OF EQUIPMENT

Consolidated statements workpaper eliminating entries for intercompany sales of equipment are summarized in Illustration 7-15. The entries are the same whether the parent company uses the cost method or the partial equity method to record its investment. However, the form of the workpaper entry to adjust for unrealized intercompany profit at the beginning of the year differs as between upstream and downstream sales and between the complete equity method and the other two.

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## 7.8 INTERCOMPANY INTEREST, RENTS, AND SERVICE FEES

**Lo 10** Intercompany interest, rents, service fees.

Income and expenses relating to interest, fees, and rents should be reported in the consolidated income statement only when they arise from transactions with parties outside the affiliated group. In addition, as discussed in Chapter 3, only receivables and payables that are receivable from or payable to parties outside the affiliated group should be reported in the consolidated balance sheet.

**ILLUSTRATION 7-15**

**Intercompany Gain on Sale of Equipment  
Summary of Workpaper Elimination Entries**

| <i>Selling Affiliate Is the Parent<br/>(or Wholly Owned Subsidiary)<br/>(Downstream Sales)</i>   |   | <i>Selling Affiliate Is a Subsidiary<br/>(Less than Wholly Owned Subsidiary)<br/>(Upstream Sales)</i>  |  |
|--|---|--|--|
| <i>Entries in Year of Intercompany Sale (Cost, Partial Equity, and Complete Equity):</i>   |   | <i>Entries in Year of Intercompany Sale (Downstream):</i>  |  |
| <p>Gain on Sale Equipment xx<br/>Accumulated Depreciation xx<br/>To eliminate unrealized gain on intercompany sale in year of sale and to restore equipment to its original cost and accumulated depreciation to its balance at the date of the intercompany sale. xx<br/>Accumulated Depreciation xx<br/>Depreciation Expense xx<br/>To reverse amount (if any) of excess depreciation recorded during current year, thus recognizing an equivalent amount of intercompany profit as realized.</p>  | <p>Gain on Sale Equipment xx<br/>Accumulated Depreciation xx<br/>To eliminate unrealized gain on intercompany sale in year of sale and to restore equipment to its original cost and accumulated depreciation to its balance at the date of the intercompany sale. xx<br/>Accumulated Depreciation xx<br/>Depreciation Expense xx<br/>To reverse amount (if any) of excess depreciation recorded during current year, thus recognizing an equivalent amount of intercompany profit as realized.</p>           | <p>Gain on Sale Equipment xx<br/>Accumulated Depreciation xx<br/>To eliminate unrealized gain on intercompany sale in year of sale and to restore equipment to its original cost and accumulated depreciation to its balance at the date of the intercompany sale. xx<br/>Accumulated Depreciation xx<br/>Depreciation Expense xx<br/>To reverse amount (if any) of excess depreciation recorded during current year, thus recognizing an equivalent amount of intercompany profit as realized.</p>  | <p>Gain on Sale Equipment xx<br/>Accumulated Depreciation xx<br/>To eliminate unrealized gain on intercompany sale in year of sale and to restore equipment to its original cost and accumulated depreciation to its balance at the date of the intercompany sale. xx<br/>Accumulated Depreciation xx<br/>Depreciation Expense xx<br/>To reverse amount (if any) of excess depreciation recorded during current year, thus recognizing an equivalent amount of intercompany profit as realized.</p>  |
| <i>Entries in Years Subsequent to the Year of Intercompany Sale (Downstream):</i>  |   | <i>Entries in Years Subsequent to the Year of Intercompany Sale (Upstream):</i>  |  |
| <i>Cost and Partial Equity</i>   |   | <i>Cost and Partial Equity</i>   |  |
| <p>Beginning Retained Earnings—P Company xx<br/>Equipment xx<br/>Accumulated Depreciation xx<br/>To reduce consolidated retained earnings for the intercompany gain, to restore accumulated depreciation and equipment to their original balances at the date of intercompany sale.</p> <p>Accumulated Depreciation xx<br/>Depreciation Expense xx<br/>Beginning Retained Earnings—P Company xx<br/>To reverse amount of excess depreciation recorded during current year and prior year, thus recognizing intercompany gain realized through usage.</p> | <p>Investment in S Company Equipment xx<br/>Accumulated Depreciation xx<br/>To facilitate elimination of the investment account and to restore accumulated depreciation and equipment to their original balances at the date of the intercompany sale.</p> <p>Accumulated Depreciation xx<br/>Depreciation Expense xx<br/>Investment in S Company xx<br/>To reverse amount of excess depreciation recorded during current year and prior year, thus recognizing intercompany gain realized through usage.</p> | <p>Investment in S Company NCI in Equity xx<br/>Equipment xx<br/>Accumulated Depreciation xx<br/>To reduce the noncontrolling interest for its share of the intercompany gain, to facilitate the elimination of the investment account and restore accumulated depreciation and equipment to their original balances at the date of the intercompany sale.</p> <p>Accumulated Depreciation xx<br/>Depreciation Expense xx<br/>Investment in S Company xx<br/>NCI in Equity xx<br/>To reverse amount of excess depreciation recorded during current year and prior year, thus recognizing intercompany gain realized through usage.</p> | <p>Investment in S Company NCI in Equity xx<br/>Equipment xx<br/>Accumulated Depreciation xx<br/>To reduce the noncontrolling interest for its share of the intercompany gain, to facilitate the elimination of the investment account and restore accumulated depreciation and equipment to their original balances at the date of the intercompany sale.</p> <p>Accumulated Depreciation xx<br/>Depreciation Expense xx<br/>Investment in S Company xx<br/>NCI in Equity xx<br/>To reverse amount of excess depreciation recorded during current year and prior year, thus recognizing intercompany gain realized through usage.</p> |

## Intercompany Interest

When interest is charged on intercompany loans, the intercompany interest income on the lending affiliate's books is equal to the intercompany interest expense on the borrowing affiliate's books. The workpaper entry to eliminate intercompany interest is:

|                  |     |     |
|------------------|-----|-----|
| Interest Income  | XXX |     |
| Interest Expense |     | XXX |

Since equal amounts of revenue and expense are removed from combined income, the net amount of consolidated net income is not affected by this entry. When intercompany loans or interest remain unpaid on the balance sheet date, additional entries are necessary to eliminate related intercompany payables and receivables as follows:

|                     |     |     |
|---------------------|-----|-----|
| Notes Payable       | XXX |     |
| Notes Receivable    |     | XXX |
| Interest Payable    | XXX |     |
| Interest Receivable |     | XXX |

## Intercompany Rents

When there is an intercompany operating lease, intercompany rent income on the books of the lessor will equal intercompany rent expense on the books of the lessee. The workpaper entry to eliminate intercompany rent is:

|              |     |     |
|--------------|-----|-----|
| Rent Income  | XXX |     |
| Rent Expense |     | XXX |

Since equal amounts of revenue and expense are removed from consolidated income, the net amount of consolidated net income is not affected by this entry.

## Intercompany Service Fees

When one affiliate charges fees to another, the form of the eliminating entry is determined by how the transaction is recorded by the affiliates. If the affiliate that provides the service treats the fee as revenue and the affiliate that receives the service treats the fee as an expense, the necessary workpaper entry is simply a debit to service fee revenue and a credit to service fee expense. On the other hand, the affiliate that receives the service may treat the amount it is charged for the service as a capital addition. For example, fees for architectural services to an affiliate may be treated by the purchasing affiliate as part of the cost of a building. In this case, architectural fees should be debited for the amount recorded as revenue on the intercompany transaction, appropriate expense accounts (as recorded on the selling affiliate's books) should be credited for the cost to the selling affiliate of providing the services, and the building should be credited for the difference between the revenue recorded and the cost of providing the service. Additional workpaper entries will also be necessary in subsequent years to report balances for the building, accumulated depreciation, and depreciation expense at amounts based on the cost of the building to the affiliated group.

For example, assume that P Company bills its subsidiary, S Company, \$400,000 for architectural services. The cost to P Company of providing the services is \$250,000. S Company charges the services to the cost of a building that it opens at the beginning of the next year with an estimated useful life of 15 years. Workpaper entries to eliminate the effects of the intercompany service fee are as follows:

| In the Year the Services Are Rendered |         |                    |         |
|---------------------------------------|---------|--------------------|---------|
| Cost and Partial Equity               |         | Complete Equity    |         |
| Architectural Fees                    | 400,000 | Architectural Fees | 400,000 |
| Salary Expense                        | 200,000 | Salary Expense     | 200,000 |
| Travel Expense                        | 15,000  | Travel Expense     | 15,000  |
| Other Expense                         | 35,000  | Other Expense      | 35,000  |
| Building                              | 150,000 | Building           | 150,000 |



**In the Year the Building Is Opened**

| Cost and Partial Equity                        |         |         | Complete Equity                  |         |         |
|--|---------|---------|----------------------------------|---------|---------|
| Beginning Retained Earnings—P Company Building | 150,000 | 150,000 | Investment in S Company Building | 150,000 | 150,000 |
| Accumulated Depreciation                       | 10,000  |         | Accumulated Depreciation         | 10,000  |         |
| Depreciation Expense                           |         | 10,000  | Depreciation Expense             |         | 10,000  |

**In the Fifth Year After the Building Is Opened**

| Cost and Partial Equity               |         |         | Complete Equity                   |         |         |
|---------------------------------------|---------|---------|-----------------------------------|---------|---------|
| Beginning Retained Earnings—P Company | 110,000 |         | Investment in S Company           | 110,000 |         |
| Accumulated Depreciation Building     | 40,000  | 150,000 | Accumulated Depreciation Building | 40,000  | 150,000 |
| Accumulated Depreciation              | 10,000  |         | Accumulated Depreciation          | 10,000  |         |
| Depreciation Expense                  |         | 10,000  | Depreciation Expense              |         | 10,000  |

Thus eliminating entries relating to intercompany transactions depend on how these transactions are recorded on the books of the affiliates. In all cases, however, the financial reporting objectives identified in previous sections of this chapter and in Chapter 6 apply. In the preceding example, the reporting objectives were:

- To include in revenue only the amounts that result from *transactions with parties outside the affiliated group*.
- To present property in the consolidated balance sheet at *its cost to the affiliated group*.
- To present accumulated depreciation in the consolidated balance sheet based on the *cost to the affiliated group* of the related assets.
- To present depreciation expense in the consolidated income statement based on the *cost to the affiliated group* of the related assets.

In order to apply the objectives identified in this chapter and in Chapter 6 to a situation that is not illustrated in this text, the student may wish to work out the workpaper entries necessary in a situation like the following. S Company is in the business of selling equipment that it manufactures. S Company treats equipment manufactured as finished goods inventory. S Company sells some equipment that it manufactured to its parent company at a profit. The equipment is capitalized and depreciated on the books of the parent company.

**SUMMARY**

- 1 *Understand the financial reporting objectives in accounting for intercompany sales of nondepreciable assets on the consolidated financial statements.* The consolidated financial statements should include gains or losses only when the property is sold to outsiders (parties outside the affiliated group) for the difference between the cost to the consolidated entity and the proceeds from outsiders. Until it is sold to outsiders, the property should be presented in the consolidated balance sheet at its cost to the affiliated group.
- 2 *State the additional financial reporting objectives in accounting for intercompany sales of depreciable assets on the consolidated financial statements.* Accumulated depreciation should be presented in the consolidated balance sheet based on the cost of the asset to the affiliated group, and depreciation expense should be presented in the consolidated income statement also based on the cost to the affiliated group.
- 3 *Explain when gains or losses on intercompany sales of depreciable assets should be recognized on a consolidated basis.* Gains or losses on intercompany sales of depreciable assets are recognized either when the asset is sold to outsiders, or gradually over time as it is depreciated.
- 4 *Explain the term “realized through usage.”* After an intercompany sale, the purchasing affiliate will calculate depreciation on the basis of its cost, which is the intercompany selling price. The depreciation recorded by the purchasing affiliate will, therefore, be excessive (deficient) from a consolidated point of view and will also require adjustment. From the view of the consolidated entity, the intercompany gain (loss) is considered to be realized from the use of the property or equipment in the generation of revenue.
- 5 *Describe the differences between upstream and downstream sales in determining consolidated net income and the controlling and noncontrolling interests in consolidated income.* There is no difference between upstream and downstream sales in determining consolidated income. However, the controlling and noncontrolling interests are affected differently. For downstream sales, the elimination of intercompany gains as well as the subsequent depreciation adjustments affect only the

controlling interest. For upstream sales, the adjustments are made to the subsidiary income, and thus affect both the noncontrolling and controlling interests in the proportion of subsidiary ownership.

- 6 *Compare the eliminating entries when the selling affiliate is a subsidiary (less than wholly owned) versus when the selling affiliate is the parent company.* Because of the differences explained in the preceding item (#5), the eliminating entries are similarly affected. Specifically, the entries in subsequent years for downstream sales that reflect prior years' income or expense adjustments [entries to Retained Earnings—Parent (under the cost or partial equity method) or Investment in Subsidiary (under the complete equity method)] are replaced by eliminating entries for upstream sales to both Retained Earnings—Parent and to NCI in Equity under the cost or partial equity method or to both Investment in Subsidiary and NCI under the complete equity method.
- 7 *Compute the noncontrolling interest in consolidated net income when the selling affiliate is a subsidiary.* The noncontrolling interest in consolidated income is computed as the noncontrolling interest percentage of the internally generated income of the subsidiary minus the unrealized gain on upstream sales (year of sale only) plus the amount of the gain realized through usage (depreciation adjustment).
- 8 *Compute consolidated net income considering the effects of intercompany sales of depreciable assets.* Consolidated net income is computed as the internally generated income of the

parent minus the unrealized gain on downstream sales (year of sale only) plus the amount of the gain realized through usage (depreciation adjustment) plus the subsidiary income adjusted for upstream sales minus any other adjustments needed (such as excess depreciation, described in earlier chapters).

- 9 *Describe the eliminating entry needed to adjust the consolidated financial statements when the purchasing affiliate sells a depreciable asset that was acquired from another affiliate.* The entry does not include any adjustment to equipment or accumulated depreciation after the disposal, as these accounts are accurately reflected at zero. The entry merely adjusts the gain or loss reported by the purchasing affiliate from the amount it recorded to the correct amount from the perspective of the consolidated entity (based on original cost and depreciation), and adjusts the controlling and noncontrolling interests for the unrealized intercompany profit associated with the equipment on the date of its premature disposal (which equals the over- or understatement of the gain or loss).
- 10 *Explain the basic principles used to record or eliminate intercompany interest, rent, and service fees.* Income and expenses relating to interest, fees, and rents should be reported in the consolidated income statement only when they arise from transactions with parties outside the affiliated group. In addition, only receivables and payables that are receivable from or payable to parties outside the affiliated group should be reported in the consolidated balance sheet.

Appendix 7A, “Deferred Taxes Consequences Related to Intercompany Sales of Equipment,” is available online at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter).

### TEST YOUR KNOWLEDGE SOLUTIONS

7.1 1. b    7.2 1. d    7.3 1. a

### QUESTIONS

(The letter A or B indicated for a question, exercise, or problem refers to a related appendix.)

- LO 1 LO 3 1. From a consolidated point of view, when should profit be recognized on intercompany sales of depreciable assets? Nondepreciable assets?
- LO 3 2. In what circumstances might a consolidated gain be recognized on the sale of assets to a nonaffiliate when the selling affiliate recognizes a loss?
- LO 6 3. What is the essential procedural difference between workpaper eliminating entries for unrealized intercompany profit when the selling affiliate is a less than wholly owned subsidiary and such entries when the selling affiliate is the parent company or a wholly owned subsidiary?
- LO 8 4. Define the controlling interest in consolidated net income using the t-account approach.
- LO 5 5. Why is it important to distinguish between upstream and downstream sales in the analysis of intercompany profit eliminations?
6. In what period and in what manner should profits relating to the intercompany sale of depreciable property and equipment be recognized in the consolidated financial statements? LO 3
7. Define consolidated retained earnings using the analytical approach. LO 8

### Business Ethics

Some people believe that the use of executive stock options is directly related to the increased number of earnings restatements. For each of the following items, discuss the potential ethical issues that might be related to earnings management within the firm.

1. Should stock options be expensed on the Income Statement?
2. Should the CEO or CFO be a past employee of the firm's audit firm?
3. Should the firm's audit committee be composed entirely of outside members and be solely responsible for hiring the firm's auditors?<sup>4</sup>

## ANALYZING FINANCIAL STATEMENTS

### AFS7-1 Green Mountain Coffee Roasters Acquisition of Timothy's Coffee of the World

Green Mountain Coffee Roasters reported net income for the year ended September 26, 2009 of \$54.439 million. There were 120,370,659 common shares outstanding. On November 13, 2009, Green Mountain acquired all the outstanding shares of Timothy's Coffee of the World for \$155.74 million cash. The purchase price was allocated as follows (\$ in thousands):

|                          |          |               |
|--------------------------|----------|---------------|
| Purchase price           |          | \$155,740     |
| Allocated to:            |          |               |
| Accounts receivable      | 8,732    |               |
| Inventory                | 6,911    |               |
| Other current assets     | 83       |               |
| Fixed assets             | 7,827    |               |
| Identifiable intangibles | 98,300   |               |
| Accounts payable         | (6,852)  |               |
| Accrued expenses         | (1,284)  |               |
| Deferred taxes           | (27,274) |               |
| Total                    |          | <u>86,443</u> |
| Excess                   |          | 69,297        |

The identifiable intangible assets included \$83.2 million for customer relationships with an estimated life of 16 years, \$8.9 million for Timothy's trade name with an estimated life of 11 years, and \$6.2 million for supply agreements with an estimated life of 11 years. The valuation of fixed assets to fair value was not significant.

#### Required:

- Prepare the consolidation worksheet entry(ies) to eliminate the investment account.
- If Timothy's Coffee generated \$15 million of income (not considering the acquisition) in 2010, will the acquisition of Timothy's Coffee be accretive or dilutive to the earnings per share of Green Mountain?

## EXERCISES

### EXERCISE 7-1 Controlling Interest in Income LO8

On January 1, 2014, Sherwood Company, an 80% owned subsidiary of Paradise Company, sold to Paradise Company equipment with a book value of \$600,000 for \$840,000. The equipment had an estimated remaining useful life of eight years on the date of the intercompany sale.

Paradise Company reported net income from its independent operations of \$550,000, and Sherwood Company reported net income of \$300,000 in the years of 2014 and 2015.

#### Required:

Calculate the controlling interest in combined net income for the years ended December 31, 2014, and December 31, 2015.

### EXERCISE 7-2 Controlling Interest in Income LO8

On January 1, 2014, Polar Company, which owns an 80% interest in Superior Company, sold Superior Company equipment with a book value of \$400,000 for \$560,000. The equipment had an estimated remaining useful life of eight years on the date of the intercompany sale.

Polar Company reported net income from its independent operations (including sales to affiliates) of \$400,000, and Superior Company reported net income of \$200,000 from its independent operations in 2014 and 2015.

#### Required:

Calculate the controlling interest in consolidated net income for the years ended December 31, 2014, and December 31, 2015.

<sup>4</sup> *The CPA Journal*, "Proposals to Improve the Image of the Public Accounting Profession," by Franklin Strier, 3/06, p. 67.

**EXERCISE 7-3 Workpaper Entries—Intercompany Sale of Equipment LO 6 LO 8**

Pearson Company owns 90% of the outstanding common stock of Spring Company. On January 1, 2014, Spring Company sold equipment to Pearson Company for \$200,000. Spring Company had purchased the equipment for \$300,000 on January 1, 2009, and had depreciated it using a 10% straight-line rate. The management of Pearson Company estimated that the equipment had a remaining useful life of five years on January 1, 2014. In 2015, Pearson Company reported \$150,000 and Spring Company reported \$100,000 in net income from their independent operations (including sales to affiliates).

**Required:**

- A. Prepare in general journal form the workpaper entries relating to the intercompany sale of equipment that are necessary in the December 31, 2014, and December 31, 2015, consolidated financial statements workpapers.
- B. Calculate controlling interest in consolidated income for 2015.

**EXERCISE 7-4 Entries—Intercompany Sale of Land LO 6**

Procter Company owns 90% of the outstanding stock of Silex Company. On January 1, 2014, Silex Company sold land to Procter Company for \$350,000. Silex had originally purchased the land on June 30, 2010, for \$200,000.

Procter Company plans to construct a building on the land bought from Silex in which it will house new production machinery. The estimated useful life of the building and the new machinery is 15 years.

**Required:**

- A. Prepare the entries on the books of Procter related to the intercompany sale of land for the years ended December 31, 2014, and December 31, 2015.
- B. Prepare in general journal form the workpaper entries necessary because of the intercompany sale of land in:
  - (1) The consolidated financial statements workpaper for the year ended December 31, 2014.
  - (2) The consolidated financial statements workpaper for the year ended December 31, 2015.

**EXERCISE 7-5 Upstream and Downstream Sale LO 6**

Patterson Company owns 80% of the outstanding common stock of Stevens Company. On June 30, 2013, land costing \$500,000 is sold by one affiliate to the other for \$800,000.

**Required:**

Prepare in general journal form the workpaper entries necessary because of the intercompany sale of land in the consolidated financial statements workpaper for the year ended December 31, 2014, assuming that:

- A. Patterson Company purchased the land from Stevens Company.
- B. Stevens Company purchased the land from Patterson Company.

**EXERCISE 7-6 Calculating Gain on Sale LO 9**

P Company owns 90% of the outstanding common stock of S Company. On January 1, 2015, S Company sold land to P Company for \$600,000. S Company originally purchased the land for \$400,000.

On January 1, 2016, P Company sold the land purchased from S Company to a company outside the affiliated group for \$700,000.

**Required:**

- A. Calculate the amount of gain on the sale of the land that is recognized on the books of P Company in 2016.
- B. Calculate the amount of gain on the sale of the land that should be recognized in the consolidated financial statements in 2016.
- C. Prepare in general journal form the workpaper entries necessary because of the intercompany sale of land in the consolidated financial statements workpaper for the year ended December 31, 2016.

**EXERCISE 7-7 Entries—Intercompany Sale of Inventory and Equipment LO 7 LO 9**

On January 1, 2013, Price Company acquired an 80% interest in the common stock of Smith Company on the open market for \$750,000, the book value at that date.

On January 1, 2014, Price Company purchased new equipment for \$14,500 from Smith Company. The equipment cost \$9,000 and had an estimated life of five years as of January 1, 2014.

During 2015, Price Company had merchandise sales to Smith Company of \$100,000; the merchandise was priced at 25% above Price Company's cost. Smith Company still owes Price Company \$17,500 on open account and has 20% of this merchandise in inventory at December 31, 2015. At the beginning of 2015, Smith Company had in inventory \$25,000 of merchandise purchased in the previous period from Price Company.

**Required:**

- A. Prepare all workpaper entries necessary to eliminate the effects of the intercompany sales on the consolidated financial statements for the year ended December 31, 2015.
- B. Assume that Smith Company reports net income of \$40,000 for the year ended December 31, 2015. Calculate the amount of noncontrolling interest to be deducted from consolidated income in the consolidated income statement for the year ended December 31, 2015.

**EXERCISE 7-8 Controlling Interest in Income LO 8**

On January 1, 2015, P Company acquired a 90% interest in S Company. During 2016, S Company sold merchandise to P Company at 25% above cost in the amount (selling price) of \$225,000. At the end of the year, P Company had in its inventory one-third of the amount of goods purchased from S Company.

On January 1, 2016, P Company sold equipment that had a book value of \$80,000 to S Company for \$120,000. The equipment had an estimated remaining life of four years.

S Company reported net income of \$120,000, and P Company reported net income of \$300,000 from their independent operations (including sales to affiliates) for the year ended December 31, 2016.

**Required:**

Calculate controlling interest in consolidated net income for the year ended December 31, 2016.

**EXERCISE 7-9 Workpaper Entries—Sales of Services LO 10**

P Company owns 80% of the outstanding stock of S Company. The 2015 sales of S Company included revenue of \$390,000 consisting of consulting services billed to P Company at cost plus 30%. P Company was billed the full \$390,000; of this amount, \$260,000 was charged to selling expenses and \$130,000 was charged to administrative expense.

**Required:**

Prepare in general journal form the workpaper entry necessary to eliminate the effects of intercompany sales of services in the consolidated financial statements workpaper for the year ended December 31, 2015.

**EXERCISE 7-10 Workpaper Entries—Intercompany Fees LO 10**

During 2013, Pier One Company billed its 80% owned subsidiary, Scale Company, \$700,000 for architectural services. The cost to Pier One Company of providing the services was \$400,000 for salaries and \$150,000 for other operating expenses. Scale Company charged the architecture fees to the cost of a building that it opened on January 1, 2014. The building had an estimated useful life of 30 years.

**Required:**

Prepare in general journal form the workpaper entries relating to the intercompany fees that are necessary in the consolidated statements workpapers for the years ended December 31, 2013, 2014, and 2015.

**EXERCISE 7-11 Workpaper Entries—Upstream and Downstream Sales LO 6 LO 8**

Pinta Company, a forklift manufacturer, owns 80% of the voting stock of Standard Company. On January 1, 2014, Pinta Company sold forklifts to Standard Company for \$400,000. The forklifts, which represented inventory to Pinta Company, had a cost to Pinta Company of \$310,000. The management of Standard Company estimated that the forklifts had a useful life of nine years from the date of purchase. Standard Company uses the straight-line method to depreciate its capital assets.

In 2014, Pinta Company reported \$700,000 in net income from its independent operations (including sales to affiliates), and Standard Company reported \$250,000 in net income from its operations.

**Required:**

- A. Prepare in general journal form the workpaper entries necessary because of the intercompany sales in:
  - (1) The consolidated financial statements workpaper for the year ended December 31, 2014.
  - (2) The consolidated financial statements workpaper for the year ended December 31, 2015.
- B. Calculate controlling interest in consolidated net income for the year ended December 31, 2014.

**EXERCISE 7-12 Workpaper Entries—Sale of Equipment LO 6**

Pomeroy Corporation owns an 80% interest in Sherer Company and a 90% interest in Tampa Company. On January 2, 2014, Tampa Company sold equipment with a book value of \$600,000 to Sherer Company for \$780,000. This equipment has a remaining useful life of three years. Sherer Company reported \$100,000 and Tampa Company reported \$150,000 in net income (including sales to affiliates) in 2014.

**Required:**

Prepare the 2014 and 2015 consolidated statements workpaper entries to eliminate the effects of this sale of equipment.

**ASC Exercises:** For all ASC exercises indicate as part of your answer: the Codification topic, subtopic, section, and paragraph upon which your answer is based (unless otherwise specified). All ASC questions require access to the FASB Codification.

- ASC7-1** **Presentation** A subsidiary sold an old, abandoned plant to its parent and incurred a loss of \$10 million. Can this loss be reported on the subsidiary-only income statement as an extraordinary item?
- ASC7-2** **Disclosure** Is a change in the method of accounting for depreciation considered a change in estimate or a change in accounting principle? What is the justification? Has it always been treated this way under U.S. GAAP? Explain.
- ASC7-3** **Glossary** Define a *related party* and provide an example.
- ASC7-4** **Cross-Reference** FASB's Emerging Issues Task Force (EITF) issued *EITF 00-21* to provide guidance on revenue arrangements with multiple deliverables. List the topic and subtopic where this information can be found in the Codification (i.e., ASC XXX-XX).

## PROBLEMS

**PROBLEM 7-1** **Workpaper Journal Entries and Income Statement Balances** **LO6 LO7 LO8**  
Powell Company owns 80% of the outstanding common stock of Sullivan Company. On June 30, 2014, Sullivan Company sold equipment to Powell Company for \$500,000. The equipment cost Sullivan Company \$780,000 and had accumulated depreciation of \$400,000 on the date of the sale. The management of Powell Company estimated that the equipment had a remaining useful life of four years from June 30, 2014. In 2015, Powell Company reported \$300,000 and Sullivan Company reported \$200,000 in net income from their independent operations (including sales to affiliates but excluding dividend or equity income from subsidiary).

**Required:**

- A. Prepare in general journal form the workpaper entries necessary because of the intercompany sale of equipment in:
- (1) The consolidated financial statements workpaper for the year ended December 31, 2014.
  - (2) The consolidated financial statements workpaper for the year ended December 31, 2015.
- B. Calculate the balances to be reported in the consolidated income statement for the year ended December 31, 2015, for the following items:
- (1) Consolidated income.
  - (2) Noncontrolling interest in consolidated income.
  - (3) Controlling interest in consolidated income.

**PROBLEM 7-2** **Workpaper Journal Entries** **LO6 LO8**  
Pico Company, a truck manufacturer, owns 90% of the voting stock of Seward Company. On January 1, 2014, Pico Company sold trucks to Seward Company for \$350,000. The trucks, which represented inventory to Pico Company, had a cost to Pico Company of \$260,000. The management of Seward Company estimated that the trucks had a useful life of six years from the date of purchase. Seward Company uses the straight-line method to depreciate its capital assets.

In 2014, Pico Company reported \$600,000 in net income from its independent operations (including sales to affiliates but excluding dividend or equity income from subsidiary), and Seward Company reported \$200,000 in net income from its operations.

**Required:**

- A. Prepare in general journal form the workpaper entries necessary because of the intercompany sales in:
- (1) The consolidated financial statements workpaper for the year ended December 31, 2014.
  - (2) The consolidated financial statements workpaper for the year ended December 31, 2015.
- B. Calculate controlling interest in consolidated net income for the year ended December 31, 2014.

**PROBLEM 7-3** **P Company Entries and Determining Gain or Loss on Sale** **LO6 LO9**  
On January 1, 2015, P Company purchased equipment from its 80% owned subsidiary for \$600,000. The carrying value of the equipment on the books of S Company was \$450,000. The equipment had a remaining useful life of six years on January 1, 2015. On January 1, 2016, P Company sold the equipment to an outside party for \$550,000.

**Required:**

- A. Prepare in general journal form the entries necessary in 2015 and 2016 on the books of P Company to account for the purchase and sale of the equipment.
- B. Determine the consolidated gain or loss on the sale of the equipment and prepare in general journal form the entry necessary on the December 31, 2016, consolidated statements workpaper to properly reflect this gain or loss.

**PROBLEM 7-4 Workpaper—Cost Method LO 6 LO 9**

Prout Company owns 80% of the common stock of Sexton Company. The stock was purchased for \$1,600,000 on January 1, 2012, when Sexton Company's retained earnings were \$800,000. On January 1, 2014, Prout Company sold fixed assets to Sexton Company for \$360,000. These assets were originally purchased by Prout Company for \$400,000 on January 1, 2004, at which time their estimated depreciable life was 25 years. The straight-line method of depreciation is used.

On December 31, 2015, the trial balances of the two companies were as shown here:

|   | <i>Prout Company</i> | <i>Sexton Company</i> |
|---|----------------------|-----------------------|
| Current Assets                          | \$ 568,000           | \$ 271,000            |
| Fixed Assets                            | 1,972,000            | 830,000               |
| Other Assets                            | 1,000,800            | 1,600,000             |
| Investment in Sexton Company            | 1,600,000            |                       |
| Dividends Declared                      | 120,000              | 100,000               |
| Cost of Goods Sold                      | 942,000              | 795,000               |
| Other Expenses (including depreciation) | 145,000              | 90,000                |
| Income Tax Expense                      | 187,200              | 90,000                |
| Total                                   | <u>\$6,535,000</u>   | <u>\$3,776,000</u>    |
| Liabilities                             | \$ 305,000           | \$ 136,000            |
| Accumulated Depreciation                | 375,000              | 290,000               |
| Sales                                   | 1,475,000            | 1,110,000             |
| Dividend Income                         | 80,000               |                       |
| Common Stock                            | 3,000,000            | 1,200,000             |
| Retained Earnings 1/1                   | 1,300,000            | 1,040,000             |
| Total                                   | <u>\$6,535,000</u>   | <u>\$3,776,000</u>    |

**Required:**

- A. Prepare a consolidated statements workpaper for the year ended December 31, 2015.
- B. Assuming that on January 1, 2016, Sexton Company sells the fixed assets purchased from Prout Company to a party outside the affiliated group for \$300,000:
- (1) Prepare the entry that would have been entered on the books of Sexton Company to record the sale.
  - (2) Prepare entries for the December 31, 2016, consolidated statements workpaper necessitated by the sale of the assets.
  - (3) Prepare any workpaper entries that will be needed in the December 31, 2017, consolidated statements workpaper in regard to these fixed assets.

**PROBLEM 7-5 Trial Balance Workpaper—Cost Method LO 6 LO 9**

Using the information presented in Problem 7-4, prepare a consolidated financial statements workpaper for the year ended December 31, 2015, using the trial balance format.

**PROBLEM 7-6 Workpaper—Cost Method LO 6 LO 8**

Pitts Company owns 80% of the common stock of Shannon Company. The stock was purchased for \$960,000 on January 1, 2012, when Shannon Company's retained earnings were \$675,000. On January 1, 2014, Shannon Company sold fixed assets to Pitts Company for \$960,000; Shannon Company had purchased these assets for \$1,350,000 on January 1, 2004, at which time their estimated useful life was 25 years. The estimated remaining useful life to Pitts Company on 1/1/14 is 10 years. Both companies employ the straight-line method of depreciation.

The financial data for 2015 are presented here:

|                                       | <i>Pitts Company</i> | <i>Shannon Company</i> |
|---------------------------------------|----------------------|------------------------|
| Sales                                 | \$1,950,000          | \$1,350,000            |
| Dividend Income                       | 60,000               |                        |
| Total Revenue                         | <u>2,010,000</u>     | <u>1,350,000</u>       |
| Cost of Goods Sold                    | 1,350,000            | 900,000                |
| Other Expenses                        | 225,000              | 150,000                |
| Total Cost and Expense                | <u>1,575,000</u>     | <u>1,050,000</u>       |
| Net Income                            | <u>\$ 435,000</u>    | <u>\$ 300,000</u>      |
| 1/1 Retained Earnings                 | \$1,215,000          | \$1,038,000            |
| Net Income                            | 435,000              | 300,000                |
| Dividends Declared                    | (150,000)            | (75,000)               |
| 12/31 Retained Earnings               | <u>\$1,500,000</u>   | <u>\$1,263,000</u>     |
| Inventory                             | \$ 498,000           | \$ 225,000             |
| Investment in Shannon Company         | 960,000              |                        |
| Fixed Assets                          | 2,168,100            | 2,625,000              |
| Accumulated Depreciation—Fixed Assets | (900,000)            | (612,000)              |
| Total Assets                          | <u>\$2,726,100</u>   | <u>\$2,238,000</u>     |
| Liabilities                           | \$ 465,600           | \$ 450,000             |
| Common Stock                          | 760,500              | 525,000                |
| Retained Earnings                     | <u>1,500,000</u>     | <u>1,263,000</u>       |
| Total Liabilities and Equity          | <u>\$2,726,100</u>   | <u>\$2,238,000</u>     |

**Required:**

- A. Prepare a consolidated statements workpaper for the year ended December 31, 2015.
- B. Calculate consolidated retained earnings on December 31, 2015, using an analytical or t-account approach.

**PROBLEM 7-7**

**Workpaper, Cost Method, Comprehensive Problem LO 6 LO 8**

Parsons Company acquired 90% of the outstanding common stock of Shea Company on June 30, 2014, for \$426,000. On that date, Shea Company had retained earnings in the amount of \$60,000, and the fair value of its recorded assets and liabilities was equal to their book value. The excess of implied over the fair value of the recorded net assets was attributed to an unrecorded manufacturing formula held by Shea Company, which had an expected remaining useful life of five years from June 30, 2014.

Financial data for 2016 are presented here:

|                         | <i>Parsons Company</i> | <i>Shea Company</i> |
|-------------------------|------------------------|---------------------|
| Sales                   | \$2,555,500            | \$1,120,000         |
| Dividend Income         | 54,000                 |                     |
| Total Revenue           | <u>2,609,500</u>       | <u>1,120,000</u>    |
| Cost of Goods Sold      | 1,730,000              | 690,500             |
| Expenses                | 654,500                | 251,000             |
| Total Cost and Expense  | <u>2,384,500</u>       | <u>941,500</u>      |
| Net Income              | <u>\$ 225,000</u>      | <u>\$ 178,500</u>   |
| 1/1 Retained Earnings   | \$ 595,000             | \$ 139,500          |
| Net Income              | 225,000                | 178,500             |
| Dividends Declared      | (100,000)              | (60,000)            |
| 12/31 Retained Earnings | <u>\$ 720,000</u>      | <u>\$ 258,000</u>   |



COMPREHENSIVE



|                              | <i>Parsons Company</i> | <i>Shea Company</i> |
|------------------------------|------------------------|---------------------|
| Cash                         | \$ 119,500             | \$ 132,500          |
| Accounts Receivable          | 342,000                | 125,000             |
| Inventory                    | 362,000                | 201,000             |
| Other Current Assets         | 40,500                 | 13,000              |
| Land                         | 150,000                |                     |
| Investment in Shea Company   | 426,000                |                     |
| Property and Equipment       | 825,000                | 241,000             |
| Accumulated Depreciation     | (207,000)              | (53,500)            |
| Total Assets                 | <u>\$2,058,000</u>     | <u>\$ 659,000</u>   |
| Accounts Payable             | \$ 295,000             | \$ 32,000           |
| Other Liabilities            | 43,000                 | 19,000              |
| Capital Stock                | 1,000,000              | 300,000             |
| Additional Paid-in Capital   |                        | 50,000              |
| Retained Earnings            | 720,000                | 258,000             |
| Total Liabilities and Equity | <u>\$2,058,000</u>     | <u>\$ 659,000</u>   |

On December 31, 2014, Parsons Company sold equipment (with an original cost of \$100,000 and accumulated depreciation of \$50,000) to Shea Company for \$97,500. This equipment has since been depreciated at an annual rate of 20% of the purchase price. During 2015 Shea Company sold land to Parsons Company at a profit of \$15,000.

The inventory of Parsons Company on December 31, 2015, included goods purchased from Shea Company on which Shea Company recognized a profit of \$7,500. During 2016, Shea Company sold goods to Parsons Company for \$375,000, of which \$60,000 was unpaid on December 31, 2016. The December 31, 2016, inventory of Parsons Company included goods acquired from Shea Company on which Shea Company recognized a profit of \$10,500.

**Required:**

- A. Prepare a consolidated financial statements workpaper for the year ended December 31, 2016.
- B. Prepare a schedule to calculate consolidated retained earnings on December 31, 2016, using an analytical or t-account approach. (*Hint:* Due to rounding, you may be out of balance by \$1. To avoid this, you should carry decimals until the final calculation.)

**PROBLEM 7-8**    **Workpaper—Cost Method, Comprehensive Problem LO 6**

On January 1, 2013, Phelps Company purchased an 85% interest in Sloane Company for \$955,000 when the retained earnings of Sloane Company were \$150,000. The difference between implied and book value was assigned as follows:

|                           |          |
|---------------------------|----------|
| Inventory                 | \$48,000 |
| Land                      | 36,000   |
| Discount on Bonds Payable | 48,000   |
| Goodwill                  | 91,529   |

One-half of the inventory was sold in 2013 and the remaining inventory was sold in 2014. The bonds mature in eight years.

On December 31, 2013, Phelps Company's inventory contained \$10,000 in unrealized intercompany profit. During 2014 Phelps Company sold merchandise with a cost of \$200,000 to Sloane Company at a 30% markup on cost. Only \$65,000 (selling price) of this merchandise remains in Sloane Company's 2014 ending inventory. As of December 31, 2014, Sloane Company owes Phelps Company \$40,000 for merchandise purchased during 2014.

Equipment with a book value of \$500,000 was sold by Sloane Company on January 2, 2014, to Phelps Company for \$640,000. This equipment had an estimated useful life when purchased by Sloane Company on July 1, 2011, of 10 years.



COMPREHENSIVE

Financial data for 2014 are presented here:

|                              | <i>Phelps Company</i> | <i>Sloane Company</i> |
|------------------------------|-----------------------|-----------------------|
| Sales                        | \$1,291,500           | \$ 560,000            |
| Other Income                 |                       | 140,000               |
| Dividend Income              | 42,500                |                       |
| Total Revenue                | <u>1,334,000</u>      | <u>700,000</u>        |
| Cost of Goods Sold           | 660,000               | 300,000               |
| Depreciation Expense         | 138,000               | 20,000                |
| Interest Expense             | 8,000                 | 10,000                |
| Other Expenses               | 174,000               | 140,000               |
| Total Cost and Expense       | <u>980,000</u>        | <u>470,000</u>        |
| Net Income                   | <u>\$ 354,000</u>     | <u>\$ 230,000</u>     |
| 1/1 Retained Earnings        | \$ 350,500            | \$ 250,000            |
| Net Income                   | 354,000               | 230,000               |
| Dividends Declared           | (100,000)             | (50,000)              |
| 12/31 Retained Earnings      | <u>\$ 604,500</u>     | <u>\$ 430,000</u>     |
| Cash                         | \$ 127,000            | \$ 70,000             |
| Accounts Receivable          | 300,000               | 210,000               |
| Inventory                    | 270,000               | 175,000               |
| Investment in Sloane Company | 955,000               |                       |
| Land                         | 100,000               | 290,000               |
| Plant and Equipment          | 800,000               | 800,000               |
| Accumulated Depreciation     | (200,000)             | (200,000)             |
| Total Assets                 | <u>\$ 2,352,000</u>   | <u>\$ 1,345,000</u>   |
| Accounts Payable             | \$ 167,500            | \$ 65,000             |
| Bonds Payable                | 80,000                | 100,000               |
| Capital Stock                | 1,500,000             | 750,000               |
| Retained Earnings            | 604,500               | 430,000               |
| Total Liabilities and Equity | <u>\$ 2,352,000</u>   | <u>\$ 1,345,000</u>   |

**Required:**

Prepare a consolidated financial statements workpaper for the year ended December 31, 2014.

**PROBLEM 7-9**

**Workpaper with Intercompany Sales of Inventory and Land, Cost Method LO 6**

Pierce Company acquired a 90% interest in Sanders Company on January 1, 2014, for \$1,480,000. At this time, Sanders Company's common stock and retained earnings balances were \$1,000,000 and \$500,000, respectively. An examination of the books of Sanders on the date of purchase revealed the following:

|                           | <i>Book Value</i> | <i>Fair Value</i> |
|---------------------------|-------------------|-------------------|
| Current Assets            | \$300,000         | \$300,000         |
| Marketable Securities     | 200,000           | 200,000           |
| Inventory                 | 175,000           | 225,000           |
| Plant and Equipment (net) | 650,000           | 800,000           |
| Land                      | 500,000           | 600,000           |

Sanders Company's equipment has a remaining life of 10 years. Eighty percent of the inventory was sold in 2014, the remainder in 2015.

During 2014, Pierce Company sold merchandise costing \$400,000 to Sanders at a 25% markup on cost, and Sanders sold merchandise to Pierce Company for \$100,000 (this price included \$25,000 in profit). In 2015, Pierce Company sold merchandise to Sanders Company for \$350,000, while Sanders Company sold merchandise to Pierce Company for \$80,000. The 2014 markup percentages were also used on the 2015 sales.

The selling price of intercompany merchandise remaining in ending inventories for both years is summarized here:

| <i>Merchandise from Intercompany Sales<br/>in Ending Inventory of</i> | <i>2014</i> | <i>2015</i> |
|---|-------------|-------------|
| Pierce Company  | \$40,000    | \$20,000    |
| Sanders Company   | 50,000      | 30,000      |



In 2015, Sanders Company also sold a piece of land that had a book value of \$250,000 to Pierce Company for \$300,000. On December 31, 2015, Pierce Company holds a \$60,000 receivable on the merchandise it sold to Sanders Company.

Adjusted trial balances for the year ended December 31, 2015 are shown here:

|                               | <i>Pierce</i>      | <i>Sanders</i>     |
|-------------------------------|--------------------|--------------------|
| Cash                          | \$ 200,000         | \$ 150,000         |
| Accounts Receivable           | 300,000            | 250,000            |
| Marketable Securities         | 100,000            | 200,000            |
| Inventory 12/31               | 300,000            | 250,000            |
| Investment in Sanders Company | 1,480,000          |                    |
| Land                          | 400,000            | 350,000            |
| Plant and Equipment (net)     | 1,000,000          | 800,000            |
| Cost of Goods Sold            | 600,000            | 400,000            |
| Depreciation Expense          | 60,000             | 40,000             |
| Other Expenses                | 400,000            | 260,000            |
| Dividends Declared            | 120,000            | 70,000             |
| Total                         | <u>\$4,960,000</u> | <u>\$2,770,000</u> |
| Accounts Payable              | \$ 241,000         | \$ 140,000         |
| Notes Payable                 | 350,000            | 100,000            |
| Common Stock                  | 1,900,000          | 1,000,000          |
| 1/1 Retained Earnings         | 706,000            | 580,000            |
| Sales                         | 1,700,000          | 900,000            |
| Gain on Sale of Land          |                    | 50,000             |
| Dividend Income               | 63,000             |                    |
| Total                         | <u>\$4,960,000</u> | <u>\$2,770,000</u> |

**Required:**

Prepare a consolidated statements workpaper for the year ended December 31, 2015.

**PROBLEM 7-10** Workpaper—Partial Equity Method **LO 6** **LO 9**

(Note: This is the same Problem as Problem 7-4, but assuming the use of the partial equity method.)

Prout Company owns 80% of the common stock of Sexton Company. The stock was purchased for \$1,600,000 on January 1, 2012, when Sexton Company's retained earnings were \$800,000. On January 1, 2014, Prout Company sold fixed assets to Sexton Company for \$360,000. These assets were originally purchased by Prout Company for \$400,000 on January 1, 2004, at which time their estimated depreciable life was 25 years. The straight-line method of depreciation is used.

On December 31, 2015, the trial balances of the two companies were as shown here:

|   | <i>Prout Company</i> | <i>Sexton Company</i> |
|---|----------------------|-----------------------|
| Current Assets                          | \$ 568,000           | \$ 271,000            |
| Fixed Assets                            | 1,972,000            | 830,000               |
| Other Assets                            | 1,000,800            | 1,600,000             |
| Investment in Sexton Company            | 1,820,000            |                       |
| Dividends Declared                      | 120,000              | 100,000               |
| Cost of Goods Sold                      | 942,000              | 795,000               |
| Other Expenses (including depreciation) | 145,000              | 90,000                |
| Income Tax Expense                      | 187,200              | 90,000                |
| Total                                   | <u>\$6,755,000</u>   | <u>\$3,776,000</u>    |
| Liabilities                             | \$ 305,000           | \$ 136,000            |
| Accumulated Depreciation                | 375,000              | 290,000               |
| Sales                                   | 1,475,000            | 1,110,000             |
| Equity in Subsidiary Income             | 108,000              |                       |
| Common Stock                            | 3,000,000            | 1,200,000             |
| Retained Earnings 1/1                   | 1,492,000            | 1,040,000             |
| Total                                   | <u>\$6,755,000</u>   | <u>\$3,776,000</u>    |

**Required:**

- A. Prepare a consolidated statements workpaper for the year ended December 31, 2015.
- B. Assuming that on January 1, 2016, Sexton Company sells the fixed assets purchased from Prout Company to a party outside the affiliated group for \$300,000:
- (1) Prepare the entry that would have been entered on the books of Sexton Company to record the sale.
  - (2) Prepare entries for the December 31, 2016, consolidated statements workpaper necessitated by the sale of the assets.
  - (3) Prepare any workpaper entries that will be needed in the December 31, 2017, consolidated statements workpaper in regard to these fixed assets.

**PROBLEM 7-11 Trial Balance format—Workpaper—Partial Equity Method LO6 LO9**

Using the information presented in Problem 7-10 prepare a consolidated financial statements workpaper for the year ended December 31, 2015, using the trial balance format.

**PROBLEM 7-12 Workpaper—Partial Equity Method LO6 LO8**

Prather Company owns 80% of the common stock of Stone Company. The stock was purchased for \$960,000 on January 1, 2012, when Stone Company's retained earnings were \$675,000. On January 1, 2014, Stone Company sold fixed assets to Prather Company for \$960,000; Stone Company had purchased these assets for \$1,350,000 on January 1, 2004, at which time their estimated useful life was 25 years. The estimated remaining useful life to Prather Company on 1/1/14 is 10 years. Both companies employ the straight-line method of depreciation.

The financial data for 2015 are presented here:

|                                       | <i>Prather Company</i> | <i>Stone Company</i> |
|---------------------------------------|------------------------|----------------------|
| Sales                                 | \$1,950,000            | \$1,350,000          |
| Equity in Subsidiary Income           | 240,000                | —                    |
| Total Revenue                         | <u>2,190,000</u>       | <u>1,350,000</u>     |
| Cost of Goods Sold                    | 1,350,000              | 900,000              |
| Other Expenses                        | 225,000                | 150,000              |
| Total Cost and Expense                | <u>1,575,000</u>       | <u>1,050,000</u>     |
| Net Income                            | <u>\$ 615,000</u>      | <u>\$ 300,000</u>    |
| 1/1 Retained Earnings                 | \$1,505,400            | \$1,038,000          |
| Net Income                            | 615,000                | 300,000              |
| Dividends Declared                    | (150,000)              | (75,000)             |
| 12/31 Retained Earnings               | <u>\$1,970,400</u>     | <u>\$1,263,000</u>   |
| Inventory                             | \$ 498,000             | \$ 225,000           |
| Investment in Stone Company           | 1,430,400              | —                    |
| Fixed Assets                          | 2,168,100              | 2,625,000            |
| Accumulated Depreciation—Fixed Assets | (900,000)              | (612,000)            |
| Total Assets                          | <u>\$3,196,500</u>     | <u>\$2,238,000</u>   |
| Liabilities                           | \$ 465,600             | \$ 450,000           |
| Common Stock                          | 760,500                | 525,000              |
| Retained Earnings                     | <u>1,970,400</u>       | <u>1,263,000</u>     |
| Total Liabilities and Equity          | <u>\$3,196,500</u>     | <u>\$2,238,000</u>   |

**Required:**

- A. Prepare a consolidated statements workpaper for the year ended December 31, 2015.
- B. Calculate consolidated retained earnings on December 31, 2015, using an analytical or t-account approach.

**PROBLEM 7-13 Workpaper—Partial Equity Method, Comprehensive Problem LO6 LO8**

COMPREHENSIVE

Padilla Company acquired 90% of the outstanding common stock of Sanchez Company on June 30, 2014, for \$426,000. On that date, Sanchez Company had retained earnings in the amount of \$60,000, and the fair value of its recorded assets and liabilities was equal to their book value. The excess of implied over fair value of the recorded net assets was attributed to an unrecorded manufacturing formula held by Sanchez Company, which had an expected remaining useful life of five years from June 30, 2014.

Financial data for 2016 are presented here:

|                               | <i>Padilla Company</i> | <i>Sanchez Company</i> |
|-------------------------------|------------------------|------------------------|
| Sales                         | \$2,555,500            | \$1,120,000            |
| Equity in Subsidiary Income   | 160,650                |                        |
| Total Revenue                 | <u>2,716,150</u>       | <u>1,120,000</u>       |
| Cost of Goods Sold            | 1,730,000              | 690,500                |
| Expenses                      | 654,500                | 251,000                |
| Total Cost and Expense        | <u>2,384,500</u>       | <u>941,500</u>         |
| Net Income                    | <u>\$ 331,650</u>      | <u>\$ 178,500</u>      |
| 1/1 Retained Earnings         | 666,550                | 139,500                |
| Net Income                    | 331,650                | 178,500                |
| Dividends Declared            | (100,000)              | (60,000)               |
| 12/31 Retained Earnings       | <u>\$ 898,200</u>      | <u>\$ 258,000</u>      |
| Cash                          | \$ 119,500             | \$ 132,500             |
| Accounts Receivable           | 342,000                | 125,000                |
| Inventory                     | 362,000                | 201,000                |
| Other Current Assets          | 40,500                 | 13,000                 |
| Land                          | 150,000                |                        |
| Investment in Sanchez Company | 604,200                |                        |
| Property and Equipment        | 825,000                | 241,000                |
| Accumulated Depreciation      | (207,000)              | (53,500)               |
| Total Assets                  | <u>\$2,236,200</u>     | <u>\$ 659,000</u>      |
| Accounts Payable              | \$ 295,000             | \$ 32,000              |
| Other Liabilities             | 43,000                 | 19,000                 |
| Capital Stock                 | 1,000,000              | 300,000                |
| Additional Paid-in Capital    |                        | 50,000                 |
| Retained Earnings             | 898,200                | 258,000                |
| Total Liabilities and Equity  | <u>\$2,236,200</u>     | <u>\$ 659,000</u>      |

On December 31, 2014, Padilla Company sold equipment (with an original cost of \$100,000 and accumulated depreciation of \$50,000) to Sanchez Company for \$97,500. This equipment had been depreciated at an annual rate of 20% of the purchase price. During 2015, Sanchez Company sold land to Padilla Company at a profit of \$15,000.

The inventory of Padilla Company on December 31, 2015, included goods purchased from Sanchez Company on which Sanchez Company recognized a profit of \$7,500. During 2016, Sanchez Company sold goods to Padilla Company for \$375,000, of which \$60,000 was unpaid on December 31, 2016. The December 31, 2016, inventory of Padilla Company included goods acquired from Sanchez Company on which Sanchez Company recognized a profit of \$10,500.

**Required:**

- A. Prepare a consolidated financial statements workpaper for the year ended December 31, 2016.
- B. Prepare a schedule to calculate consolidated retained earnings on December 31, 2016, using an analytical or t-account approach.

**PROBLEM 7-14** **Entries and Computation of Income and Retained Earnings** **LO 6** **LO 7** **LO 8**

Platt Company acquired an 80% interest in Sloane Company when the retained earnings of Sloane Company were \$300,000. On January 1, 2014, Sloane Company recorded a \$250,000 gain on the sale to Platt Company of equipment with a remaining life of five years. On January 1, 2015, Platt Company recorded a \$180,000 gain on the sale to Sloane Company of equipment with a remaining life of six years. Sloane Company reported net income of \$180,000 and declared dividends of 60,000 in 2015. It reported retained earnings of \$520,000 on January 1, 2015, and \$640,000 on December 31, 2015. Platt Company reported net income from independent operations of \$400,000 in 2015 and retained earnings of \$1,800,000 on December 31, 2015.

**Required:**

- A. Prepare in general journal form the entries necessary in the December 31, 2015, consolidated statements workpaper to eliminate the effects of the intercompany sales.

- B. Calculate controlling interest in consolidated net income for the year ended December 31, 2015.
- C. Calculate consolidated retained earnings on December 31, 2015.
- D. Calculate noncontrolling interest in consolidated income for the year ended December 31, 2015.

**PROBLEM 7-15** Workpaper—Complete Equity Method **LO 6** **LO 9**

(Note: This is the same Problem as Problems 7-4 and 7-10, but assuming the use of the complete equity method.)

Prout Company owns 80% of the common stock of Sexton Company. The stock was purchased for \$1,600,000 on January 1, 2012, when Sexton Company's retained earnings were \$800,000. On January 1, 2014, Prout Company sold fixed assets to Sexton Company for \$360,000. These assets were originally purchased by Prout Company for \$400,000 on January 1, 2004, at which time their estimated depreciable life was 25 years. The straight-line method of depreciation is used.

On December 31, 2015, the trial balances of the two companies were as shown here:

|   | <i>Prout Company</i> | <i>Sexton Company</i> |
|---|----------------------|-----------------------|
| Current Assets                          | \$ 568,000           | \$ 271,000            |
| Fixed Assets                            | 1,972,000            | 830,000               |
| Other Assets                            | 1,000,800            | 1,600,000             |
| Investment in Sexton Company            | 1,716,000            |                       |
| Dividends Declared                      | 120,000              | 100,000               |
| Cost of Goods Sold                      | 942,000              | 795,000               |
| Other Expenses (including depreciation) | 145,000              | 90,000                |
| Income Tax Expense                      | 187,200              | 90,000                |
| Total                                   | <u>\$6,651,000</u>   | <u>\$3,776,000</u>    |
| Liabilities                             | \$ 305,000           | \$ 136,000            |
| Accumulated Depreciation                | 375,000              | 290,000               |
| Sales                                   | 1,475,000            | 1,110,000             |
| Equity in Subsidiary Income             | 116,000              |                       |
| Common Stock                            | 3,000,000            | 1,200,000             |
| Retained Earnings 1/1                   | 1,380,000            | 1,040,000             |
| Total                                   | <u>\$6,651,000</u>   | <u>\$3,776,000</u>    |

**Required:**

- A. Prepare a consolidated statements workpaper for the year ended December 31, 2015.
- B. Assuming that on January 1, 2016, Sexton Company sells the fixed assets purchased from Prout Company to a party outside the affiliated group for \$300,000:
  - (1) Prepare the entry that would have been entered on the books of Sexton Company to record the sale.
  - (2) Prepare entries for the December 31, 2016, consolidated statements workpaper necessitated by the sale of the assets.
  - (3) Prepare any workpaper entries that will be needed in the December 31, 2017, consolidated statements workpaper in regard to these fixed assets.
- C. If you completed Problem 7-4, compare the consolidated balance obtained in requirement A to those obtained in Problem 7-4.

**PROBLEM 7-16** Workpaper—Complete Equity Method **LO 6** **LO 8**

(This is the same problem as Problem 7-12, but assuming the complete equity method.)

Prather Company owns 80% of the common stock of Stone Company. The stock was purchased for \$960,000 on January 1, 2012, when Stone Company's retained earnings were \$675,000. On January 1, 2014, Stone Company sold fixed assets to Prather Company for \$960,000; Stone Company had purchased these assets for \$1,350,000 on January 1, 2004, at which time their estimated useful life was 25 years. The estimated remaining useful life to Prather Company on 1/1/14 is 10 years. Both companies employ the straight-line method of depreciation.

The financial data for 2015 are presented here:

|                                       | <i>Prather Company</i> | <i>Stone Company</i> |
|---------------------------------------|------------------------|----------------------|
| Sales                                 | \$1,950,000            | \$1,350,000          |
| Equity in Subsidiary Income           | 252,000                |                      |
| Total Revenue                         | <u>2,202,000</u>       | <u>1,350,000</u>     |
| Cost of Goods Sold                    | 1,350,000              | 900,000              |
| Other Expenses                        | 225,000                | 150,000              |
| Total Cost and Expense                | <u>1,575,000</u>       | <u>1,050,000</u>     |
| Net Income                            | <u>\$ 627,000</u>      | <u>\$ 300,000</u>    |
| 1/1 Retained Earnings                 | \$1,397,400            | \$1,038,000          |
| Net Income                            | 627,000                | 300,000              |
| Dividends Declared                    | (150,000)              | (75,000)             |
| 12/31 Retained Earnings               | <u>\$1,874,400</u>     | <u>\$1,263,000</u>   |
| Inventory                             | \$ 498,000             | \$ 225,000           |
| Investment in Stone Company           | 1,334,400              |                      |
| Fixed Assets                          | 2,168,100              | 2,625,000            |
| Accumulated Depreciation—Fixed Assets | (900,000)              | (612,000)            |
| Total Assets                          | <u>\$3,100,500</u>     | <u>\$2,238,000</u>   |
| Liabilities                           | \$ 465,600             | \$ 450,000           |
| Common Stock                          | 760,500                | 525,000              |
| Retained Earnings                     | <u>1,874,400</u>       | <u>1,263,000</u>     |
| Total Liabilities and Equity          | <u>\$3,100,500</u>     | <u>\$2,238,000</u>   |

**Required:**

- A. Prepare a consolidated statements workpaper for the year ended December 31, 2015.
- B. Calculate consolidated retained earnings on December 31, 2015, using a t-account or analytical approach.

**PROBLEM 7-17**



COMPREHENSIVE

**Workpaper—Complete Equity Method, Comprehensive Problem**

Padilla Company acquired 90% of the outstanding common stock of Sanchez Company on June 30, 2014, for \$426,000. On that date, Sanchez Company had retained earnings in the amount of \$60,000, and the fair value of its recorded assets and liabilities was equal to their book value. The excess of implied over fair value of the recorded net assets was attributed to an unrecorded manufacturing formula held by Sanchez Company, which had an expected remaining useful life of five years from June 30, 2014.

Financial data for 2016 are presented here:

|                             | <i>Padilla Company</i> | <i>Sanchez Company</i> |
|-----------------------------|------------------------|------------------------|
| Sales                       | \$2,555,500            | \$1,120,000            |
| Equity in Subsidiary Income | 156,050                |                        |
| Total Revenue               | <u>2,711,550</u>       | <u>1,120,000</u>       |
| Cost of Goods Sold          | 1,730,000              | 690,500                |
| Expenses                    | 654,500                | 251,000                |
| Total Cost and Expense      | <u>2,384,500</u>       | <u>941,500</u>         |
| Net Income                  | <u>\$ 327,050</u>      | <u>\$ 178,500</u>      |
| 1/1 Retained Earnings       | 591,200                | 139,500                |
| Net Income                  | 327,050                | 178,500                |
| Dividends Declared          | (100,000)              | (60,000)               |
| 12/31 Retained Earnings     | <u>\$ 818,250</u>      | <u>\$ 258,000</u>      |

|                               | <i>Padilla Company</i> | <i>Sanchez Company</i> |
|-------------------------------|------------------------|------------------------|
| Cash                          | \$ 119,500             | \$ 132,500             |
| Accounts Receivable           | 342,000                | 125,000                |
| Inventory                     | 362,000                | 201,000                |
| Other Current Assets          | 40,500                 | 13,000                 |
| Land                          | 150,000                |                        |
| Investment in Sanchez Company | 524,250                |                        |
| Property and Equipment        | 825,000                | 241,000                |
| Accumulated Depreciation      | (207,000)              | (53,500)               |
| Total Assets                  | <u>\$2,156,250</u>     | <u>\$ 659,000</u>      |
| Accounts Payable              | \$ 295,000             | \$ 32,000              |
| Other Liabilities             | 43,000                 | 19,000                 |
| Capital Stock                 | 1,000,000              | 300,000                |
| Additional Paid-in Capital    |                        | 50,000                 |
| Retained Earnings             | 818,250                | 258,000                |
| Total Liabilities and Equity  | <u>\$2,156,250</u>     | <u>\$ 659,000</u>      |

On December 31, 2014, Padilla Company sold equipment (with an original cost of \$100,000 and accumulated depreciation of \$50,000) to Sanchez Company for \$97,500. This equipment has since been depreciated at an annual rate of 20% of the purchase price. During 2015, Sanchez Company sold land to Padilla Company at a profit of \$15,000.

The inventory of Padilla Company on December 31, 2015, included goods purchased from Sanchez Company on which Sanchez Company recognized a profit of \$7,500. During 2016, Sanchez Company sold goods to Padilla Company for \$375,000, of which \$60,000 was unpaid on December 31, 2016. The December 31, 2016, inventory of Padilla Company included goods acquired from Sanchez Company on which Sanchez Company recognized a profit of \$10,500.

**Required:**

- A. Prepare a consolidated financial statements workpaper for the year ended December 31, 2016.
- B. Prepare a schedule to calculate consolidated retained earnings on December 31, 2016, using a t-account or analytical approach.



# Chapter 7

## APPENDIX A – DEFERRED TAX CONSEQUENCES RELATED TO INTERCOMPANY SALES OF EQUIPMENT (ONLINE)

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To keep the focus of this appendix on deferred tax consequences rather than alternative methods of accounting for investments, we present the discussion only once. The balances reported by the parent company in income, retained earnings, and the investment account differ depending on the method used by the parent company to record its investment. As illustrated in previous chapters, however, the method used by the parent company to record its investment has no effect on the consolidated balances.

As has also been illustrated in previous chapters, when the parent company records its investment using the equity method, a workpaper entry to reverse the effect of parent company entries during the year for subsidiary dividends and income replaces the cost method entries to establish reciprocity and to eliminate dividend income. However, workpaper entries to allocate the difference between implied and book values, to amortize, depreciate, or record impairment of differences between implied and book values of depreciable or amortizable assets, to eliminate intercompany sales, and to eliminate unrealized intercompany profit are the same regardless of whether the investment is recorded using the cost method or the partial equity method. Workpaper entries to record deferred tax consequences of unrealized intercompany profit and undistributed subsidiary income are also the same when the parent company records its investment using the partial equity method or the cost method. The principal difference between the workpaper entries for these methods and for the complete equity method is that entries to Retained Earnings—P Company are generally replaced by entries to the Investment in S Company, as indicated by an asterisk in the following analysis.

To illustrate the treatment in the consolidated financial statements of deferred income taxes relating to intercompany sales of equipment, assume that P Company owns a 70% interest in S Company and that on January 1, 2013, S Company sells P Company equipment with a book value of \$500,000 (original cost of \$800,000 and accumulated depreciation of \$300,000) for \$600,000. On January 1, 2013, the equipment has a remaining useful life of five years and is depreciated using the straight-line method. The marginal income tax rates for both companies are 40% and separate income tax returns are filed.

S Company will record a gain of \$100,000 on the sale of the equipment and each year P Company will record depreciation that is \$20,000 greater than depreciation based on the cost of the equipment to the selling affiliate. Workpaper eliminating entries in the December 31, 2013, and December 31, 2014, consolidated statements workpapers relating to the unrealized profit on the intercompany sale of the equipment are illustrated below:

### Consolidated Statements Workpaper Entries—December 31, 2013

|     |  |         |         |
|-----|--|---------|---------|
| (1) | Gain on Sale of Equipment  | 100,000 |         |
|     | Property and Equipment   |         | 100,000 |
|     | To eliminate unrealized profit recorded on intercompany sale of equipment.     |         |         |
| (2) | Accumulated Depreciation   | 20,000  |         |
|     | Depreciation Expense   |         | 20,000  |
|     | To reverse the amount of excess depreciation recorded during the current year. |         |         |

|     |   |         |         |
|-----|---|---------|---------|
| (3) | Deferred Tax Asset  | 32,000  |         |
|     | Income Tax Expense  |         | 32,000  |
|     | To defer the net amount of income tax paid or accrued by the affiliates on the amount of unrealized intercompany profit in equipment at the end of the year [ $.4 \times (\$100,000 - \$20,000)$ ]. |         |         |
| (4) | Property and Equipment  | 300,000 |         |
|     | Accumulated Depreciation  |         | 300,000 |
|     | To restate property and equipment at original cost to the selling affiliate.  |         |         |

Since the selling affiliate is a partially owned subsidiary (upstream sale), the calculation of the noncontrolling interest in consolidated income requires that the *after-tax* amount of gain recorded by the subsidiary ( $.60 \times \$100,000 = \$60,000$ ) be subtracted from the reported net income of the subsidiary and that the *after-tax* amount of the gain realized through depreciation ( $.6 \times \$20,000 = \$12,000$ ) be added to the reported net income of the subsidiary *before* multiplying by the noncontrolling interest percentage. Assuming that S Company reported net income of \$144,000 in 2013, the noncontrolling interest in consolidated income is \$28,800 [ $.30 \times (\$144,000 - \$60,000 + \$12,000)$ ].

If the sale of equipment is downstream, no adjustments to the reported net income of the subsidiary are necessary in the calculation of the noncontrolling interest in consolidated income.

#### Consolidated Statements Workpaper Entries—December 31, 2014

|     |  |         |         |
|-----|--|---------|---------|
| (1) | 1/1 Retained Earnings—P Company*   |         |         |
|     | [ $.70 \times (\$100,000 - \$20,000)$ ]  | 56,000  |         |
|     | 1/1 NCI  |         |         |
|     | [ $.30 \times (\$100,000 - \$20,000)$ ]  | 24,000  |         |
|     | Accumulated Depreciation   | 20,000  |         |
|     | Equipment  |         | 100,000 |
|     | To reduce the controlling and the noncontrolling interests for their respective shares of unrealized intercompany profit at the beginning of the year, to reduce accumulated depreciation by the amount of excess depreciation accumulated to the beginning of the year, and to reduce the carrying value of equipment to its book value on the date of the intercompany sale.   |         |         |
| (2) | Accumulated Depreciation   | 20,000  |         |
|     | Depreciation Expense   |         | 20,000  |
|     | To reverse the amount of excess depreciation recorded (during the current year).   |         |         |
| (3) | Deferred Tax Asset   | 24,000  |         |
|     | Income Tax Expense   | 8,000   |         |
|     | 1/1 Retained Earnings—P Company*   |         | 22,400  |
|     | 1/1 NCI  |         | 9,600   |
|     | To recognize deferred taxes for taxes paid in prior years on the amount of intercompany profit still considered unrealized at the <i>end of the year</i> [ $.40 \times (\$100,000 - \$20,000 - \$20,000) = \$24,000$ ], to recognize income tax expense on intercompany profit considered to be realized during the current year ( $.40 \times \$20,000 = \$8,000$ ), to adjust consolidated retained earnings for the controlling interest's share of the tax consequence of unrealized profit at the beginning of the year ( $.70 \times \$32,000 = \$22,400$ ), and to adjust the noncontrolling interest for its share of the tax consequence of unrealized profit at the beginning of the year ( $.30 \times \$32,000 = \$9,600$ ). |         |         |
|     | * Entry to R/E—P Company is replaced by an entry to Investment in S Company under the complete equity method.  |         |         |
| (4) | Property and Equipment   | 300,000 |         |
|     | Accumulated Depreciation   |         | 300,000 |
|     | To restate property and equipment to original cost to the selling affiliate.   |         |         |

The noncontrolling interest in consolidated income is calculated after adding the *after-tax* profit considered realized during the year ( $.6 \times \$20,000 = \$12,000$ ) to the reported net income of the subsidiary. If S Company reported net income of \$162,000 in 2014, the noncontrolling interest in consolidated income is \$52,200 [ $.30 \times (\$162,000 + \$12,000)$ ].

## IMPACT OF UNREALIZED INTERCOMPANY PROFIT ON THE CALCULATION OF DEFERRED TAX CONSEQUENCES RELATED TO UNDISTRIBUTED SUBSIDIARY INCOME

Earlier we emphasized that the calculation of the tax consequences of undistributed income is based on the undistributed income of the subsidiary that has been *included in consolidated income*. Thus, before calculating the deferred tax consequences relating to undistributed subsidiary income, the amount of undistributed income must be adjusted for the *after-tax* amount of unrealized intercompany profit *recorded by the subsidiary* that has been recognized in the determination of consolidated income.

To illustrate, assume that:

1. P Company acquired 70% of the voting stock of S Company when S Company's retained earnings amounted to \$150,000.
2. On January 1, 2013, S Company recorded a \$100,000 gain on the sale to P Company of equipment with a remaining life of five years.
3. On January 1, 2014, P Company recorded a \$60,000 gain on the sale to S Company of equipment with a remaining life of six years.
4. S Company reported retained earnings of \$260,000 on January 1, 2014, and \$320,000 on December 31, 2014.
5. S Company reported net income of \$90,000 and declared dividends of \$30,000 in 2014.
6. P Company reported net income from independent operations in 2014 in the amount of \$700,000 and retained earnings on December 31, 2014, of \$3,500,000.
7. The affiliates file separate income tax returns.
8. Undistributed income is expected to be received in the form of future dividends.
9. The dividends received deduction is 80%, and the past, current, and expected future marginal income tax rates are 40%.

The calculation of the amounts of the undistributed income of S Company that have been included in consolidated income is presented in Illustration 7-16.

### ILLUSTRATION 7-16

#### Undistributed Income of S Company That Has Been Included in Consolidated Income

| <i>S Company</i>  | <i>From<br/>Acquisition<br/>to 1/1/14</i> | <i>For<br/>Calendar<br/>Year 2014</i> | <i>From<br/>Acquisition<br/>to 12/31/14</i> |
|---|---|---------------------------------------|---|
| Retained earnings 1/1/14  | \$ 260,000                                |                                       |   |
| Retained earnings 12/31/14  |   |                                       | \$ 320,000                                  |
| Retained earnings date of acquisition   | (150,000)                                 |                                       | (150,000)                                   |
| Increase in retained earnings   | 110,000                                   |                                       | 170,000                                     |
| Net income 2014   |   | \$ 90,000                             |   |
| Dividends 2014  |   | (30,000)                              |   |
| After-tax unrealized profit on 1/1/14<br>[.6 × (\$100,000 – \$20,000)]              | (48,000)                                  |                                       |   |
| After-tax profit realized in 2014<br>(.6 × \$20,000)                                |   | 12,000                                |   |
| After-tax unrealized profit on 12/31/14<br>[.6 × (\$100,000 – \$20,000 – \$20,000)] |   |                                       | (36,000)                                    |
| Undistributed income that has been<br>included in consolidated income               | \$ 62,000                                 | \$ 72,000                             | \$ 134,000                                  |

The following entry is needed in the December 31, 2014, consolidated statements workpaper to report the income tax consequences of past and current undistributed subsidiary income:

|   |       |       |
|---|-------|-------|
| 1/1 Retained Earnings—P Company (1)*      | 3,472 |       |
| Income Tax Expense (balancing amount) (2) | 4,032 |       |
| Deferred Income Tax Liability (3)         |       | 7,504 |

(1)  $\$62,000 \times 70\% \times 20\% \times 40\% = \$3,472$

(2)  $\$7,504 - \$3,472 = \$4,032$

(3)  $\$134,000 \times 70\% \times 20\% \times 40\% = \$7,504$

\* Entry to Retained Earnings—P Company is replaced by an entry in the same amount to the Investment in S Company account under the complete equity method.

Note that the calculation of the deferred income tax liability on undistributed subsidiary income is not affected by unrealized intercompany profit recorded by the parent company on sales to the subsidiary (downstream sales). The calculation is also not affected by the allocation, depreciation, or amortization of any differences between market and book values.

## CALCULATIONS (AND ALLOCATION) OF CONSOLIDATED NET INCOME AND CONSOLIDATED RETAINED EARNINGS

When the affiliated companies file separate income tax returns, the calculations of consolidated net income and consolidated retained earnings must be modified to incorporate income tax consequences. When calculating the amounts of net income or retained earnings that have been realized in transactions with third parties, adjustments must now be made for the *after-tax amounts* of unrealized intercompany profit. In addition, consolidated net income is reduced by the income tax consequence of undistributed income for the current year and consolidated retained earnings is reduced by the income tax consequence of undistributed income from the date of acquisition to the date of the calculation.

The calculation of consolidated net income in Illustration 7-17 and the calculation of consolidated retained earnings in Illustration 7-18 are based on the same assumptions as those used in the preparation of Illustration 7-16.

### ILLUSTRATION 7-17

#### Calculation of Controlling and Noncontrolling Interests in Income for Year Ended December 31, 2014 Deferred Tax Considerations

| Noncontrolling Interest in Consolidated Net Income—Year 2014                                      |        |  |            |
|---|--------|--|------------|
| Unrealized profit on upstream sales in ending inventory (after-tax)                               | 0      | Internally generated income of S Company   | \$ 90,000  |
| Unrealized gain on 2014 intercompany sale of equipment—upstream sales (after-tax)                 | 0      | After-tax gain realized through usage (depreciation adjustment) .60(\$20,000)            | 12,000     |
| Amortization of excess depreciation   | 0      | Realized profit (upstream sales) from beginning inventory (after-tax)                    | 0          |
|   |        | Subsidiary Income included in Consolidated Income  | \$ 102,000 |
|   |        | Noncontrolling Ownership percentage interest   | 30%        |
|   |        | Noncontrolling Interest in Consolidated Income   | \$ 30,600  |
| Controlling Interest in Income—Year 2014  |        |  |            |
| After-tax unrealized gain on 2014 intercompany sales of equipment (downstream sales) .6(\$60,000) | 36,000 | Net income internally generated by P Company   | \$ 700,000 |
| Unrealized profit on downstream sales to S Company (ending inventory) (after-tax)                 | 0      | After-tax gain realized through usage (depreciation adjustment) .6(\$10,000)             | 6,000      |
|   |        | Realized profit (downstream sales) from beginning inventory (after-tax)                  | 0          |
|   |        | P Company's percentage of S Company's income realized from third parties, .70(\$102,000) | 71,400     |
| Deferred taxes on S Company's undistributed income for 2014 [(\$102,000 - 30,600) (.7)(.2)(.4)]   | 4,032  |  |            |
|   |        | Controlling interest in consolidated income  | \$ 737,368 |

**ILLUSTRATION 7-18****Calculation of Consolidated Retained Earnings  
December 31, 2014**

|  |            |                     |
|--|------------|---------------------|
| P Company's retained earnings on 12/31/14  |            | \$ 3,500,000        |
| Less the after-tax amount of P Company's retained earnings that have not been realized in transactions with third parties [ $.6 \times (\$60,000 - \$10,000)$ ]                                      |            | <u>(30,000)</u>     |
| P Company's retained earnings that have been realized in transactions with third parties   |            | 3,470,000           |
| Increase in retained earnings of S Company from date of acquisition to 12/31/14 ( $\$320,000 - \$150,000$ )  | \$ 170,000 |                     |
| Less cumulative amortization of differences between implied and book values  |            | <u>—0—</u>          |
| Less after-tax unrealized profit, included in S Company's retained earnings on 12/31/14 [ $.6 \times (\$100,000 - \$20,000 - \$20,000)$ ]  |            | <u>(36,000)</u>     |
| Increase in reported retained earnings of S Company since acquisition that has been realized in transactions with third parties  | \$ 134,000 |                     |
| P Company's share thereof ( $.70 \times \$134,000$ )   |            | 93,800              |
| Less income tax consequence of undistributed income of S Company that has been included in consolidated income from date of acquisition to 12/31/14 ( $\$134,000 \times .70 \times .20 \times .40$ ) |            | <u>(7,504)</u>      |
| Consolidated retained earnings 12/31/14  |            | <u>\$ 3,556,296</u> |

**PROBLEM 7-18A Deferred Tax Consequences of Intercompany Inventory and Equipment**

Peer Company acquired an 80% interest in Sells Company on January 1, 2014, for \$1,600,000. On this date, the common stock and retained earnings balances were \$1,500,000 and \$500,000, respectively. During the year, Peer Company sold merchandise to Sells Company for \$200,000. Only one-fourth of this merchandise was in Sells Company's 2014 ending inventory, and \$10,000 of this amount is unrealized profit.

On January 2, 2014, Sells Company sold equipment with a book value of \$300,000 to Peer Company for \$400,000. The equipment has a remaining useful life of four years. Sells Company's net income for 2014 was \$300,000, while Peer Company's was \$800,000. Neither company declared dividends in 2014. The affiliated companies file separate income tax returns, the dividends received exclusion is 80%, and the prior, current, and expected future marginal income tax rates for both companies are 40%.

**Required:**

- A. Prepare in general journal form all consolidated statements workpaper entries necessary for 2014.
- B. Calculate the controlling interest in consolidated net income for the year ended December 31, 2014.
- C. Calculate the noncontrolling interest in consolidated income for the year ended December 31, 2014.

## Chapter 7 – Review Questions

The review questions accompanying this course are designed to assist you in achieving the course learning objectives. The review section is not graded; do not submit it in place of your qualified assessment. While completing the review questions, it may be helpful to study any unfamiliar terms in the glossary in addition to course content. After completing the review questions, proceed to the review question answers and rationales.

46. In looking at the objectives for consolidated reporting related to exchanges of non-depreciable assets between affiliated parties, which the following is **NOT** a financial reporting objective?
- To show the economic impact of a transaction on each separate company.
  - To include gains or losses on non-depreciable property only when the property has been sold to a third party.
  - To uphold the revenue recognition principle for the consolidated entity and not the individual entities.
  - To present non-depreciable property in the consolidated balance sheet at its cost to the consolidated entity.
47. P Company owns all of the common stock of S Company. On January 1, P sold to S for a \$5,000 gain a fixed assets that S will use over the next five years. How should this gain be reflected in the consolidated financial statements?
- Not be recorded.
  - Be recognized over 5 years.
  - Be recognized in its entirety in the year of sale.
  - Be recognized in its entirety only when it is sold to outsiders.
48. P Corporation owns all of the common stock of S Company. On January 2, P sells a machine with a book value of \$30,000 to S for \$40,000. S uses straight-line depreciation and intends to use the machine for five years. The adjustments (net) needed to compute the consolidated net income (before tax) for the first 2 years are:
- Year 1: (\$10,000); year 2: \$0.
  - Year 1: (\$10,000); year 2: \$2,000.
  - Year 1: (\$8,000); year 2: \$0.
  - Year 1: (\$8,000); year 2: \$2,000.

49. P Corp owns 80% of the common stock of S Corp. S sold an asset with a carrying value of \$10,000 to its parent for \$15,000 on January 1, year 1. P intended to use the asset for five years but actually sold it on December 31, year 2 to a third party for \$17,000. If no adjustments were made for this intercompany transaction in the consolidating process, identify the amount (and direction) of balance sheet misstatements at the end of year 2.
- No misstatements occurred.
  - The noncontrolling interest is overstated by \$600.
  - The noncontrolling interest is overstated by \$2,000.
  - Retained earnings and controlling interest are both overstated by \$2,400.
50. Which of the following is accurate regarding the differences between the cost, partial equity, and complete equity methods assuming an upstream sale of depreciable property?
- The entries used to eliminate the effects of intercompany sales of equipment will be the same whether the parents uses the partial equity method or the complete equity method.
  - The entries used to eliminate the effects of intercompany sales of equipment will be different when the parents uses the cost method or the partial equity method.
  - The balances of the parent company for income, retained earnings, and in the investment in subsidiary account differ depending on the method used by the parent company to record its investment.
  - The reciprocity entry will need to be made regardless of the method used by the parent to account for the investment in subsidiary.
51. When depreciable assets are sold to an affiliate:
- Whether the purchaser is upstream, downstream, or horizontal is the critical consideration in determining the impact to noncontrolling interest.
  - The length of the remaining useful life of the equipment is the critical consideration in determining the impact on consolidated income.
  - Whether the equipment is sold at a gain or loss is the critical consideration in determining the impact on consolidated income.
  - Whether the seller is upstream, downstream, or horizontal is the critical consideration in determining the impact to noncontrolling interest.

52. All of the following are accurate regarding intercompany transactions with the **EXCEPTION** of:
- a. Interest on intercompany loans offsets the interest income on the loan so the two income statement accounts are simply eliminated in consolidation.
  - b. When one affiliate charges rent to another within the group, the income statement accounts are simply eliminated in consolidation.
  - c. When intercompany services are provided, it will always result in revenue and expense being recorded which are simply eliminated in consolidation.
  - d. If intercompany notes have not been repaid at the balance sheet date, the notes and the related interest payable/receivable must be eliminated in consolidation.



## Chapter 8 – Changes in Ownership Interest

### Learning Objectives

After completing this section of the course, you will be able to:

- Identify the types of transactions that change the parent company's ownership interest in a subsidiary.
- Identify the impact and required responses when a parent acquires subsidiary shares through multiple open market purchases using cost, partial equity method and complete equity method.
- Identify the reporting for differences between selling price and book value when shares are sold subsequent to acquisition.
- Recall how to prepare the required accounting entries on the books of the parent and in consolidation for purchases and sales of subsidiary stock by the parent.
- Compute the controlling and noncontrolling interest in income after the parent sells some shares of the subsidiary company.
- Recognize the impact of subsidiary issuance of new shares to the parent and account for purchase prices of more or less than book value.
- Recognize the impact on the investment in subsidiary account when the subsidiary issues new shares and they are purchased under various parent and minority interest situations.

# CHANGES IN OWNERSHIP INTEREST

## CHAPTER CONTENTS

- 8.1 CHANGES IN OWNERSHIP
- 8.2 PARENT ACQUIRES SUBSIDIARY STOCK THROUGH SEVERAL OPEN-MARKET PURCHASES—COST METHOD
- 8.3 PARENT SELLS SUBSIDIARY STOCK INVESTMENT ON THE OPEN MARKET—COST METHOD
- 8.4 EQUITY METHOD—PURCHASES AND SALES OF SUBSIDIARY STOCK BY THE PARENT
- 8.5 PARENT SELLS SUBSIDIARY STOCK INVESTMENT ON THE OPEN MARKET—COST METHOD
- 8.6 SUBSIDIARY ISSUES STOCK

## 8.1 CHANGES IN OWNERSHIP

Two assumptions regarding the equity interest acquired have been followed in previous chapters dealing with consolidated financial statements. Although not expressly stated, those assumptions were:

**LO 1** Changes in ownership.

1. The interest in the subsidiary was obtained through a single open-market transaction.
2. The percentage of ownership remained constant.

These assumptions are not always valid. For example, control of a purchased subsidiary might not be obtained until two or more stock purchases have been made. Similarly, the percentage of ownership may change for several reasons, such as (1) additional shares of the subsidiary may be purchased on the open market; (2) some of the shares held by the parent company may be sold; (3) the subsidiary may engage in capital transactions with the parent company and/or outside parties that change the parent company's percentage of ownership. In this chapter, we focus on changes in the ownership interest with only two principal companies involved, one parent and one subsidiary.

A summary of transactions and the accounting treatment for each follows:

| <i>Topic</i>  | <i>Current GAAP<br/>(ASC Topics 805 and 810)</i>  |
|---|---|
| <i>Parent Transactions with Third Parties</i>                                   |   |
| <b>Parent acquires in stages</b>  |   |
| Control not achieved upon the first purchase.                                   | Revalue initial investment to fair value when control is achieved. Adjustment to Income Statement.  |
| Control achieved in the first purchase.   | In the second purchase, adjustment to contributed capital of controlling interest.  |
| <b>Parent sells shares to third parties</b>                                     |   |
| Completely.   | Gain/loss on difference between selling price and book value (no change from prior GAAP).   |
| Loss of control, but maintains some ownership.                                  | The entire interest must be adjusted to fair value, and a gain or loss recorded on all shares owned prior to sale.                                  |
| Sold some shares, but maintains control.  | Adjustment to contributed capital of controlling interest, no gain or loss in Income Statement.   |
| <i>Subsidiary Transactions with and without the Parent</i>                      |   |
| <b>Issues additional shares</b>   |   |
| Parent's ownership decreases (no participation by the controlling interest).    | Adjustment to contributed capital of controlling interest.  |
| Parent's ownership increases (no participation by the noncontrolling interest). | Assuming the Parent already has control, no new adjustments are made for changes in fair value. Otherwise, see above ("Parent acquires in stages"). |

Justification for the current accounting treatments is based on the concept of economic substance over form. That is, a parent company can effectively increase its ownership interest in a subsidiary by either (1) buying additional subsidiary shares directly from third parties or (2) having a subsidiary purchase its (subsidiary's) shares from third parties. Similarly, the parent can effectively decrease its ownership interest by either (1) selling some of its subsidiary shares directly to third parties or (2) having a subsidiary sell additional shares (including treasury shares) to third parties. Since the economic substance is essentially the same from the parent company's point of view, the transactions should be accounted for in a consistent manner. Accounting for these changes in the parent company's percentage of ownership is discussed and illustrated in this chapter.

Recall that the current rules focus on the entity rather than on the parent's perspective. Thus, this is a significant change from previous standards. Under past GAAP, acquisitions of additional shares in an investee were handled in a step-by-step manner, with Computation and Allocation Schedules prepared for each portion purchased. Sales of shares were handled in much the same manner as any sale of an asset: the difference between the selling price and the basis of the shares sold is shown as a gain or loss in income. Shares retained are not adjusted. In contrast, current GAAP requires the following for acquisitions that take place in stages and for partial sales:

- a. Measure and recognize the acquiree's identifiable assets and liabilities at 100% of their fair values on the date the acquirer obtains *control*, and
- b. Recognize all the acquiree's goodwill (not just the parent's share), measured as the difference between the fair value of the acquiree on the acquisition date and the fair value of the identifiable net assets.

#### RELATED CONCEPTS

The date when control is achieved is treated as the acquisition date because it reflects the point at which the two firms become one economic entity.

- c. Any previously held noncontrolling equity interests should be remeasured to fair value, with the resulting adjustment recognized in income.
- d. After control is achieved, subsequent adjustments due to increased ownership are shown as Additional Contributed Capital, not as income.
- e. If a parent loses control, the retained investment should be remeasured to fair value and the adjustments recognized in net income.

## 8.2 PARENT ACQUIRES SUBSIDIARY STOCK THROUGH SEVERAL OPEN-MARKET PURCHASES—COST METHOD

**LO 2** Multiple open market purchases.



COST

Sometimes the controlling interest in a subsidiary is acquired through the initial stock purchase; at other times control is not achieved until two or more stock purchases have been made. When control is achieved on the first purchase, the date of acquisition is the purchase date. However, when more than one purchase is made before control is obtained, the acquisition date is the date when control is achieved. Determination of the date of acquisition is important because previously purchased shares must be revalued and the gain or loss included in income. Under prior GAAP, the previously held interests were not revalued at the date of subsequent purchases. Under current GAAP, subsidiary retained earnings accumulated before control is achieved constitutes a portion of the equity acquired by the parent company, whereas the parent’s share of subsidiary retained earnings accumulated after acquisition is properly included in consolidated retained earnings.

Under FASB ASC paragraph 805–10–25–9, the previously held noncontrolling equity interest should be remeasured to fair value *when control is achieved*, and the resulting adjustment should be recognized in net income. Similarly, if a parent loses control but retains a noncontrolling interest, the portion retained should be remeasured to fair value on the date control is surrendered and the adjustment reflected in the income statement.

The fair values of the acquirer’s interest in the acquiree and the noncontrolling interest on a per-share basis might differ. The main difference is likely to be the inclusion of a control premium in the per-share fair value of the acquirer’s interest in the acquiree or, conversely, the inclusion of a discount for lack of control (also referred to as a minority interest discount) in the per-share fair value of the noncontrolling interest. In this textbook, for practical considerations, we assume that the per-share fair value for pricing the controlling and noncontrolling shares are the same.

To illustrate the consolidation of an investment acquired in stages, assume that S Company had 10,000 shares of \$10 par value common stock outstanding and retained earnings as follows:

|                                      | <i>S Company<br/>Retained Earnings</i> |
|--------------------------------------|--|
| January 1, 2013 (1st stock purchase) | \$ 40,000                              |
| January 1, 2015 (control achieved)   | 120,000                                |
| January 1, 2016                      | 185,000                                |
| December 31, 2016                    | 265,000                                |

P Company purchased S Company common stock on the open market for cash as follows:

| <i>Date</i>     | <i>Shares Acquired</i>       | <i>Cost</i> | <i>Cost/share</i> |
|-----------------|------------------------------|-------------|-------------------|
| January 1, 2013 | 1,500 (15% of 10,000 shares) | \$ 24,000   | \$16/share        |
| January 1, 2015 | 7,500 (75% of 10,000 shares) | 187,500     | \$25/share        |
| Total           | 9,000 (90% of 10,000 shares) | \$211,500   |                   |

Thus on P’s books, the following entries are made:

|                         |  |         |         |
|-------------------------|--|---------|---------|
| January 1, 2013         |  |         |         |
| Investment in S Company |  | 24,000  |         |
| Cash                    |  |         | 24,000  |
| January 1, 2015         |  |         |         |
| Investment in S Company |  | 187,500 |         |
| Cash                    |  |         | 187,500 |

Some additional simplifying assumptions are made to concentrate attention on the new issues introduced and because the complexities avoided by the assumptions have been discussed in detail in previous chapters. The assumptions are:

1. Any difference between implied and book values of the purchases relates solely to goodwill and is, therefore, not subject to amortization or depreciation but is reviewed periodically for impairment.
2. S Company distributes no dividends during the periods under consideration.

The initial purchase of the 15% interest in S Company is recorded at its cost of \$24,000 and reported as an investment on P Company's balance sheets on December 31, 2013 and 2014. No income on the investment is recognized for either 2013 or 2014 because no dividends were distributed by S Company. The second purchase on January 1, 2015, is also recorded in the investment account at its cost of \$187,500. Again, no income is recognized on the investment during 2015 because S Company declared no dividends.

Since P Company now has controlling ownership of S Company, the investment must be consolidated. In the preparation of a consolidated workpaper on December 31, 2015, it is necessary to determine the amount of S Company equity to eliminate, as well as the difference between implied and book value. Note that P Company owns 90% of S Company after the second purchase, which constitutes control.

The payment by P Company of \$187,500 for 75% of S implies a total value at this date, which is the acquisition date, of \$250,000, \$187,500 divided by 75%. P now owns a total of 90% of S Company, or a total value of \$225,000, while the noncontrolling share is 10%, or \$25,000. The Computation and Allocation Schedule implied by this second purchase is as follows:

#### Computation and Allocation of Difference Schedule

|   | <i>Parent<br/>Share</i> | <i>Noncontrolling<br/>Share</i> | <i>Entire<br/>Value</i> |
|---|-------------------------|---------------------------------|-------------------------|
| Value implied by purchase price           | <b>\$225,000</b>        | <b>25,000</b>                   | 250,000                 |
| Less: Book value of equity acquired       | <u>198,000</u>          | <u>22,000</u>                   | <b>220,000</b>          |
| Difference between implied and book value | 27,000                  | 3,000                           | <b>30,000</b>           |
| Record goodwill                           | <u>(27,000)</u>         | <u>(3,000)</u>                  | <b>(30,000)</b>         |
| Balance                                   | <u><u>0</u></u>         | <u><u>0</u></u>                 | <u><u>0</u></u>         |

## Cost Method

Because P Company has owned a percentage of S Company (15%) since January 1, 2013, an entry is needed on P's books to revalue the 1,500 shares purchased in 2013 to their fair value as of the date of control (January 1, 2015). Initially, these 1,500 shares were purchased for \$16 per share, but now the shares are worth \$25 per share (or a \$9 per share increase). Thus the investment in S must be increased by \$13,500 (or \$9 × 1,500 shares) for consolidation. Before this entry can be made, the carrying value of the initial investment (1,500 shares) must be determined. Recall that S Company retained earnings increased from \$40,000 on January 1, 2013, to \$120,000 on January 1, 2015. During that time, P Company owned 15% of S Company; thus, since the consolidation is being retroactively applied to cover this time period, this is equivalent to the entry for reciprocity in previous chapters. Therefore, the carrying value of the initial investment for consolidated purposes is computed as:

|   |                      |
|---|----------------------|
| Initial purchase price (1,500 shares at \$16/share)   | \$24,000             |
| Change in retained earnings of S since acquisition × 15%:<br>[.15 × (\$120,000 – \$40,000)] | <u>12,000</u>        |
| Carrying value (implied) of initial investment  | <u><u>36,000</u></u> |

Thus the gain on revaluation of the initial shares is computed as:

|  |                     |
|--|---------------------|
| Implied value (\$25/share × 1,500)       | \$37,500            |
| Implied carrying value of initial shares | <u>36,000</u>       |
| Revaluation gain                         | <u><u>1,500</u></u> |

Thus the following entry is made on P company books.

|   |         |         |
|---|---------|---------|
| Investment in S Company   | \$1,500 |         |
| Gain on revaluation   |         | \$1,500 |
| To adjust from the implied carrying value of \$36,000 to fair value of \$37,500 (or \$25/share × 1,500 shares). |         |         |

Note that the implied carrying value of \$36,000, as shown above and used in the calculation of the \$1,500 gain does not match the actual carrying value on the books of the parent under the cost method. The reason for the difference is that the \$12,000 change in retained earnings of S (on the 15% original purchase) is not applied retroactively to the investment in S and the retained earnings accounting of P (as it is under the equity method, illustrated subsequently). Thus, a workpaper entry is needed on December 31, 2015, to convert to equity (establish reciprocity) from 2013 to the beginning of 2015 if P Company uses the cost method to account for its investment in S. This entry must be repeated in every future worksheet.

|   |        |        |
|---|--------|--------|
| Investment in S Company   | 12,000 |        |
| 1/1 Retained Earnings—P Company   |        | 12,000 |
| [.15 × (\$120,000 – \$40,000) change in retained earnings from 1/1/13 to 1/1/15]. |        |        |

Note that the FASB standards are not explicit with respect to the recording on the books of the parent company in a situation like the one illustrated here. Instead the standards focus on the correct reporting for the consolidated entity. A case could be made for recording (as a gain on the books of P under the cost method) the entire difference between the implied value of \$37,500 and the actual carrying value of \$24,000, or \$13,500. So long as the correct eliminating entries are made on the consolidating worksheet, this approach would not be inconsistent with GAAP. However, we believe the alternative of recording only the gain of \$1,500 to be preferable for the following reason: Since the \$12,000 is treated retroactively under the equity method, it never flows through the income statement of the parent. If we show it as a gain to the parent under the cost method, this introduces a permanent rather than temporary difference in the revenue reported by the parent company between the cost and equity methods. Thus, we believe the approach illustrated here to be the better alternative.

## Workpaper Elimination Entries

On the workpaper, the investment is eliminated by the following entry (per CAD Schedule):

|  |         |         |
|--|---------|---------|
| Common Stock—S Company                         | 100,000 |         |
| 1/1 Retained Earnings—S Company                | 120,000 |         |
| Difference between Implied and Book Value      | 30,000  |         |
| Investment in S Company (\$187,500 + \$37,500) |         | 225,000 |
| Noncontrolling Interest in Equity              |         | 25,000  |

The workpaper is then completed as illustrated in previous chapters.

If the cost method is used, in subsequent periods reciprocity (equity conversion) is established by taking 90% of the increase (decrease) in S Company's retained earnings from January 1, 2015, to the beginning of the current year, and then adding the \$12,000 initial adjustment (from 1/1/13 to 1/1/15, at 15%). For example, for the preparation of a consolidated statements workpaper on December 31, 2016, reciprocity (equity conversion) would be established as follows:

|  |                 |
|--|-----------------|
| Amount from the December 31, 2015, workpaper | \$12,000        |
| Add: Change in Retained Earnings             |                 |
| [.90 × (\$185,000 – \$120,000)]              | <u>58,500</u>   |
| Total  | <u>\$70,500</u> |

The reciprocity entry is not needed if P Company uses the equity method. The computation of the noncontrolling interest in consolidated net income is made by multiplying the *end-of-year* noncontrolling interest percentage times realized subsidiary income.

In the preceding example, the difference between implied and book values was assumed to relate to goodwill. If the differences were allocable to depreciable or amortizable assets (and liabilities), the difference would be assigned to the appropriate assets and/or liabilities as usual.

## Comparison to IFRS



IFRS 3, *Business Combinations*, provides the guidance for step acquisitions under international standards. Under IFRS 3, all previous ownership interests are adjusted to fair value, with any gain or loss recorded in earnings. This is similar to the rules issued by the FASB.

## 8.3 PARENT SELLS SUBSIDIARY STOCK INVESTMENT ON THE OPEN MARKET—COST METHOD

### Control Maintained



COST

The treatment of the sale of a portion (but not all) of its investment by a parent company depends on whether or not the sale results in the loss of effective control of the subsidiary. If control is maintained, no gain or loss is recognized in the income statement. Instead, an adjustment is made to additional contributed capital of the controlling interest. However, if control is lost, the entire interest is adjusted to fair value, and a gain or loss recorded in income on all shares owned prior to sale. This treatment is discussed in the next section.

**Lo 3** Parent sells shares subsequent to acquisition.

Recall the information from the previous example. P Company owns 9,000 shares of S Company that were revalued to \$25 a share on the date of acquisition, or \$225,000. Assume that P Company sold 1,800 shares of the 9,000 shares of S Company stock on July 1, 2015, for \$84,600 (\$47/share). The cost of the 1,800 shares sold equals \$45,000 (or 20% of \$225,000). The percentage of P Company shares sold is calculated by dividing the shares sold by the total owned by P ( $1,800/9,000 = 20\%$ ). After the sale, P Company retains control with a 72% ( $(9,000 \times 80\%)/10,000$ ) interest. It should be noted that the 1,800 shares sold represent 18% of total S Company shares. Retained Earnings balances were given on page 357.

To record the sale of the shares, P Company makes the following entry in its books on July 1, 2015.

#### P Company's Books

|   |        |        |
|---|--------|--------|
| Cash                                      | 84,600 |        |
| Investment in S Company (20% × \$225,000) |        | 45,000 |
| Additional Contributed Capital—P Company  |        | 39,600 |

After this entry, the balance in the investment in S Company account on P Company books will be \$168,000 (or \$24,000 + \$187,500 + \$1,500 − \$45,000).

From a consolidated standpoint, the cost of the shares sold (\$45,000) needs to be adjusted for 18% of the undistributed earnings since the date of acquisition. This is computed as follows:



COST

|   |          |          |
|---|----------|----------|
| Cost of Shares (1,800 × \$25/share)   |          | \$45,000 |
| Plus: Undistributed Income:   |          |          |
| (A) Change in Retained Earnings from the date of acquisition (1/1/14) to the beginning of the year (1/1/15) |          |          |
| (\$185,000 − \$120,000)   | \$65,000 |          |
| Ownership percentage sold   | 18%      | 11,700   |
| (B) Earnings from beginning of current year to the date of sale (1/1/15 to 7/1/15)                          |          |          |
| (\$80,000/2)  | 40,000   |          |
| Ownership percentage sold   | 18%      | 7,200    |
| Adjusted cost of shares sold  |          | \$63,900 |

Therefore, the correct consolidated amount of additional contributed capital on the sale is \$20,700, computed by subtracting the adjusted cost of \$63,900 from the selling price of \$84,600, or:

|  |               |
|--|---------------|
| Selling price of shares (1,800 × \$47/share) | \$84,600      |
| Adjusted cost of shares sold                 | <u>63,900</u> |
| Additional paid in capital—P Company         | \$20,700      |

Since additional contributed capital of \$39,600 is already recorded on the parent’s books (see entry above), an adjustment is needed on the workpapers to reduce it to \$20,700. The adjustments, totaling \$18,900, needed on the consolidated workpaper are as follows (these amounts are already computed above, 11,700 + 7,200 = 18,900):

|  |        |        |
|--|--------|--------|
| (1) Additional Contributed Capital—P Company | 11,700 |        |
| 1/1 Retained Earnings—P Company              |        | 11,700 |
| (2) Additional Contributed Capital—P Company | 7,200  |        |
| Subsidiary Income Sold                       |        | 7,200  |

The first entry represents undistributed income to the beginning of the year of sale on the shares sold accruing to the 18% of shares sold [(\$185,000 – \$120,000) × 18%]. This amount reduces the additional contributed capital and increases retained earnings for the prior year’s unrecorded earnings in P’s retained earnings.

The second entry adjusts for the subsidiary income earned during the first six months of 2015 that was sold to the noncontrolling stockholders. From January 1, 2015, to July 1, 2015, S Company earned \$40,000. Because 18% of Company S is sold, \$7,200 (18% × \$40,000) represents net income purchased by the noncontrolling stockholders. The \$7,200 should be excluded from noncontrolling interest in consolidated income, since it was purchased by the noncontrolling stockholders rather than being earned by them.

A workpaper for the preparation of consolidated financial statements on December 31, 2015, is presented in Illustration 8-1. Data necessary to complete the workpaper, other than those previously provided, are assumed. Workpaper entries, in addition to those made to adjust the additional contributed capital, are:

|   |        |        |
|---|--------|--------|
| (3) Investment in S Company (\$12,000 + \$46,800) | 58,800 |        |
| 1/1 Retained Earnings—P Company                   |        | 58,800 |

Entry (3) contains two components. The first component is the \$12,000 adjustment for the 1,500 shares purchased before control was obtained and retroactively adjusting the books for retained earnings. The second component establishes reciprocity by recognizing P Company’s share of the increase in S Company’s retained earnings from the date of control to the beginning of 2015 on the *shares still held at the end of 2015* (i.e., 72% of the change in retained earnings). The total adjustment is computed as follows:

|  |               |
|--|---------------|
| From January 1, 2012, to January 1, 2014 15% × (\$120,000 – \$40,000)  | \$12,000      |
| From January 1, 2014, to January 1, 2015 72% × (\$185,000 – \$120,000) | <u>46,800</u> |
| Total  | \$58,800      |

After conversion/reciprocity is established, the workpaper investment elimination entry is:

|   |         |         |
|---|---------|---------|
| (4) Common Stock—S Company                  | 100,000 |         |
| 1/1 Retained Earnings—S Company             | 185,000 |         |
| Difference between Implied and Book Value   | 30,000  |         |
| Investment in S Company (72%)               |         |         |
| (\$225,000 – \$45,000 + \$46,800)           |         | 226,800 |
| Noncontrolling Interest                     |         |         |
| [25,000 + 28% (185,000 – 120,000) + 45,000] |         | 88,200  |



COST



## Cost Method

## ILLUSTRATION 8-1

Sale of Part of Investment  
72% Owned Subsidiary

**Consolidated Statements Workpaper**  
**P Company and Subsidiary**  
**for the Year Ended December 31, 2015**

| <i>Income Statement</i>                         | <i>P Company</i> | <i>S Company</i> | <i>Eliminations</i> |                | <i>Noncontrolling Interest</i> | <i>Consolidated Balances</i> |
|---|------------------|------------------|---------------------|----------------|--------------------------------|------------------------------|
|   |                  |                  | <i>Dr.</i>          | <i>Cr.</i>     |                                |                              |
| Net Income                                      | 120,000          | 80,000           |                     |                |                                | 200,000                      |
| Net/Consolidated Income                         | 120,000          | 80,000           |                     |                |                                | 200,000                      |
| Subsidiary Income Sold                          |                  |                  |                     | (2) 7,200      |                                | 7,200                        |
| Noncontrolling Interest in Income .28(\$80,000) |                  |                  |                     |                | 22,400                         | (22,400)                     |
| Net Income to Retained Earnings                 | <u>120,000</u>   | <u>80,000</u>    | <u>—</u>            | <u>7,200</u>   | <u>22,400</u>                  | <u>184,800</u>               |
| <i>Retained Earnings Statement</i>              |                  |                  |                     |                |                                |                              |
| 1/1 Retained Earnings                           |                  |                  |                     |                |                                |                              |
| P Company                                       | 283,500          |                  |                     | (1) 11,700     |                                | 354,000                      |
| S Company                                       |                  | 185,000          | (4) 185,000         | (3) 58,800     |                                |                              |
| Net Income from above                           | 120,000          | 80,000           | —                   | 7,200          | 22,400                         | 184,800                      |
| Dividends Declared 10/30                        |                  |                  |                     |                |                                |                              |
| P Company                                       | (40,000)         |                  |                     |                |                                | (40,000)                     |
| 12/31 Retained Earnings to                      |                  |                  |                     |                |                                |                              |
| Balance Sheet                                   | <u>363,500</u>   | <u>265,000</u>   | <u>185,000</u>      | <u>77,700</u>  | <u>22,400</u>                  | <u>498,800</u>               |
| <i>Balance Sheet</i>                            |                  |                  |                     |                |                                |                              |
| Current Assets                                  | 235,100          | 100,000          |                     |                |                                | 335,100                      |
| Investment in S Company                         | 168,000          |                  | (3) 58,800          | (4) 226,800    |                                |                              |
| Difference Between Implied and Book Value       |                  |                  | (4) 30,000          | (5) 30,000     |                                |                              |
| Other Assets (Goodwill)                         | 512,600          | 300,000          | (5) 30,000          |                |                                | 842,600                      |
| Land  | 90,000           | 40,000           |                     |                |                                | 130,000                      |
| Total Assets                                    | <u>1,005,700</u> | <u>440,000</u>   |                     |                |                                | <u>1,307,700</u>             |
| Liabilities                                     | 102,600          | 75,000           |                     |                |                                | 177,600                      |
| Common Stock                                    |                  |                  |                     |                |                                |                              |
| P Company                                       | 500,000          |                  |                     |                |                                | 500,000                      |
| S Company                                       |                  | 100,000          | (4) 100,000         |                |                                |                              |
| Additional Contributed Capital—P Company        | 39,600           |                  | (1) 11,700          | (2) 7,200      |                                | 20,700                       |
| Retained Earnings from above                    | 363,500          | 265,000          | 185,000             | 77,700         | 22,400                         | 498,800                      |
| Noncontrolling Interest in Net Assets           |                  |                  |                     | (4) 88,200     | 88,200                         |                              |
| Total Liabilities and Equity                    | <u>1,005,700</u> | <u>440,000</u>   | <u>422,700</u>      | <u>422,700</u> | <u>110,600</u>                 | <u>1,307,700</u>             |

- (1) To adjust contributed capital for undistributed income on shares sold.  
(2) To adjust for current year's income sold to noncontrolling stockholders.  
(3) To establish reciprocity for remaining 72%.  
(4) To eliminate investment in S Company and create noncontrolling interest account.  
(5) To allocate the difference between implied and book value.

The workpaper entry to allocate the difference between implied and book value is:

|   |        |        |
|---|--------|--------|
| (5) Goodwill                              | 30,000 |        |
| Difference between Implied and Book Value |        | 30,000 |

- The additional contributed capital recognized for consolidation purposes is adjusted to \$20,700, consisting of the \$39,600 recorded capital less the portion of the additional contributed capital recognized in consolidated income in prior years (\$11,700) and the portion of the current year's income to the date of sale associated with the shares sold (\$7,200).



COST

2. Noncontrolling interest in consolidated income is represented by the December 31, 2015, noncontrolling interest percentage times reported subsidiary income ( $28\% \times \$80,000$ ), or \$22,400. Note, however, in Illustration 8-1 that \$7,200 of subsidiary income appears in the consolidated income statement columns of the workpaper as “subsidiary income sold.” The \$7,200 represents the amount that was purchased by the noncontrolling stockholders from the parent. Thus, the noncontrolling interest in consolidated income reported in the formal consolidated income statement reflects a net amount of \$15,200 ( $\$22,400 - \$7,200$ ). Note, however, that the full \$22,400 is included as a part of the noncontrolling interest on the balance sheet (the \$15,200 noncontrolling interest share of consolidated income plus the \$7,200 purchased by the noncontrolling stockholders). That is, the full \$22,400 represents an appropriate claim by the noncontrolling stockholders against the consolidated net assets, although \$15,200 represents assets earned during the period and \$7,200 reflects assets purchased.

In subsequent periods, the amount needed to convert to equity/establish reciprocity is the total of 15% of the increase in S Company’s retained earnings from January 1, 2012 to January 1, 2014 (always \$12,000), plus 72% of the change in S Company’s retained earnings thereafter. Thus, the entry needed to establish reciprocity for a workpaper on December 31, 2016, would be:

|  |         |         |
|--|---------|---------|
| Investment in S Company  | 116,400 |         |
| 1/1 Retained Earnings—P Company  |         | 116,400 |
| [ $15\% \times (\$120,000 - \$40,000)$ ] + [ $72\% \times (\$265,000 - \$120,000)$ ] |         |         |

### TEST YOUR KNOWLEDGE

8.1

**NOTE:** Solutions to *Test Your Knowledge* questions are found at the end of each chapter before the end-of-chapter questions.

#### Multiple Choice

- Proper Company purchased the outstanding common stock of Silly Company in increments as follows:  
January 1, 2010, Purchased 15%  
June 1, 2010, Additional 20%  
August 1, 2010, Additional 30%  
September 30, 2010, Remaining 35%  
Both Proper and Silly have fiscal years ending on September 30. Silly’s stock was acquired at book value. The controlling interest in net income for the consolidated entity for the fiscal year ending September 30, 2010, should include which of the following percentages of subsidiary earnings?
  - 100%, January–September 2010.
  - 65%, January–September 2010.
  - 15%, January–May 2010; 20%, June–July 2010; and 30%, August–September 2010.
  - None of the above.
- Suppose a parent company owns 90% of a particular subsidiary at the beginning of its fiscal year, but during the year the parent sells 10% of its interest, thus reducing its ownership percentage to 80%. The most popular view of this transaction under current consolidations theory is:
  - Any increase or decrease in equity as a result of the sale should be adjusted to donated capital.
  - The transaction occurs between the controlling and noncontrolling owner groups and has no effect on consolidated income.
  - The transaction is a sale of an investment at either a gain or loss, depending upon the selling price.
  - The transaction results in an adjustment to additional contributed capital of the controlling interest, with no gain or loss in the income statement.

## 8.4 EQUITY METHOD—PURCHASES AND SALES OF SUBSIDIARY STOCK BY THE PARENT



EQUITY

As stated in the previous section (cost method), sometimes the controlling interest in a subsidiary is acquired through the initial stock purchase; at other times control is not achieved until two or more stock purchases are made. When control is achieved on the first purchase, the date of acquisition is the purchase date. However, when more than one purchase is made before control is obtained, the acquisition date is defined as the date at which control is achieved.

Determination of the date of acquisition is important under purchase accounting because subsidiary retained earnings accumulated before that date constitute a portion of the equity acquired by the parent company, whereas the parent's share of subsidiary retained earnings accumulated after acquisition is properly included in consolidated retained earnings.

Recall that under the equity method, the parent company adjusts its investment in subsidiary account for its share of subsidiary income or loss and dividends distributed. Under the complete equity method (as compared to the partial equity method), additional adjustments are made on the books of the parent company to adjust for excess depreciation, amortization, elimination of unrealized intercompany profit, and so forth.

However, under the assumptions presented at the beginning of this chapter (no intercompany sales and the difference between implied and book value attributed to goodwill), the complete and partial equity methods require the same procedures (and, as always, yield the same consolidated results). To illustrate the procedures followed for open-market purchases and sales of subsidiary stock under the equity method, the previous cost method example will be used. For convenience, the facts are repeated here:

1. S Company had 10,000 shares of \$10 par value common stock outstanding during 2012–2015 and retained earnings as follows:

| <i>S Company<br/>Retained Earnings</i> |           |
|--|-----------|
| January 1, 2012                        | \$ 40,000 |
| January 1, 2014                        | 120,000   |
| January 1, 2015                        | 185,000   |
| December 31, 2015                      | 265,000   |

2. P Company purchased S Company common stock on the open market as follows:

| <i>Date</i>     | <i>Shares Acquired</i>       | <i>Cost</i> | <i>Cost/share</i> |
|-----------------|------------------------------|-------------|-------------------|
| January 1, 2012 | 1,500 (15% of 10,000 shares) | \$ 24,000   | \$16/share        |
| January 1, 2014 | 7,500 (75% of 10,000 shares) | 187,500     | \$25/share        |
| Total           | 9,000 (90% of 10,000 shares) | 211,500     |                   |



EQUITY

3. Any difference between implied and book value of net assets acquired relates to goodwill.
4. S Company distributed no dividends during the periods under consideration. Since no dividends were declared, the change in retained earnings represents the net income for that year.
5. P Company sold 1,800 shares of S Company stock on July 1, 2015, for \$84,600.

As with the cost method, the initial purchase of the 15% interest is recorded at its cost of \$24,000 and reported as an investment on P Company's balance sheets on December 31, 2012 and 2013. The second purchase on January 1, 2014, is also recorded in the investment account at its cost of \$187,500. Since P Company now has a 90% interest in S Company and intends to apply the equity method, the investment account must be restated to recognize P Company's share (15%) of the increase in S Company's retained earnings from January 1, 2012, to January 1, 2014. In essence, consolidation is being retroactively applied to the time period when the parent owned only 15% of the subsidiary. This results in the following entry on P Company books:

|  |        |        |
|--|--------|--------|
| Investment in S Company  | 12,000 |        |
| 1/1 Retained Earnings—P Company  |        | 12,000 |
| [.15 3 (\$120,000 – \$40,000) or the change in retained earnings from 1/1/12 to 1/1/14]. |        |        |

Then, to adjust the investment to fair value as of the date of acquisition, the gain on revaluation of the initial shares is computed as:

|                                    |               |
|------------------------------------|---------------|
| Implied value (\$25/share × 1,500) | \$37,500      |
| Carrying value of initial shares   | <u>36,000</u> |
| Revaluation gain                   | <u>1,500</u>  |

Thus the following entry is made on P company books.

| P Company's Books  |         |         |
|--|---------|---------|
| Investment in S Company  | \$1,500 |         |
| Gain on revaluation  |         | \$1,500 |
| To adjust from the carrying value of \$36,000 to fair value of \$37,500 (or \$25/share × 1,500 share). |         |         |

P Company will recognize its share of S Company income for 2014 with the following entry:

| P Company's Books  |        |        |
|--|--------|--------|
| Investment in S Company  | 58,500 |        |
| Equity in Subsidiary Income<br>[90% × (\$185,000 – \$120,000)] |        | 58,500 |



Recall (from item 4) that because there were no dividends declared by S Company, the change in retained earnings equals the amount of net income.

When a sale of subsidiary shares is made during a fiscal period, the parent's share of the subsidiary's income to the date of sale is normally recorded by a book entry if the information is available. Thus, assuming P Company received a six-month interim income statement from S Company reporting \$40,000 of net income, the following entry will be made by P Company on June 30, 2015.

| P Company's Books                            |        |        |
|--|--------|--------|
| Investment in S Company                      | 36,000 |        |
| Equity in Subsidiary Income (90% × \$40,000) |        | 36,000 |

After this entry, the Investment in S Company account will appear as follows:

| Investment in S Company                   |               |
|---|---------------|
| 1/1/12 Purchase (15%)                     | 24,000        |
| 1/1/14 Adjustment of 15%<br>to fair value | 1,500         |
| 1/1/14 Purchase (75%)                     | 187,500       |
| 1/1/14 Adjustment                         | 12,000        |
| 12/31/14 Subsidiary Income                | 58,500        |
| 6/30/15 Subsidiary Income                 | <u>36,000</u> |
| Balance                                   | 319,500       |

To record the sale of the S Company shares on July 1, 2015, P Company will make the following entry (recall that P Company is selling 20% of its shares):

| P Company's Books  |        |        |
|--|--------|--------|
| Cash   | 84,600 |        |
| Investment in S Company*   |        | 63,900 |
| Additional contributed capital                                       |        | 20,700 |
| * \$63,900 = 20% of \$319,500, the carrying value of the investment. |        |        |

The \$20,700 difference between selling price and carrying value is appropriately reported as an adjustment to the parent's additional contributed capital for consolidated purposes and, as always, agrees with the amount reported for consolidated purposes under the cost method (Illustration 8-1). Since the investment account was brought up to date as of the date of sale under the equity method on P Company books, no *workpaper* adjustments to the gain are necessary.

After the sale of the 1,800 shares, P Company holds a 72% interest in S Company. Thus, for the second six months of 2015 (and for subsequent periods), P Company will

recognize 72% of the reported income and dividends received from S Company. The December 31, 2015, book entry by P Company is:

| P Company's Books  |        |        |
|--|--------|--------|
| Investment in S Company                                  | 28,800 |        |
| Equity in Subsidiary Income $72\% \times \$40,000$       |        | 28,800 |
| To record equity income for the second 6 months of 2013. |        |        |

## Equity Method

## ILLUSTRATION 8-2

Sale of Part of Investment

## Consolidated Statements Worksheet

72% Owned Subsidiary

## P Company and Subsidiary

for the Year Ended December 31, 2015

| Income Statement                              | P<br>Company     | S<br>Company   | Eliminations   |                           | Noncontrolling<br>Interest | Consolidated<br>Balances |
|---|------------------|----------------|----------------|---------------------------|----------------------------|--------------------------|
|   |                  |                | Dr.            | Cr.                       |                            |                          |
| Income before                                 |                  |                |                |                           |                            |                          |
| Equity in Subsidiary Income                   | 120,000          | 80,000         |                |                           |                            | 200,000                  |
| Equity in Subsidiary Income                   | <u>64,800</u>    |                | (1) 64,800     |                           |                            | <u>2,00,000</u>          |
| Net/Consolidated Income                       | 184,800          | 80,000         |                |                           |                            | 2,00,000                 |
| Subsidiary Income Sold                        |                  |                |                | (1) 7,200                 |                            | 7,200                    |
| Noncontrolling Interest in Income             |                  |                |                |                           | 22,400                     | (22,400)                 |
| Net Income to Retained Earnings               | <u>184,800</u>   | <u>80,000</u>  | <u>64,800</u>  | <u>7,200</u>              | <u>22,400</u>              | <u>184,800</u>           |
| <i>Retained Earnings Statement</i>            |                  |                |                |                           |                            |                          |
| 1/1 Retained Earnings                         |                  |                |                |                           |                            |                          |
| P Company                                     | 354,000          |                |                |                           |                            | 354,000                  |
| S Company                                     |                  | 185,000        | (2) 185,000    |                           |                            |                          |
| Net Income from above                         | 184,800          | 80,000         | 64,800         | 7,200                     | 22,400                     | 184,800                  |
| Dividends Declared 10/30                      |                  |                |                |                           |                            |                          |
| P Company                                     | (40,000)         |                |                |                           |                            | (40,000)                 |
| 12/31 Retained Earnings to<br>Balance Sheet   | <u>498,800</u>   | <u>265,000</u> | <u>249,800</u> | <u>7,200</u>              | <u>22,400</u>              | <u>498,800</u>           |
| <i>Balance Sheet</i>                          |                  |                |                |                           |                            |                          |
| Current Assets                                | 235,100          | 100,000        |                |                           |                            | 335,100                  |
| Investment in S Company                       | 284,400          |                |                | (1) 57,600<br>(2) 226,800 |                            |                          |
| Goodwill                                      |                  |                | (3) 30,000     |                           |                            | 30,000                   |
| Difference Between Implied<br>and Book Value  |                  |                | (2) 30,000     | (3) 30,000                |                            |                          |
| Other Assets                                  | 512,600          | 300,000        |                |                           |                            | 812,600                  |
| Land  | <u>90,000</u>    | <u>40,000</u>  |                |                           |                            | <u>130,000</u>           |
| Total Assets                                  | <u>1,122,100</u> | <u>440,000</u> |                |                           |                            | <u>1,307,700</u>         |
| Liabilities                                   | 102,600          | 75,000         |                |                           |                            | 177,600                  |
| Common Stock                                  |                  |                |                |                           |                            |                          |
| P Company                                     | 500,000          |                |                |                           |                            | 500,000                  |
| S Company                                     |                  | 100,000        | (2) 100,000    |                           |                            |                          |
| Additional Contributed Capital—<br>P Company  | 20,700           |                |                |                           |                            | 20,700                   |
| Retained Earnings from above                  | 498,800          | 265,000        | 249,800        | 7,200                     | 22,400                     | 498,800                  |
| 1/1 Noncontrolling interest<br>in Net Assets  |                  |                |                | (2) 88,200                | 88,200                     |                          |
| 12/31 Noncontrolling Interest<br>in Net Asset |                  |                |                |                           | <u>110,600</u>             | <u>110,600</u>           |
| Total Liabilities and Equity                  | <u>1,122,100</u> | <u>440,000</u> | <u>409,800</u> | <u>409,800</u>            |                            | <u>1,307,700</u>         |

**LO 4** Controlling interest in income after parent sells shares.

(1) To reverse the effect of subsidiary income for the year.  
 (2) To eliminate investment in S Company.  
 (3) To allocate the difference between implied and book value.

A December 31, 2015, workpaper, using the same basic information as under the cost basis (Illustration 8-1), is presented in Illustration 8-2. Notice, again, that consolidated net income, consolidated retained earnings, and consolidated balance sheet totals are identical in Illustrations 8-1 and 8-2.

## 8.5 PARENT SELLS SUBSIDIARY STOCK INVESTMENT ON THE OPEN MARKET—COST METHOD

### Loss of Control



COST

The treatment of the sale of a portion (but not all) of its investment by a parent company depends on whether or not the sale results in the loss of effective control of the subsidiary. If control is maintained, no gain or loss is recognized in the income statement. Instead, an adjustment is made to additional contributed capital of the controlling interest. However, if control is lost, the entire interest is adjusted to fair value, and a gain or loss recorded in income on all shares owned prior to sale. It should be noted that under past GAAP, the treatment of the sale of a portion of an investment by the parent company was the same, regardless of whether or not control was surrendered.

The parent accounts for the deconsolidation by recognizing a gain or loss in net income attributable to the parent, measured as the difference between:

1. The carrying value of S Company
2. The sum of the following:
  - a. The fair value of the consideration received
  - b. The fair value of the retained noncontrolling interest (at the date of deconsolidation)
  - c. The carrying value of the former noncontrolling interest (at the date of deconsolidation).<sup>1</sup>

Consider the following. Suppose P Company owns 9,000 shares of S Company (90% of S Company) that were acquired at \$25 a share (or \$225,000) on January 1, 2014. During 2014, S Company reported \$60,000 of income and did not pay any dividends.

| P Company's Books                      |         |         |
|--|---------|---------|
| Investment (9,000 shares × \$25/share) | 225,000 |         |
| Cash                                   |         | 225,000 |

On January 1, 2015, P Company sold two-thirds of its investment (6,000 shares of the 9,000 shares) of S Company stock, for \$180,000 (\$30/share). After the sale, P Company has lost control and now only maintains a 30% ((9,000 – 6,000)/ 10,000) interest.

The carrying value of S company, on January 1, 2015, is computed as follows:

|  |           |                |
|--|-----------|----------------|
| Implied Carrying value of S Company                |           |                |
| Carrying value of S Company (on 1/1/2015)          |           |                |
| P Company's carrying value of Company S            |           |                |
| Initial cost (9,000 shares × \$25/share)           | \$225,000 |                |
| Increase in retained earnings (\$60,000 × 0.90)    | 54,000    |                |
| Carrying value of investment in S Company 1/1/2015 |           | 279,000        |
| Noncontrolling carrying value in Company S         |           |                |
| Initial value (1,000 shares × \$25/share)          | \$25,000  |                |
| Increase in retained earnings (\$60,000 × 0.10)    | 6,000     |                |
| Carrying value of NCI in S Company 1/1/2015        |           | 31,000         |
| Total carrying value of S Company (1/1/2015)       |           | <u>310,000</u> |



COST

<sup>1</sup> This amount also includes any accumulated other comprehensive income attributable to the noncontrolling interest.

The gain or loss in net income attributable to P Company is computed as follows:

|   |               |                 |
|---|---------------|-----------------|
| Gain or loss is the difference in:                  |               |                 |
| (1) Total carrying value of S Company               |               | 310,000         |
| (2) Sum of:   |               |                 |
| Fair value of consideration received (6,000 shares) | \$180,000     |                 |
| Fair value of retained NCI (3,000 × \$30)           | 90,000        |                 |
| Carrying value of the NCI (1,000 shares)            | <u>31,000</u> |                 |
| Total   |               | <u>301,000</u>  |
| Loss attributable to P Company                      |               | <u>\$ 9,000</u> |

The loss is split between the 6,000 shares that are sold and the 3,000 shares that are still held as an investment. To record the sale of the shares, P Company makes the following entry in its books on January 1, 2015.

#### P Company's Books

|  |         |         |
|--|---------|---------|
| (1) Cash (6,000 × \$30/share)                    | 180,000 |         |
| Realized loss on sale (on 6,000 shares sold)     | 6,000   |         |
| Investment in S Company (2/3 × \$279,000)        |         | 186,000 |
| (2) Unrealized loss (on 3,000 shares retained)   | 3,000   |         |
| Investment in S Company (remaining 3,000 shares) |         | 3,000   |
| To reduce the remaining shares to market value.  |         |         |

Because P Company now holds a 30% (not controlling) interest in S Company, the investment must be carried on the books using the equity method, even if P Company uses the cost method for its controlled subsidiaries. Thus the investment account must be adjusted for previous earnings of S Company (i.e., the reciprocity entry usually made on the consolidated workpaper).

|   |        |        |
|---|--------|--------|
| (3) Investment in S Company (\$60,000 × 0.90) | 54,000 |        |
| 1/1 Retained Earnings—P Company               |        | 54,000 |

After this entry, the balance in the investment in S Company account on P Company books will be equal to its fair value of \$90,000 (or \$225,000 + \$54,000 – \$186,000 – \$3,000). Consolidated financial statements will no longer be required because P Company has lost control.

## 8.6 SUBSIDIARY ISSUES STOCK



COST

A parent company's equity interest in a subsidiary also may change as the result of the issuance of additional shares of stock by the subsidiary. The effect of these subsidiary stock transactions on the parent company depends on whether the parent is a party to the transactions, as well as on the price at which the subsidiary shares are sold. Throughout this section, most adjustments, will affect only the additional contributed capital (controlling interest) or the noncontrolling interest in equity. This approach is consistent with the FASB's position that transactions in the shares of a subsidiary by any of the affiliates are transactions in the equity of the consolidated group. Subsidiary shares are part of the residual interest remaining after subtracting consolidated liabilities from net assets; thus, no gains or losses should be recognized.

### Issuance of Additional Shares by a Subsidiary

Assume that the parent company already has a controlling interest in a subsidiary, and the subsidiary issues additional shares of its common stock. The newly issued shares may be purchased (1) entirely by the parent company, (2) partly by the parent company and partly by the noncontrolling stockholders, or (3) entirely by the noncontrolling stockholders.

When shares are purchased by the noncontrolling stockholders, the situation is analogous to a sale of shares by P Company while maintaining control. If the shares are purchased by the noncontrolling stockholders for more than book value, the effect is equivalent to a sale of a portion of its interest by P Company with an increase in the parent's additional contributed capital. Conversely, if the shares are purchased by the noncontrolling stockholders for less than book value, the effect is equivalent to a sale of a portion of its interest with a decrease in the parent's additional contributed capital. To keep the focus on the relevant issues in the next section as we illustrate these possibilities and to conserve space, we combine the presentation of cost and equity methods. Adjustments to the parent's additional contributed capital resulting from subsidiary stock issuance transactions that decrease the parent company's percentage of ownership are recorded on the parent's books the same way under both methods. The effects of subsidiary stock issuance transactions that change the parent's percentage of ownership are adjusted to the additional contributed capital when the investment is eliminated on the consolidated workpaper, as illustrated in the following section. In either case, subsequent recognition of the parent's share of subsidiary income and dividends is based on the new percentage of ownership. Of course, no entries are needed to establish reciprocity/convert to equity when the equity method is being used. Otherwise the entries are the same as those presented for the cost method.

**One Hundred Percent of New Shares Purchased by the Parent Company** When shares are purchased by the parent company directly from the subsidiary, care must be exercised in the determination of equity acquired. This occurs because the number of subsidiary shares outstanding is increased and the proceeds from the stock issue flow increase the subsidiary's total stockholders' equity.

If the parent company holds less than a 100% interest and purchases the entire new issue of stock directly from the subsidiary, one of two situations must exist. Either (1) the preemptive right has previously been waived or (2) the noncontrolling stockholders have elected not to exercise their rights. The purchase of the entire new issue by the parent company will increase the parent company's percentage of ownership with an equal reduction in the noncontrolling interest's percentage of ownership. Since a subsidiary's stock transactions affect the balances in the subsidiary's stockholders' equity accounts, a special computational method is needed to determine the change in the parent's share of the subsidiary's equity. The change is determined by comparing the parent's share of the subsidiary's equity immediately before and immediately after the new purchase.



### New Shares Issued above Existing Carrying Value per Share

**Lo 5** Issue of new shares entirely to the parent.

To illustrate, assume that P Company purchased 14,000 shares (70%) of S Company's \$10 par value common stock on January 1, 2008, for \$210,000, which included a \$20,000 excess of implied over book value; the excess cost was assigned to land. S Company's retained earnings on January 1, 2008, were \$50,000, common stock at par was \$200,000, and other contributed capital was \$30,000. See Computation and Allocation Schedule below.

**Computation and Allocation of Difference between Implied and Book Value**

| <i>January 1, 2008</i>                    | <i>Parent Share</i> | <i>Noncontrolling Share</i> | <i>Implied Value</i> |
|---|---------------------|-----------------------------|----------------------|
| Cost                                      | \$210,000           | \$90,000                    | \$300,000            |
| Equity Acquired:                          |                     |                             |                      |
| Common Stock (1)                          | 140,000             | 60,000                      | 200,000              |
| Other Contributed Capital (2)             | 21,000              | 9,000                       | 30,000               |
| Retained Earnings (3)                     | 35,000              | 15,000                      | 50,000               |
| Total                                     | <u>196,000</u>      | <u>84,000</u>               | <u>280,000</u>       |
| Difference Between Implied and Book Value | \$ 14,000           | \$ 6,000                    | \$ 20,000            |
| Adjust Land to fair value                 | <u>(14,000)</u>     | <u>(6,000)</u>              | <u>(20,000)</u>      |
| Balance                                   | <u>—0—</u>          | <u>—0—</u>                  | <u>—0—</u>           |

(1) 70% × \$200,000.  
 (2) 70% × \$30,000.  
 (3) 70% × \$50,000.



On January 1, 2016, P Company purchased 4,000 additional shares of S Company stock directly from S Company at its current market price of \$22 per share (\$88,000). This price is **greater** than the existing book value per share of S Company. Noncontrolling stockholders elected not to participate in the new issue. S Company's stockholders equity on January 1, 2016, was:



#### S Company's Stockholders' Equity and Book Value per Share

| <i>January 1, 2016</i>       | <i>Immediately<br/>before the<br/>New Issue</i> | <i>New<br/>Issue</i> | <i>Immediately<br/>after the<br/>New Issue</i> |
|------------------------------|---|----------------------|--|
| Common Stock, \$10 Par Value | \$200,000                                       | \$40,000             | \$240,000                                      |
| Other Contributed Capital    | 30,000  | 48,000               | 78,000   |
| Retained Earnings            | <u>120,000</u>                                  | <u>—0—</u>           | <u>120,000</u>                                 |
| Total Stockholders' Equity   | <u>\$350,000</u>                                | <u>\$88,000</u>      | <u>\$438,000</u>                               |
| Common Shares                | 20,000  | 4,000                | 24,000   |
| Book Value per Share         | \$ 17.50  | \$ 22.00             | \$ 18.25                                       |

Note that after P Company buys the new shares, the book value per share of S Company goes from \$17.50 to \$18.25. There are 24,000 shares of S Company stock outstanding after the new issue, 18,000 of which are owned by P Company. Thus, P Company's percentage of ownership has increased to 75% (18,000 shares/24,000 shares). The computation of the book value of the equity interest acquired in the purchase of the new shares is as follows:

#### P Company's Carrying Value of the Investment in S Company

|                              | <i>Before New<br/>Purchase<br/>(70%)</i> | <i>After New<br/>Purchase<br/>(75%)</i> | <i>Book Value of<br/>Interest<br/>Acquired</i> |
|------------------------------|--|---|--|
| Common Stock                 | (1) \$140,000                            | (4) \$180,000                           | \$40,000                                       |
| Other Contributed Capital    | (2) 21,000                               | (5) 58,500                              | 37,500   |
| Retained Earnings            | (3) <u>84,000</u>                        | (6) <u>90,000</u>                       | <u>6,000</u>                                   |
| Total Stockholders' Equity   | <u>\$245,000</u>                         | <u>\$328,500</u>                        | <u>\$83,500</u>                                |
| Land to fair value           | (7) <u>14,000</u>                        | (8) <u>15,000</u>                       | <u>1,000</u>                                   |
| Carrying Value in S Company  | <u>259,000</u>                           | <u>343,500</u>                          | <u>\$84,500</u>                                |
| (1) $.7 \times \$200,000$ .  | (5) $.75 \times \$78,000$                |   |  |
| (2) $.7 \times \$30,000$ .   | (6) $.75 \times \$120,000$ .             |   |  |
| (3) $.7 \times \$120,000$ .  | (7) $.7 \times \$20,000$                 |   |  |
| (4) $.75 \times \$240,000$ . | (8) $.75 \times \$20,000$ .              |   |  |



The cost of the new shares was \$88,000 and the book value of the interest acquired was \$84,500, as determined above. The difference is debited to the parent's additional contributed capital. It should be noted that the \$4,500 excess cost resulted because P Company purchased the additional shares from S Company at a price of \$22 per share, which exceeded the \$17.50 book value of S Company's shares (\$350,000/20,000 shares). The noncontrolling shareholders' book value per share increased from \$17.50 to \$18.25, or 0.75 per share. Since they own 6,000 shares, the book value of their shares increased by \$4,500 (or  $.75 \times 6,000$ ) and decreased by the difference between implied and book value (assigned to land) considered transferred to P Company of \$1,000, yielding a net increase of \$3,500.

Although the noncontrolling stockholders did not participate in the new issue and their percentage of ownership decreased (30% to 25%), the amount of their total book value interest in S Company's net assets increased by \$3,500. It is not a coincidence that the increase in the noncontrolling interest equals the amount debited to the parent's additional contributed capital. The noncontrolling interest will increase if the cost of the new shares is greater than the carrying value of the interest acquired. Because the shares were purchased directly from the subsidiary, the \$3,500 represents a transfer of interest from

the controlling interest to the noncontrolling stockholders. This can be verified as follows:

**Noncontrolling Interest in S Company**

|  |                          |                 |
|--|--------------------------|-----------------|
| Before the new issue                               | $.30 \times \$350,000 =$ | \$105,000       |
| After the new issue                                | $.25 \times \$438,000 =$ | <u>109,500</u>  |
| Increase in noncontrolling interest                |                          | \$ 4,500        |
| Less: land value transferred to P (5% of \$20,000) |                          | <u>(1,000)</u>  |
| Net increase                                       |                          | <u>\$ 3,500</u> |

Essentially, because the controlling stockholders paid more than the existing carrying value per share, the noncontrolling stockholders' carrying value must increase.

To record the purchase of the new shares, P Company will make the following entry:

**P Company's Books**

|                         |        |        |
|-------------------------|--------|--------|
| Investment in S Company | 88,000 |        |
| Cash                    |        | 88,000 |

If a workpaper were prepared immediately after the purchase of the new shares, the workpaper entries to establish reciprocity (convert to equity) and eliminate the investment account would be:

|  |        |        |
|--|--------|--------|
| Investment in S Company                                | 49,000 |        |
| 1/1 Retained Earnings—P Company                        |        | 49,000 |
| [70% × (\$120,000 – 50,000)]                           |        |        |
| To establish reciprocity (convert to equity).*         |        |        |
| *Conversion entry not needed if equity method is used. |        |        |



COST

|   |         |         |
|---|---------|---------|
| Common Stock—S Company                          | 240,000 |         |
| Other Contributed Capital—S Company             | 78,000  |         |
| Retained Earnings—S Company                     | 120,000 |         |
| Difference between Implied and Book Value       | 20,000  |         |
| Additional Contributed Capital—P Company        | 3,500   |         |
| Investment in S Company                         |         | 347,000 |
| (\$210,000 + \$88,000 + \$49,000)               |         |         |
| Noncontrolling interest in S Company            |         | 114,500 |
| (\$90,000 + \$21,000 + \$3,500)                 |         |         |
| To eliminate the investment and create the NCI. |         |         |

Because this entry only reflects the change in Retained Earnings—S Company up to the *beginning of the year*, we use the percentage of ownership as of the beginning of the year (70%). In later years, reciprocity is established on the basis of a 70% interest to the date of purchase of the new shares plus a 75% interest thereafter. The elimination of S Company's stockholders' equity, however, is based on the level of ownership held after the purchase of the new shares (75%).

**New Shares Issued at or below the Existing Book Value per Share**

**Lo 5** New shares issued to the parent.

In the previous example, the parent paid more than the existing book value per share of S Company. If the new shares are issued at a price *equal* to their book value, the parent's additional contributed capital will change only by difference between implied and purchase price considered transferred. For example, if the shares are issued at their book value of \$17.50 per share (or \$70,000), the computation is as follows:

**P Company's Share of S Company's Net Assets**

|  |   |                  |
|--|---|------------------|
| Before the new issue                                 | $.70 \times \$350,000 =$                    | \$245,000        |
| After the new issue                                  | $.75[\$350,000 + (4,000 \times \$17.50)] =$ | <u>\$315,000</u> |
| Increase in P Company's share                        |   | 70,000           |
| Land value transferred to P ((75% – 70%) × \$20,000) |   | <u>1,000</u>     |
| Total  |   | 71,000           |
| Cost of investment (4,000 × \$17.50)                 |   | <u>70,000</u>    |
| Difference   |   | <u>\$ 1,000</u>  |

Although the noncontrolling stockholders' percentage of ownership decreases from 30% to 25%, their share of the net assets of S Company decreased only by the land value transferred, as shown here:

#### Noncontrolling Interest in S Company

|   |                                       |                 |
|---|---------------------------------------|-----------------|
| Before the new issue  | $.30 \times \$350,000 =$              | \$ 105,000      |
| After the new issue   | $.25 \times (\$350,000 + \$70,000) =$ | 105,000         |
| Decrease in noncontrolling share                              |                                       | \$ —0—          |
| Land value transferred to P $((0.30 - 0.25) \times \$20,000)$ |                                       | 1,000           |
| Difference  |                                       | <u>\$ 1,000</u> |

If the new shares are issued at a price *less* than their book value, total noncontrolling book value interest decreases, and the controlling book value interest increases by more than the amount of the land value transferred. In this case, an excess of book value over implied value results. For example, assume the new shares were issued at \$14 per share (or \$56,000). The excess of book value over cost is computed as follows:

|   |  |                 |
|---|--|-----------------|
| Before the new issue  | $.70 \times \$350,000 =$                 | \$ 245,000      |
| After the new issue   | $.75[\$350,000 + (4,000 \times \$14)] =$ | \$ 304,500      |
| Increase in P Company's share<br>(book value acquired)              |  | 59,500          |
| Plus: land value transferred to P $((75\% - 70\%) \times \$20,000)$ |  | 1,000           |
| Total   |  | 60,500          |
| Cost of the investment $(4,000 \times \$14)$                        |  | 56,000          |
| Increase in additional contributed capital                          |  | <u>\$ 4,500</u> |

The resulting decrease in the noncontrolling interest is verified as:

#### Noncontrolling Interest in S Company

|  |  |                 |
|--|--|-----------------|
| Before the new issue   | $.30 \times \$350,000 =$                 | \$ 105,000      |
| After the new issue  | $.25[\$350,000 + (4,000 \times \$14)] =$ | \$ 101,500      |
| Decrease in noncontrolling interest                                |  | \$ 3,500        |
| Less: land value transferred to P $(0.30 - 0.25) \times \$20,000)$ |  | 1,000           |
| Total decrease in NCI  |  | <u>\$ 4,500</u> |

In this case, the journal entry by P Company to record the purchase of the new shares is:

#### P Company's Books

|                         |        |        |
|-------------------------|--------|--------|
| Investment in S Company | 56,000 |        |
| Cash                    |        | 56,000 |

In this case, the \$4,500 excess of book value over cost is treated as an increase in the additional contributed capital of the parent. Thus, the workpaper entries to establish reciprocity and eliminate the investment account in the preparation of a consolidated workpaper immediately after the purchase are:

|   |        |        |
|---|--------|--------|
| Investment in S Company   | 49,000 |        |
| 1/1 Retained Earnings—P Company<br>[ $70\% \times (\$120,000 - \$50,000)$ ] |        | 49,000 |
| To establish reciprocity/convert to equity*                                 |        |        |

|  |         |         |
|--|---------|---------|
| Common Stock—S Company   | 240,000 |         |
| Other Contributed Capital—S Company  | 46,000  |         |
| Retained Earnings—S Company  | 120,000 |         |
| Difference between Implied and Book Value  | 20,000  |         |
| Investment in S Company<br>(\$210,000 + \$56,000 + \$49,000)                                       |         | 315,000 |
| Additional contributed capital—P Company   |         | 4,500   |
| Noncontrolling interest in S Company<br>[\$90,000 + $(\$120,000 - 50,000) \times 30\% - \$4,500$ ] |         | 106,500 |
| To eliminate the investment account and create NCI   |         |         |

\*Entry not needed if equity method is used.



COST



COST

**LO 6** New subsidiary shares purchased ratably by the parent and noncontrolling shareholders.

**New Shares Purchased Ratably by Parent and Noncontrolling Stockholders** In the previous example, noncontrolling stockholders elected not to exercise their right to purchase a ratable number of the new shares. If the noncontrolling stockholders had elected to exercise their rights, the percentage of stock owned by the parent and noncontrolling stockholders after the new issue would be the same as their respective interests prior to the new issue. Assume, for example, that the shares are issued at \$22 each, that P Company is permitted to purchase only its ratable share of the new issue, and that the remaining shares are purchased by the noncontrolling stockholders. Thus, P Company would purchase 2,800 of the 4,000 new shares and retain its 70% (16,800 shares/24,000 shares) interest in S Company. Comparison of cost with the book value of the interest acquired by P Company is as follows:

|   |                |                 |
|---|----------------|-----------------|
| Cost of investment (2,800 × \$22)                     |                | \$ 61,600       |
| Book value of equity interest acquired:               |                |                 |
| P Company's share of S Company's net assets:          |                |                 |
| Before the new purchase .7(\$350,000)                 | \$245,000      |                 |
| After the new purchase .7[\$350,000 + (4,000 × \$22)] | <u>306,600</u> |                 |
| Increase in P Company's share of S Company            |                | 61,600          |
| Land value transferred (0.70 – 0.70)(\$20,000)        |                | <u>— 0 —</u>    |
| Difference  |                | <u>\$ — 0 —</u> |

Note that the book value of the interest acquired is equal to the cost of the shares to P Company; thus, there is no need to adjust the parent's additional contributed capital. This condition will always result if the shares are purchased ratably by the existing stockholders, regardless of whether the new shares are issued at a price below, equal to, or above their book value.

**LO 6** New subsidiary shares purchased by noncontrolling shareholders.



COST

**New Shares Purchased Entirely by Noncontrolling Stockholders** Occasionally, in order to obtain an additional capital increment for the consolidated entity or to meet the requirements of employee stock options or stock purchase plans, the subsidiary may issue new shares entirely to noncontrolling stockholders. Since any shares purchased by the parent represent a transfer of funds within the affiliated group, purchases by the parent do not provide any additional capital to the group as a whole. As long as the number of new shares issued is not so large that it reduces the parent's percentage of ownership below that needed for control, new financing can be made available and control retained. The issuance of all the new shares to noncontrolling stockholders does, of course, reduce the parent's percentage of ownership. Thus, the economic substance of the transaction is a sale of interest by P Company. However, the book value of the parent's interest in the subsidiary may increase, decrease, or remain unchanged depending on the relationship of the issue price to book value per share of stock. To illustrate, assume the previous example except that the 4,000 new shares were issued entirely to noncontrolling stockholders at the current market price of \$22 per share. The new issue results in a decrease in P Company's percentage of ownership from 70% to 58.33% (14,000 shares/24,000 shares). The change in the book value of P Company's interest in S Company is determined as before by an immediately "before" and "after" computation as follows:

**P Company's Share of S Company's Net Assets**

|   |   |                 |
|---|---|-----------------|
| Before the new issue  | 70% × \$350,000 =                       | \$245,000       |
| After the new issue   | 58.33% × [\$350,000 + (4,000 × \$22)] = | <u>255,500</u>  |
| Increase  |   | \$ 10,500       |
| Less: land value transferred to NCI (0.70 – 0.5833)(\$20,000) |   | <u>(2,333)</u>  |
| Net increase  |   | <u>\$ 8,167</u> |

Although P Company's ownership interest decreased from 70% to 58.33%, the book value of its interest in S Company after the new issue increased by \$8,167. The \$8,167 increase in P Company's book value interest is accompanied by a decline in the noncontrolling book value interest relative to the cost of the new shares. The total \$88,000 cost of

the new shares is allocated between the controlling and noncontrolling interests in essence, even though the noncontrolling interest paid the entire amount as follows:

|   |           |        |                 |
|---|-----------|--------|-----------------|
| Cost of new shares to noncontrolling interest<br>(4,000 × \$22) |           |        | \$88,000        |
| Less: equity in net assets acquired:                            |           |        |                 |
| Noncontrolling interest's share of net assets:                  |           |        |                 |
| Before the purchase .3(\$350,000)                               | \$105,000 |        |                 |
| After the purchase  |           |        |                 |
| 41.67% × (\$350,000 + \$88,000)                                 | 182,500   | 77,500 |                 |
| Plus: land value transferred to NCI (41.67% – 30%)(20,000)      |           | 2,333  |                 |
| Increase in noncontrolling interest                             |           |        | 79,833          |
| Increase in controlling interest                                |           |        | <u>\$ 8,167</u> |



COST

Since the purchase of the shares by the noncontrolling stockholders decreased P Company's ownership percentage, the situation is analogous to a sale of shares by P Company, while retaining control. The transfer of the \$8,167 interest in consolidated net assets from the noncontrolling stockholders to the controlling stockholders is recorded on the books of P Company as follows:

#### P Company's Books

|                                |       |       |
|--------------------------------|-------|-------|
| Investment in S Company        | 8,167 |       |
| Additional Contributed Capital |       | 8,167 |

Because the shares were purchased by the noncontrolling stockholders for more than book value, P Company's percentage interest decreased, and P Company's interest in the consolidated net assets increased, the effect is the equivalent of a sale of a portion of its interest by P Company, while retaining control. Note that, in this example, the new shares are purchased by the noncontrolling stockholders at a price in excess of book value, which results in an increase in P Company's share of consolidated net assets. If the new shares are issued at book value, the parent's additional contributed capital will change only by the amount of land value transferred:

#### P Company's Share of S Company's Net Assets

|   |   |                   |
|---|---|-------------------|
| Before the new issue                                      | 70% × 350,000 =                         | 245,000           |
| After the new issue                                       | 58.33% × [350,000 + (4,000 × \$17.5)] = | 245,000           |
|   |   | <u>—0—</u>        |
| Land value transferred to NCI ((70% – 58.33%) × \$20,000) |   | 2,333             |
| Difference  |   | <u>(\$ 2,333)</u> |

If the shares are issued below book value, P Company's book value interest decreases and a book entry debiting Additional Contributed Capital and crediting Investment in S Company is made. For example, assuming the issue of the entire 4,000 shares to noncontrolling stockholders at \$14 per share (or \$56,000), the computation and journal entry are:

#### P Company's Share of S Company's Net Assets

|   |   |                  |
|---|---|------------------|
| Before the new issue  | 70% × \$350,000 =                       | 245,000          |
| After the new issue   | 58.33% × [\$350,000 + (4,000 × \$14)] = | 236,833          |
| Decrease  |   | 8,167            |
| Less: land value transferred to NCI ((70% – 58.33%) × \$20,000) |   | 2,333            |
| Total decrease in book value interest                           |   | <u>\$ 10,500</u> |

#### P Company's Books

|                                |        |        |
|--------------------------------|--------|--------|
| Additional Contributed Capital | 10,500 |        |
| Investment in S Company        |        | 10,500 |

## IFRS and Step Acquisitions

There are some important differences between U.S. GAAP and IFRS with regard to step acquisitions. Under IFRS, a choice is available to measure noncontrolling interests either (1) at their proportionate interest in the net identifiable assets of the acquired firm or (2) at fair value (which is required under U.S. GAAP). The choice of method affects the

**IFRS**

amount recognized on the acquisition date as goodwill and is available for each business combination. Measuring the fair value of noncontrolling interest is similar to U.S. GAAP. It may be possible to use market prices for noncontrolling shares trading shortly after acquisition or other valuation methods may be necessary.

Under IFRS, a change in control is a significant economic event. Accordingly, acquisition accounting is applied only at the date that control is achieved. Consequently, goodwill is identified and net assets remeasured to fair value only in respect of the transaction that achieved control, and not in respect of any earlier or subsequent acquisitions of equity interests. In measuring goodwill, any previously held interests in the acquiree are first remeasured to fair value, with any gain recognized in income (including the reclassification of gains or losses included in other comprehensive income). Similarly, on disposal of a controlling interest, any residual interest is remeasured to fair value and reflected in income on disposal.

After control is attained, any subsequent transactions between the parent and noncontrolling interests (that do not result in a loss of control) are accounted for as equity transactions. Consequently, additional goodwill is not recorded on any increase in the parent's ownership percentage. Also, there is no remeasurement of net assets to fair value and no gain or loss is recognized on any decrease in parent ownership percentage.

Consider the following example. Suppose that Company P acquired an 80% interest in S Company for \$120,000. On this date, the fair value of S Company's identifiable net assets is \$100,000. The fair value of the noncontrolling interest is \$30,000. Goodwill is computed under each acceptable alternative for recording noncontrolling interests (NCI) for firms using IFRS and under U.S. GAAP.

|                               | IFRS   |                                   | U.S. GAAP                         |
|-------------------------------|--|-----------------------------------|-----------------------------------|
|                               | <i>NCI Recorded at % of Fair Value of Net Assets</i> | <i>NCI Recorded at Fair Value</i> | <i>NCI Recorded at Fair Value</i> |
| Purchase price                | \$120,000  | \$120,000                         | \$120,000                         |
| Noncontrolling interest (NCI) | <u>20,000</u>  | <u>30,000</u>                     | <u>30,000</u>                     |
| Total                         | 140,000  | 150,000                           | 150,000                           |
| Fair value of net assets      | <u>100,000</u>                                       | <u>100,000</u>                    | <u>100,000</u>                    |
| Goodwill                      | 40,000   | 50,000                            | 50,000                            |

Suppose that one year later, S Company earned income of 40,000 and did not pay any dividends. The carrying value of the noncontrolling interest is computed as follows:

|                                | IFRS   |                                   | U.S. GAAP                         |
|--------------------------------|--|-----------------------------------|-----------------------------------|
|                                | <i>NCI Recorded at % of Fair Value of Net Assets</i> | <i>NCI Recorded at Fair Value</i> | <i>NCI Recorded at Fair Value</i> |
| NCI at acquisition             | 20,000   | 30,000                            | 30,000                            |
| S Company income $\times$ 0.20 | <u>8,000</u>   | <u>8,000</u>                      | <u>8,000</u>                      |
| Carrying value of NCI          | 28,000   | 38,000                            | 38,000                            |

Suppose that P Company acquires the remaining 20% for \$40,000. The adjustment to equity is:

|                              | IFRS   |                                   | U.S. GAAP                         |
|------------------------------|--|-----------------------------------|-----------------------------------|
|                              | <i>NCI Recorded at % of Fair Value of Net Assets</i> | <i>NCI Recorded at Fair Value</i> | <i>NCI Recorded at Fair Value</i> |
| Purchase price               | \$40,000   | \$40,000                          | \$40,000                          |
| Carrying value of NCI        | <u>28,000</u>  | <u>38,000</u>                     | <u>38,000</u>                     |
| Reduction in paid in capital | 12,000   | 2,000                             | 2,000                             |

Thus there can be no difference or quite a difference depending on the alternative chosen under IFRS.


**SUMMARY**

- 1 *Identify the types of transactions that change the parent company's ownership interest in a subsidiary.* The parent may buy additional shares of the subsidiary from third parties; the parent may sell subsidiary shares to third parties; the subsidiary may issue additional shares, either to the parent or to others, or both; the subsidiary may buy its own shares either from its parent or from others.
- 2 *Describe the process needed when the parent acquires subsidiary shares through multiple open market purchases.* The initial investment(s) is revalued to fair value when control is achieved, and adjustments are recorded in the income statement. Subsequent purchases result in adjustments to additional contributed capital.
- 3 *Explain how the parent reports the difference between selling price and book value when shares are sold subsequent to acquisition.* If the parent maintains control, the difference is an adjustment to additional contributed capital. If not, the difference after adjusting any remaining ownership to fair value, is treated as a gain or loss.
- 4 *Compute the controlling interest in income after the parent sells some shares of the subsidiary company.* The controlling interest in income is computed as the internally generated income of the parent plus or minus the usual adjustments for excess depreciation, and so on, plus the controlling percentage of the subsidiary adjusted income. The controlling percentage of the subsidiary adjusted income is layered in the year of sale so that the portion of the year's income prior to the sale reflects the initial percentage ownership and the portion subsequent to the sale reflects the new lower percentage ownership.
- 5 *Describe the effect on the eliminating process when the subsidiary issues new shares entirely to the parent, and the parent pays either more or less than the book value of the subsidiary shares.* The number of subsidiary shares outstanding is increased, and the proceeds from the stock issue flow increase

the subsidiary's total stockholders' equity. This affects the additional contributed capital of the parent and the noncontrolling interest. The change in the parent's share of the subsidiary's equity is determined by comparing the parent's share of the subsidiary's equity immediately before and immediately after the new purchase. The noncontrolling interest will increase if the cost of the new shares is greater than the book value of the interest acquired and decrease if the cost is less than the book value. This change must be decreased (increased) for the value of goodwill transferred between the controlling and noncontrolling interests.

- 6 *Describe the impact on the parent's investment account when the subsidiary issues new shares and either the new shares are purchased ratably by the parent and noncontrolling shareholders or entirely by the noncontrolling shareholders.* If the shares are purchased ratably by both, the percentage of stock owned by the parent and noncontrolling stockholders after the new issue would be the same as their respective interests prior to the new issue. If the shares are purchased entirely by the noncontrolling shareholders, the parent's percentage of ownership is reduced. Thus, the economic substance of the transaction is a sale of interest by parent. However, the book value of the parent's interest in the subsidiary may increase, decrease, or remain unchanged depending on the relationship of the issue price to book value per share of stock. If the price is higher than book value, the parent's interest increases. If the price is lower than book value, the parent's interest decreases.

**TEST YOUR KNOWLEDGE SOLUTIONS**
 8.1

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 8.2

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**QUESTIONS**

- LO 1 1. Identify three types of transactions that result in a change in a parent company's ownership interest in its subsidiary.
- LO 2 2. Why is the date of acquisition of subsidiary stock important under the purchase method?
- LO 3 3. When a parent company has obtained control of a subsidiary through several purchases and subsequently sells a portion of its shares in the subsidiary, how is the carrying value of the shares sold determined?
- LO 3 4. When a parent company that records its investment using the cost method during a fiscal year sells a portion of its investment, explain the correct accounting for any differences between selling price and recorded values.
- LO 3 5. ABC Corporation purchased 10,000 shares (80%) of EZ Company at \$30 per share and sold them several years later for \$35 per share. The consolidated income statement reports a loss on the sale of this investment. Explain.
- LO 5 6. Explain how a parent company that owns less than 100% of a subsidiary can purchase an entire new issue of common stock directly from the subsidiary.
- LO 6 7. When a subsidiary issues additional shares of stock to noncontrolling stockholders and such issuance results in an increase in the book value of the parent's share of the subsidiary's equity, how should the increase be reflected in the financial statements? What if it results in a decrease?

- LO 5** 8. P Company holds an 80% interest in S Company. Determine the effect (that is, increase, decrease, no change, not determinable) on both the total book value of the noncontrolling interest and the noncontrolling interest's percentage of ownership in the net assets of S Company for each of the following situations:
- LO 6**
- P Company acquires additional shares directly from S Company at a price equal to the book value per share of the S Company stock immediately prior to the issuance.
  - S Company acquires its own shares on the open market. The cost of these shares is less than their book value.
  - Assume the same situation as in (b) except that the cost of the shares is greater than their book value.
  - P Company and a noncontrolling stockholder each acquire 100 shares directly from S Company at a price below the book value per share.

### Business Ethics

During a recent review of the quarterly financial statements and supporting ledgers, you noticed several unusual journal entries. While the dollar amounts of the journal entries were not large, there did not appear to be supporting documentation. You decide to bring the matter to the attention of your immediate supervisor. After you mentioned the issue, the supervisor calmly stated that the matter would be looked into and that you should not worry about it.

*Question:* You feel a bit uncomfortable about the situation. What is your responsibility and what action, if any, should you take?

## ANALYZING FINANCIAL STATEMENTS

### AFS8-1 Cadbury Acquisition

On January 19, 2010, Kraft Foods announced the terms of its final offer for each outstanding ordinary share of Cadbury, including each ordinary share represented by an American Depositary Share ("Cadbury ADS"), and the Cadbury Board of Directors recommended that Cadbury shareholders accept the terms of the final offer. On February 2, 2010, all of the conditions to the offer were satisfied or validly waived, the initial offer period expired, and a subsequent offer period immediately began. At that point, Kraft Foods had received acceptances of 71.73% of the outstanding Cadbury ordinary shares, including those represented by Cadbury ADSs ("Cadbury Shares").

As of June 1, 2010, Kraft Foods owned 100% of all outstanding Cadbury Shares. Kraft Foods believes the combination of Kraft Foods and Cadbury will create a global snacks powerhouse and an unrivaled portfolio of brands that people will love. Under the terms of its final offer and the subsequent offer, Kraft Foods agreed to pay Cadbury shareholders 500 pence in cash and 0.1874 shares of Kraft Foods Common Stock per Cadbury ordinary share and 2,000 pence in cash and 0.7496 shares of Kraft Foods Common Stock per Cadbury ADS. This resulted in a \$18.5 billion value for Cadbury, or approximately £11.6 billion (based on the average price of \$28.36 for a share of Kraft Foods Common Stock on February 2, 2010 and an exchange rate of \$1.595 per £1.00).

On February 2, 2010, Kraft Foods acquired 71.73% of Cadbury Shares for \$13.1 billion and the value attributed to noncontrolling interests was \$5.4 billion. From February 2, 2010, through June 1, 2010, Kraft Foods acquired the remaining 28.27% of Cadbury Shares for \$5.4 billion.

#### Required:

- For this step acquisition, describe the appropriate accounting for the acquisition.
- The change in value for the noncontrolling interest between February 2 and the date that Kraft acquired all remaining shares was an increase of \$38 million. What is the appropriate accounting for the increase in value?

## EXERCISES

### EXERCISE 8-1 Multiple Stock Purchases—Journal Entries **LO 2**

Peck Company purchased Sanno Company common stock in a series of open-market cash purchases from 2012 through 2014 as follows:

| <i>Date</i>     | <i>Shares Acquired</i> | <i>Cost</i> |
|-----------------|------------------------|-------------|
| January 1, 2012 | 1,800                  | \$ 46,000   |
| January 1, 2013 | 4,500                  | 95,000      |
| January 1, 2014 | 9,900                  | 262,350     |



Sanno Company had 18,000 shares of \$20 par value common stock outstanding during the entire period. Retained earnings balances for Sanno Company on relevant dates were

|                   |           |
|-------------------|-----------|
| January 1, 2012   | \$ 20,000 |
| January 1, 2013   | (30,000)  |
| January 1, 2014   | 85,000    |
| December 31, 2014 | 170,000   |

Dividends in the amount of \$50,000 were distributed by Sanno Company only in 2014. Any difference between implied and book values is assigned to goodwill. Peck Company uses the cost method to account for its investment in Sanno Company.

**Required:**

- Prepare the journal entries that Peck Company would record on its books during 2014 to account for its investment in Sanno Company.
- Prepare the workpaper eliminating entries necessary to prepare a consolidated statements workpaper on December 31, 2014.

**EXERCISE 8-2 Parent Company Entries—Multiple Stock Purchase and Sale of Stock, Cost Method LO 2 LO 3**

Papke Company acquired 85% of the common stock of Serbin Company in two separate cash transactions. The first purchase of 72,000 shares (60%) on January 1, 2013, cost \$490,000. The second purchase, on January 1, 2014, of 30,000 shares (25%) cost \$220,000. Serbin Company's stockholders' equity was as follows:

|                                   | 2013             | 2014             |
|-----------------------------------|------------------|------------------|
| Common Stock, \$5 par             | <u>\$600,000</u> | <u>\$600,000</u> |
| Retained Earnings, 1/1            | 175,000          | 201,000          |
| Net Income                        | 46,000           | 60,000           |
| Dividends Declared, 9/30          | <u>(20,000)</u>  | <u>(25,000)</u>  |
| Retained Earnings, 12/31          | <u>201,000</u>   | <u>236,000</u>   |
| Total Stockholders' Equity, 12/31 | <u>\$801,000</u> | <u>\$836,000</u> |

On April 1, 2014, after a significant rise in the market price of Serbin Company's stock, Papke Company sold 21,600 of its Serbin Company shares for \$260,000. Serbin Company notified Papke Company that its net income for the first three months was \$15,000. The shares sold were identified as those obtained in the first purchase. Any difference between implied and book values relates to goodwill. Papke uses the cost method to account for its investment in Serbin Company.

**Required:**

Prepare the journal entries Papke Company would record on its books during 2014 to account for its investment in Serbin Company.

**EXERCISE 8-3 Workpaper Entries—Multiple Stock Purchases LO 4**

Use the data provided in Exercise 8-2.

**Required:**

- Prepare the workpaper eliminating entries needed for a consolidated statements workpaper on December 31, 2014.
- Determine the amount of noncontrolling interest that would be reported on the consolidated balance sheet on December 31, 2014.

**EXERCISE 8-4 Parent Company Entries—Multiple Stock Purchases, Equity Method LO 2 LO 3 LO 4**

Use the data from Exercise 8-1, but assume use of either the complete or the partial equity method rather than the cost method.

**Required:**

- Prepare the journal entries Peck Company will make on its books during 2013 and 2014 to account for its investment in Sanno Company.
- Prepare workpaper eliminating entries necessary to prepare a consolidated statements workpaper on December 31, 2014.

**EXERCISE 8-5 Parent Company and Workpaper Entries—Equity Method LO 2 LO 4**

Use the data presented in Exercise 8-2, but assume use of the complete or the partial equity method rather than the cost method.

**Required:**

- A. Prepare the journal entries Papke Company will make on its books during 2013 and 2014 to account for its investment in Serbin Company.
- B. Prepare the workpaper eliminating entries needed for a consolidated statements workpaper on December 31, 2014.

**EXERCISE 8-6 Parent Company and Workpaper Entries—New Shares Issued by Subsidiary LO 5**

On January 1, 2014, Pace Company purchased 250,000 shares of common stock directly from its subsidiary, Sime Company, for \$1.50 per share. Noncontrolling stockholders elected not to participate in the new issue.

Pace Company acquired its initial 92.5% interest in Sime Company by purchasing on the open market 462,500 shares of Sime's common stock for \$578,125 on January 1, 2010. Sime Company's stockholders' equity just before each of the two purchases was as follows:

|                           | <i>December 31</i><br><i>2009</i> | <i>December 31</i><br><i>2013</i> |
|---------------------------|-----------------------------------|-----------------------------------|
| Common Stock \$1 par      | \$500,000                         | \$500,000                         |
| Other Contributed Capital | 40,000                            | 40,000                            |
| Retained Earnings         | <u>60,000</u>                     | <u>150,000</u>                    |
| Total                     | <u>\$600,000</u>                  | <u>\$690,000</u>                  |

During 2014 Sime Company reported \$90,000 net income and declared a dividend in the amount of \$30,000. Any difference between implied and book values relates to subsidiary land. Pace uses the cost method to account for its investment.

**Required:**

- A. Prepare the journal entry on Pace Company's books to record the purchase of the additional shares on January 1, 2014.
- B. Prepare the eliminating entries needed for the preparation of a consolidated statements workpaper on December 31, 2014.

**EXERCISE 8-7 Parent Company and Workpaper Entries—New Shares Issued by Subsidiary LO 5**

Use the same data provided in Exercise 8-6, with the exception that Pace Company purchased the additional shares from Sime Company on January 1, 2014, at a price of \$1.30 per share rather than \$1.50.

**Required:**

- A. Prepare the journal entry on Pace Company's books to record the purchase of the additional shares on January 1, 2014.
- B. Prepare the eliminating entries needed for the preparation of a consolidated statements workpaper on December 31, 2014.

**EXERCISE 8-8 Parent Company and Workpaper Entries—New Shares Issued by Subsidiary LO 6**

Padilla Company acquired 80% of the outstanding common stock of Skon Company on January 1, 2012, for \$132,000. At the date of purchase, Skon Company had a balance in its \$2 par value common stock account of \$120,000 and retained earnings of \$30,000.

On January 1, 2014, Skon Company issued 15,000 shares of its previously unissued stock to noncontrolling stockholders for \$3.00 per share. On this date, Skon Company had a retained earnings balance of \$50,500. The difference between implied and book values relates to subsidiary land. No dividends were paid in 2014.

Skon Company reported income of \$10,000 in 2014.

**Required:**

- A. Prepare the journal entry on Padilla's books to record the effect of the issuance assuming
  - (1) Cost method
  - (2) Complete or partial equity method
- B. Prepare the eliminating entries needed for the preparation of a consolidated statements workpaper on December 31, 2014 assuming
  - (1) Cost method
  - (2) Complete or partial equity method

**ASC Exercises:** For all ASC exercises indicate as part of your answer: the Codification topic, subtopic, section, and paragraph upon which your answer is based (unless otherwise specified). All ASC questions require access to the FASB Codification.

- ASC8-1** **Recognition** FASB assumes that if the number of shares issued in a stock dividend is large enough to materially reduce the per-share market value, it is inappropriate to record the impact using the firm's market value. What is the preferred treatment in such cases? Does FASB provide a guideline as to the percentage of previously outstanding shares that would qualify for the treatment?
- ASC8-2** **Overview** Does ASC 505 (stock dividends and stock splits) apply to both issuers and recipients? If not, which party is addressed?
- ASC8-3** **Glossary** There are three definitions of *control* in the glossary. Which definition is used for business combinations? Provide the definition.
- ASC8-4** **Glossary** Define *kick-out rights*. How can you determine if the kick-out rights are substantive?

## PROBLEMS

### PROBLEM 8-1 Multiple Stock Purchases LO 2

Sarko Company had 300,000 shares of \$10 par value common stock outstanding at all times, and retained earnings balances as indicated here:

|                 | <i>Retained Earnings</i> |
|-----------------|--------------------------|
| January 1, 2013 | \$260,000                |
| January 1, 2014 | 540,000                  |
| January 1, 2015 | 630,000                  |
| January 1, 2016 | 820,000                  |

Pelzer Company acquired Sarko Company stock through open-market purchases as follows:

| <i>Date</i> | <i>% Acquired</i> | <i>Shares</i> | <i>Cost</i> |
|-------------|-------------------|---------------|-------------|
| 1/1/13      | 10%               | 30,000        | \$ 365,000  |
| 1/1/14      | 25%               | 75,000        | 960,000     |
| 1/1/15      | 45%               | 135,000       | 1,890,000   |
|             | 80%               |               |             |

Sarko Company declared no dividends during this period. The fair values of Sarko Company's assets and liabilities were approximately equal to their book values throughout this period (2013 through 2015). Pelzer Company uses the cost method.

#### Required:

- Prepare a schedule to compare investment cost with the book value of equity acquired.
- Prepare elimination entries for the preparation of a consolidated statements worksheet on December 31, 2015.

### PROBLEM 8-2 Workpaper—Sale of Shares by Parent, Cost Method—Loss of Control

The accounts of Pyle Company and its subsidiary, Stern Company, are summarized below as of December 31, 2014:

| <i>Debits</i>               | <i>Pyle</i>        | <i>Stern</i>       |
|-----------------------------|--------------------|--------------------|
| Current Assets              | \$ 600,000         | \$ 320,000         |
| Investment in Stern Company | 480,000            |                    |
| Other Assets                | 1,180,000          | 668,000            |
| Dividends Declared, 11/1    | 80,000             | 60,000             |
|                             | <u>\$2,340,000</u> | <u>\$1,048,000</u> |
| <i>Credits</i>              |                    |                    |
| Liabilities                 | \$ 190,000         | \$ 90,000          |
| Common Stock, \$5 par       | 500,000            | 300,000            |
| Other Contributed Capital   | 230,000            | 180,000            |
| 1/1 Retained Earnings       | 1,200,000          | 292,000            |
| Net Income                  | 220,000            | 186,000            |
|                             | <u>\$2,340,000</u> | <u>\$1,048,000</u> |

Pyle Company made the following open-market purchase and sale of Stern Company common stock:

- January 2, 2012, purchased 51,000 shares (85% of Stern), cost \$510,000, \$10/share;
- January 1, 2014 sold 40,000 shares (two-thirds of Stern), proceeds, \$480,000, \$12/share.

The book value of Stern Company's net assets on January 2, 2012, \$600,000, approximated the fair value of those net assets, including retained earnings of \$120,000. Subsequent changes in book value of the net assets are entirely attributable to earnings of Stern Company. Stern Company earns its income evenly throughout the year.

**Required:**

Prepare the journal entries needed on Pyle Company's books to record the transactions regarding the investment in Stern Company account assuming that the cost method is used to account for the investment.

**PROBLEM 8-3**

**Workpaper—Sale of Shares by Parent, Cost Method LO2 LO3 LO4**

The accounts of Pyle Company and its subsidiary, Stern Company, are summarized below as of December 31, 2014:

| <i>Debits</i>               | <i>Pyle</i>        | <i>Stern</i>       |
|-----------------------------|--------------------|--------------------|
| Current Assets              | \$ 600,000         | \$ 320,000         |
| Investment in Stern Company | 480,000            |                    |
| Other Assets                | 1,180,000          | 668,000            |
| Dividends Declared, 11/1    | <u>80,000</u>      | <u>60,000</u>      |
|                             | <u>\$2,340,000</u> | <u>\$1,048,000</u> |
| <i>Credits</i>              |                    |                    |
| Liabilities                 | \$ 190,000         | \$ 90,000          |
| Common Stock, \$5 par       | 500,000            | 300,000            |
| Other Contributed Capital   | 230,000            | 180,000            |
| 1/1 Retained Earnings       | 1,200,000          | 292,000            |
| Net Income                  | <u>220,000</u>     | <u>186,000</u>     |
|                             | <u>\$2,340,000</u> | <u>\$1,048,000</u> |

Pyle Company made the following open-market purchase and sale of Stern Company common stock: January 2, 2012, purchased 51,000 shares, cost \$510,000; April 1, 2014, sold 3,000 shares, proceeds, \$100,000.

The book value of Stern Company's net assets on January 2, 2012, \$600,000, (including retained earnings of \$120,000) approximated the fair value of those net assets. Subsequent changes in book value of the net assets are entirely attributable to earnings of Stern Company. Stern Company earns its income evenly throughout the year.

**Required:**

Prepare a consolidated financial statements workpaper as of December 31, 2014. Begin the income statement section of the workpaper with "Net Income Before Dividend Income" which is \$172,000 and \$186,000 for Pyle Company and Stern Company, respectively.

**PROBLEM 8-4**

**Workpaper—Purchase and Sale of Shares, Cost Method LO3 LO4**

Trial balances for Porter Company and its subsidiary, Spitz Company, as of December 31, 2014, follow:

| <i>Debits</i>               | <i>Porter</i>    | <i>Spitz</i>     |
|-----------------------------|------------------|------------------|
| Cash                        | \$ 90,000        | \$ 40,000        |
| Accounts Receivable (net)   | 62,000           | 38,000           |
| Inventory                   | 106,000          | 64,000           |
| Investment in Spitz Company | 121,500          |                  |
| Plant Assets                | 320,000          | 149,000          |
| Land                        | 69,000           | 46,000           |
| Dividends Declared, 10/1    | 50,000           | 30,000           |
| Total                       | <u>\$818,500</u> | <u>\$367,000</u> |
| <i>Credits</i>              |                  |                  |
| Liabilities                 | \$102,000        | \$ 61,000        |
| Common Stock, \$2 per value | 250,000          | 100,000          |
| Other Contributed Capital   | 172,500          | 20,000           |
| 1/1 Retained Earnings       | 206,500          | 126,000          |
| Income Summary              | <u>87,500</u>    | <u>60,000</u>    |
| Total                       | <u>\$818,500</u> | <u>\$367,000</u> |

Porter Company made the following open-market purchase and sale of Spitz Company common stock: January 1, 2010, purchased 45,000 shares for \$135,000; May 1, 2014, sold 4,500 shares for \$28,000.

The book value of Spitz Company's net assets on January 1, 2010, was \$140,000; the excess of cost over net assets acquired relates to land. Subsequent changes in the book value of Spitz Company's net assets are entirely attributable to earnings retained in the business. Spitz Company earns its income evenly throughout the year. Porter Company uses the cost method to account for its investment.

**Required:**

Prepare a consolidated financial statements workpaper as of December 31, 2014. Begin the income statement section of the workpaper with "Net Income Before Dividend Income" which is \$63,200 for Porter Company and \$60,000 for Spitz Company.

**PROBLEM 8-5**

**Workpaper—Sale of Shares by Parent, Equity Method LO 3 LO 4**

(Note: This is the same problem as Problem 8-3, but assuming use of the complete or the partial equity method.)

The accounts of Pyle Company and its subsidiary, Stern Company, are summarized below as of December 31, 2014:

| <i>Debits</i>               | <i>Pyle</i>        | <i>Stern</i>       |
|-----------------------------|--------------------|--------------------|
| Current Assets              | \$ 600,000         | \$ 320,000         |
| Investment in Stern Company | 718,400            |                    |
| Other Assets                | 1,180,000          | 668,000            |
| Dividends Declared, 11/1    | 80,000             | 60,000             |
| Total                       | <u>\$2,578,400</u> | <u>\$1,048,000</u> |
| <i>Credits</i>              | <i>Pyle</i>        | <i>Stern</i>       |
| Liabilities                 | \$ 190,000         | 90,000             |
| Common Stock, \$5 par value | 500,000            | 300,000            |
| Other Contributed Capital   | 219,075            | 180,000            |
| 1/1 Retained Earnings       | 1,346,200          | 292,000            |
| Net Income                  | 323,125            | 186,000            |
| Total                       | <u>\$2,578,400</u> | <u>\$1,048,000</u> |

Pyle Company made the following open-market purchase and sale of Stern Company common stock: January 2, 2012, purchased 51,000 shares, cost \$510,000; April 1, 2014, sold 3,000 shares, proceeds, \$100,000.

The book value of Stern Company's net assets on January 2, 2012, \$600,000 (including retained earnings of \$120,000), approximated the fair value of those net assets. Subsequent changes in book value of the net assets are attributable to earnings of Stern Company. Stern Company earns its income evenly throughout the year.

**Required:**

Prepare a consolidated financial statements workpaper as of December 31, 2014. Begin the income statement section of the workpaper with "Income before Equity in Subsidiary Income and Gain on Sale of Investment," which is \$172,000 and \$186,000 for Pyle Company and Stern Company, respectively.

**PROBLEM 8-6**

**Workpaper—Purchase and Sale of Shares, Equity Method LO 3 LO 4**

(Note: This is the same problem as Problem 8-4, but assuming use of the complete or the partial equity method.)

Trial balances for Porter Company and its subsidiary, Spitz Company, as of December 31, 2014, follow:

| <i>Debits</i>               | <i>Porter</i>    | <i>Spitz</i>     |
|-----------------------------|------------------|------------------|
| Cash                        | \$ 90,000        | \$ 40,000        |
| Accounts Receivable (net)   | 62,000           | 38,000           |
| Inventory                   | 106,000          | 64,000           |
| Investment in Spitz Company | 231,660          |                  |
| Plant Assets                | 320,000          | 149,000          |
| Land                        | 69,000           | 46,000           |
| Dividends Declared, 10/1    | 50,000           | 30,000           |
| Total                       | <u>\$928,660</u> | <u>\$367,000</u> |
| <i>Credits</i>              |                  |                  |
| Liabilities                 | \$102,000        | \$ 61,000        |
| Common Stock, \$2 par value | 250,000          | 100,000          |
| Other Contributed Capital   | 161,160          | 20,000           |
| 1/1 Retained Earnings       | 301,900          | 126,000          |
| Income Summary              | 113,600          | 60,000           |
| Total                       | <u>\$928,660</u> | <u>\$367,000</u> |

Porter Company made the following open-market purchase and sale of Spitz Company common stock: January 1, 2010, purchased 45,000 shares for \$135,000; May 1, 2014, sold 4,500 shares for \$28,000.

The book value of Spitz Company's net assets on January 1, 2010 was \$140,000; the excess of cost over net assets acquired relates to land. Subsequent changes in the book value of Spitz Company's net assets are entirely attributable to earnings retained in the business. Spitz Company earns its income evenly throughout the year.

**Required:**

Prepare a consolidated financial statements workpaper as of December 31, 2014. Begin the income statement section of the workpaper with "Net Income before Equity in Subsidiary Income and Gain on Sale of Investment," which is \$63,200 for Porter Company and \$60,000 for Spitz Company.

**PROBLEM 8-7 Multiple Stock Purchases and Sale of Shares LO3 LO4**

On January 1, 2014, Plum Company made an open-market purchase of 30,000 shares of Spivey Company common stock for \$122,000. At that time, Spivey Company had common stock (\$2 par) of \$600,000 and retained earnings of \$240,000. On July 1, 2014, an additional 210,000 shares were purchased on the open market by Plum Company at a cost of \$789,600 or \$3.76 a share. On November 1, 2014, 3,000 of the shares purchased on January 1, 2014, were sold on the open market for \$21,000. Assume that any excess of implied value over book value acquired relates to subsidiary goodwill.

During 2014, Plum Company earned \$22,000 (excluding any gain or loss on the sale of the shares). Plum Company received income statements from Spivey Company reporting the following results.

|                                      | <i>Spivey Company Income</i> |
|--------------------------------------|------------------------------|
| January 1, 2014 to June 30, 2014     | \$ 60,000                    |
| January 1, 2014 to October 31, 2014  | 96,000                       |
| For the year ended December 31, 2014 | 130,000                      |

Neither company declared dividends during the year. Plum Company's retained earnings were \$460,000 on January 1, 2014.

**Required:**

- A. Prepare the book entries Plum Company would make during 2014 to account for its investment in Spivey Company, assuming
  - (1) The use of the cost method.
  - (2) The use of either the complete or the partial equity method.
- B. Prepare in general journal form the eliminating entries for a consolidated statements workpaper on December 31, 2014, assuming
  - (1) The use of the cost method.
  - (2) The use of either the complete or the partial equity method.
- C. Compute controlling interest in consolidated net income for 2014.

**PROBLEM 8-8 New Shares Purchased by Parent LO6**

Pryor Company acquired 51,000 shares of Spero Company's common stock on January 1, 2013, for \$400,000 when Spero Company had common stock (\$5 par) of \$300,000 and retained earnings of \$200,000.

On January 1, 2015, Spero Company issued 7,500 additional shares of its common stock for \$8.50 per share. The new shares were purchased entirely by Pryor Company. Spero Company's retained earnings had increased to \$360,000 by that date.

During 2015, Spero Company declared dividends of \$40,000 and reported net income at year-end of \$90,000. Pryor Company uses the cost method. Assume that any difference between implied and book values relates to subsidiary land.

**Required:**

- A. Prepare the journal entry on Pryor's books to record the purchase of the new shares.
- B. Prepare in general journal form the workpaper entries needed for the preparation of a consolidated statements workpaper on December 31, 2015.

**PROBLEM 8-9 New Subsidiary Shares Issued to Outsider LO6**

On January 1, 2013, Purdy Company acquired 84% of the capital stock of Sally Company for \$840,000. On that date, Sally Company's stockholders' equity was:

|                           |           |
|---------------------------|-----------|
| Capital Stock, \$20 par   | \$600,000 |
| Other Contributed Capital | 200,000   |
| Retained Earnings         | 160,000   |
| Total                     | \$960,000 |

The difference between implied and book values relates to land owned by Sally Company.

On January 2, 2015, Sally Company issued 6,000 shares of its authorized capital stock, with a market value of \$55 per share, to Marcy Smith in exchange for a patent. Sally Company's retained earnings balance on this date was \$400,000, capital stock and other contributed capital balances had not changed during 2013 and 2014.

**Required:**

- A. Prepare (1) the entry on Purdy's books to record the effect of the issuance, and (2) the elimination entries for the preparation of a consolidated balance sheet workpaper immediately after the new issue of shares assuming use of the cost method.
- B. Assuming that the market value of the new shares issued was \$34 per share, repeat requirement A above.

**PROBLEM 8-10 Open Market Purchases and Sales of Stock—Cost Method LO3 LO4**

On January 2, 2013, Pullen Company purchased, on the open market, 135,000 shares of Souza Company common stock for \$665,000. At that time, Souza Company had common stock (\$2 par value) of \$300,000 and retained earnings of \$400,000. On May 1, 2014, Pullen Company sold 13,500 of its Souza Company shares on the open market for \$91,000. Changes in Souza Company retained earnings during 2014 follow:

|   |                  |
|---|------------------|
| Retained Earnings 1/1/14                                | \$500,000        |
| Net Income for 2014 (earned evenly throughout the year) | 270,000          |
| Dividends Declared on 11/1/14 and paid on 12/16/14      | (70,000)         |
| Retained Earnings, 12/31/14                             | <u>\$700,000</u> |

Pullen Company, which uses the cost method to record its investment in Souza Company, reported net income for 2014 amounting to \$352,500. Any difference between implied and book values relates to subsidiary land.

**Required:**

- A. Prepare the book entries Pullen Company will make during 2014 to account for its investment in Souza Company.
- B. Prepare, in general journal form, the eliminating entries needed to prepare a consolidated statements workpaper on December 31, 2014.
- C. Compute controlling interest in consolidated net income for 2014.
- D. Prepare the workpaper entry to establish reciprocity for the 2015 consolidated statements workpaper.

**PROBLEM 8-11 Workpaper—Sale of Shares by Parent, Equity Method—Loss of Control LO3 LO4**

The accounts of Pyle Company and its subsidiary, Stern Company, are summarized below as of December 31, 2014:

| <i>Debits</i>               | <i>Pyle</i>        | <i>Stern</i>       |
|-----------------------------|--------------------|--------------------|
| Current Assets              | \$ 600,000         | \$ 320,000         |
| Investment in Stern Company | 480,000            |                    |
| Other Assets                | 1,180,000          | 668,000            |
| Dividends Declared, 11/1    | 80,000             | 60,000             |
|                             | <u>\$2,340,000</u> | <u>\$1,048,000</u> |
| <i>Credits</i>              |                    |                    |
| Liabilities                 | \$ 190,000         | \$ 90,000          |
| Common Stock, \$5 par       | 500,000            | 300,000            |
| Other Contributed Capital   | 230,000            | 180,000            |
| 1/1 Retained Earnings       | 1,200,000          | 292,000            |
| Net Income                  | 220,000            | 186,000            |
|                             | <u>\$2,340,000</u> | <u>\$1,048,000</u> |

Pyle Company made the following open-market purchase and sale of Stern Company common stock:

- January 2, 2012, purchased 51,000 shares (85% of Stern), cost \$510,000, \$10/share;
- January 1, 2014, sold 40,000 shares (two-thirds of Stern), proceeds, \$480,000, \$12/share.

The book value of Stern Company's net assets on January 2, 2012, \$600,000, approximated the fair value of those net assets, including retained earnings of \$120,000. Subsequent changes in book value of the net assets are entirely attributable to earnings of Stern Company. Stern Company earns its income evenly throughout the year.

**Required:**

Prepare the journal entries needed on Pyle Company's books to record the transactions regarding the investment in Stern Company account assuming the equity method is used to account for the investment.

**PROBLEM 8-12** Worksheet, Multiple Stock Purchases, Cost Method LO 2

Trial balances for Phan Company and its subsidiary Sato Company on December 31, 2013, are as follows:

|                            | <i>Phan</i>        | <i>Sato</i>        |
|----------------------------|--------------------|--------------------|
| Current Assets             | \$ 165,500         | \$ 138,000         |
| Investment in Sato Company | 334,425            |                    |
| Other Assets               | 920,000            | 672,000            |
| Dividends Declared         | 150,000            | 70,000             |
| Cost of Goods Sold         | 1,100,000          | 320,000            |
| Other Expenses             | 350,000            | 130,000            |
|                            | <u>\$3,019,925</u> | <u>\$1,330,000</u> |
| Liabilities                | \$ 142,050         | \$ 160,000         |
| Capital Stock, \$10 par    | 600,000            | 400,000            |
| Paid in Capital            | 100,000            |                    |
| 1/1 Retained Earnings      | 326,325            | 165,000            |
| Sales                      | 1,800,000          | 605,000            |
| Gain on revaluation        | 13,925             |                    |
| Dividend Income            | 37,625             |                    |
|                            | <u>\$3,019,925</u> | <u>\$1,330,000</u> |

Phan Company acquired its investment in Sato Company through open-market purchases of stock as follows:

| <i>Date</i> | <i>Shares Purchased</i> | <i>Cost</i>      | <i>Sato Company<br/>Retained Earnings Balance</i> |
|-------------|-------------------------|------------------|---|
| 1/1/12      | 9,000                   | \$110,500        | \$ 46,000   |
| 1/1/13      | 12,500                  | 210,000          | 165,000   |
| 1/1/14      | <u>14,500</u>           | <u>280,000</u>   | 250,000   |
| Total       | <u>36,000</u>           | <u>\$600,500</u> |   |

Any difference between implied and book values of the interest acquired relates to Sato Company land, which is included in Other Assets.

Sato Company issued 40,000 shares of stock on July 1, 2009, its date of incorporation. No other capital stock transactions were undertaken by Sato Company after that time.

**Required:**

Prepare a consolidated financial statements workpaper for Phan Company and its subsidiary Sato Company on December 31, 2013.

**PROBLEM 8-13** Worksheet, Multiple Stock Purchases, Cost Method LO 2

This is a continuation of Problem 8-12.

Trial balances for Phan Company and its subsidiary Sato Company on December 31, 2014, are as follows:

|                            | <i>Phan</i>        | <i>Sato</i>        |
|----------------------------|--------------------|--------------------|
| Current Assets             | \$ 165,500         | \$ 218,000         |
| Investment in Sato Company | 614,425            |                    |
| Other Assets               | 920,000            | 672,000            |
| Dividends Declared         | 150,000            | 70,000             |
| Cost of Goods Sold         | 1,100,000          | 325,000            |
| Other Expenses             | 350,000            | 125,000            |
|                            | <u>\$3,299,925</u> | <u>\$1,410,000</u> |
| Liabilities                | \$ 159,050         | \$ 160,000         |
| Capital Stock, \$10 par    | 600,000            | 400,000            |
| Paid in Capital            | 100,000            |                    |
| 1/1 Retained Earnings      | 577,875            | 250,000            |
| Sales                      | 1,800,000          | 600,000            |
| Dividend Income            | 63,000             |                    |
|                            | <u>\$3,299,925</u> | <u>\$1,410,000</u> |



Phan Company acquired its investment in Sato Company through open-market purchases of stock as follows:

| <i>Date</i> | <i>Shares Purchased</i> | <i>Cost</i>      | <i>Sato Company<br/>Retained Earnings Balance</i> |
|-------------|-------------------------|------------------|---|
| 1/1/12      | 9,000                   | \$110,500        | \$ 46,000   |
| 1/1/13      | 12,500                  | 210,000          | 165,000   |
| 1/1/14      | 14,500                  | 280,000          | 250,000   |
| Total       | <u>36,000</u>           | <u>\$600,500</u> |   |

**Required:**

Refer to Problem 8-12. Prepare the consolidated financial statement workpaper for Phan Company and its subsidiary Sato Company on December 31, 2014. Use the cost method.

**PROBLEM 8-14** **Worksheet, Multiple Stock Purchases, Equity Method (record gain on revaluation as difference in cost) LO 2**

Trial balances for Phan Company and its subsidiary Sato Company on December 31, 2013, are as follows:

|                            | <i>Phan</i>        | <i>Sato</i>        |
|----------------------------|--------------------|--------------------|
| Current Assets             | \$ 165,500         | \$ 138,000         |
| Investment in Sato Company | 406,888            |                    |
| Other Assets               | 920,000            | 672,000            |
| Dividends Declared         | 150,000            | 70,000             |
| Cost of Goods Sold         | 1,100,000          | 320,000            |
| Other Expenses             | 350,000            | 130,000            |
|                            | <u>\$3,092,388</u> | <u>\$1,330,000</u> |
| Liabilities                | \$ 142,050         | \$ 160,000         |
| Capital Stock, \$10 par    | 600,000            | 400,000            |
| Paid in Capital            | 100,000            |                    |
| 1/1 Retained Earnings      | 353,100            | 165,000            |
| Sales                      | 1,800,000          | 605,000            |
| Gain on revaluation        | 13,925             |                    |
| Equity Income              | 83,313             |                    |
|                            | <u>\$3,092,388</u> | <u>\$1,330,000</u> |

Phan Company acquired its investment in Sato Company through open-market purchases of stock as follows:

| <i>Date</i> | <i>Shares Purchased</i> | <i>Cost</i>      | <i>Sato Company<br/>Retained Earnings Balance</i> |
|-------------|-------------------------|------------------|---|
| 1/1/12      | 9,000                   | \$110,500        | \$ 46,000   |
| 1/1/13      | 12,500                  | 210,000          | 165,000   |
| 1/1/14      | 14,500                  | 280,000          | 250,000   |
| Total       | <u>36,000</u>           | <u>\$600,500</u> |   |

Any difference between implied and book values of the interest acquired relates to Sato Company land, which is included in Other Assets.

Sato Company issued 40,000 shares of stock on July 1, 2009, its date of incorporation. No other capital stock transactions were undertaken by Sato Company after that time.

**Required:**

Prepare a consolidated financial statements workpaper for Phan Company and its subsidiary Sato Company on December 31, 2013.

**PROBLEM 8-15** Worksheet, Multiple Stock Purchases, Equity Method **LO 2**

This is a continuation of Problem 8-14.

Trial balances for Phan Company and its subsidiary Sato Company on December 31, 2014, are as follows:

|                            | <i>Phan</i>        | <i>Sato</i>        |
|----------------------------|--------------------|--------------------|
| Current Assets             | \$ 165,500         | \$ 218,000         |
| Investment in Sato Company | 758,888            |                    |
| Other Assets               | 920,000            | 672,000            |
| Dividends Declared         | 150,000            | 70,000             |
| Cost of Goods Sold         | 1,100,000          | 325,000            |
| Other Expenses             | 350,000            | 125,000            |
|                            | <u>\$3,444,388</u> | <u>\$1,410,000</u> |
| Liabilities                | \$ 159,050         | \$ 160,000         |
| Capital Stock, \$10 par    | 600,000            | 400,000            |
| Paid in Capital            | 100,000            |                    |
| 1/1 Retained Earnings      | 650,338            | 250,000            |
| Sales                      | 1,800,000          | 600,000            |
| Equity Income              | 135,000            |                    |
|                            | <u>\$3,444,388</u> | <u>\$1,410,000</u> |

Phan Company acquired its investment in Sato Company through open-market purchases of stock as follows:

| <i>Date</i> | <i>Shares Purchased</i> | <i>Cost</i>      | <i>Sato Company<br/>Retained Earnings Balance</i> |
|-------------|-------------------------|------------------|---|
| 1/1/12      | 9,000                   | \$110,500        | \$ 46,000   |
| 1/1/13      | 12,500                  | 210,000          | 165,000   |
| 1/1/14      | 14,500                  | 280,000          | 250,000   |
| Total       | <u>36,000</u>           | <u>\$600,500</u> |   |

**Required:**

Refer to Problem 8-14. Prepare the consolidated financial statement workpaper for Phan Company and its subsidiary Sato Company on December 31, 2014. Use the equity method.

## Chapter 8 – Review Questions

The review questions accompanying this course are designed to assist you in achieving the course learning objectives. The review section is not graded; do not submit it in place of your qualified assessment. While completing the review questions, it may be helpful to study any unfamiliar terms in the glossary in addition to course content. After completing the review questions, proceed to the review question answers and rationales.

53. Under current accounting rules for incremental acquisitions:
- Acquisitions of additional shares should be handled in a step-by-step manner.
  - Computation and allocation schedules should be prepared for each portion purchased.
  - Sales of shares are handled like a sale of any asset with gain or loss going to earnings.
  - Remeasure the acquiree's assets and liabilities at fair value on the date that the acquirer attains control.
54. One of the requirements under the current rules for acquisitions which occur in stages is:
- To recognize only the parent's share of goodwill.
  - Previously held noncontrolling interest should be remeasured to fair value and any adjustment are Additional Contributed Capital.
  - If the parent loses control, the retained investment should be remeasured to fair value and any adjustments are recognized in income.
  - After control is achieved, any additional adjustments due to increased ownership are recognized in income.
55. Which of the following statements is accurate when a parent sells some, but not all, of the subsidiary stock?
- The accounting treatment will be the same whether or not the parent retains control of the subsidiary.
  - If the parent retains control of the subsidiary in spite of the sale, no gain or loss is recognized and any adjustments flow through Additional Contributed Capital.
  - If control of the subsidiary is lost upon sale, no gain or loss is recognized and any adjustments flow through Additional Contributed Capital.
  - At the time of sale, the entire investment must be revalued to fair value and the difference is recognized in income.

56. Under the equity method of accounting for the investment in subsidiary, when the parent purchases the shares that create control, the parent will record all of the following entries on their books with the **EXCEPTION** of:
- The purchase based on the cash price of the shares acquired by increasing investment in subsidiary.
  - The increase (decrease) in the investment in subsidiary account for the amount of the revaluation gain (or loss).
  - The increase in the investment in subsidiary account to retroactively record the earnings of the subsidiary at the original ownership percentage for the time between the first purchase and the second purchase.
  - Goodwill for the difference between the implied value of the subsidiary and the fair market value of its assets after allocating the fair market value to the underlying assets and liabilities of the subsidiary.
57. When a parent company sells subsidiary stock and loses control of the company, all of the following information is needed in order to correctly account for the sale with the **EXCEPTION** of:
- The book value of the subsidiary.
  - The fair value of the consideration received by the parent.
  - The fair value of the noncontrolling interest at the date of the sale.
  - The carrying value of the former noncontrolling interest as of the date of the sale.

58. P Company acquired an 80% interest in S Company and accounted for that investment using the cost method on the separate company books but prepared consolidated financial statements as required. Several years later, they sold 50% of their stock. As a result:
- They have a choice of switching to the equity method or continuing to use the cost method.
  - They must now switch to the partial equity method.
  - They have a choice of using the partial equity method or the cost method.
  - They must now switch to the equity method.
59. Which of the following statements is accurate regarding consolidation entries after a purchase of additional shares by the parent when the cost method is used?
- In the year after the purchase of the additional shares, the reciprocity entry will be based on the new ownership percentage.
  - In the year after the purchase of the additional shares, the entry to eliminate subsidiary equity will be based on the old ownership percentage up to the date of purchase of the new shares and the new percentage for the activity after the purchase.
  - In the year after the purchase of the additional shares, the reciprocity is established based on the old ownership percentage to the date of purchase of the new shares and the new ownership percentage thereafter.
  - In the year after the purchase of the additional shares, the reciprocity entry will be based on the old ownership percentage.
60. Which of the following is an accurate statement regarding changes when the parent company purchases additional subsidiary shares from the subsidiary directly?
- When the parent pays more than carrying value for the new shares, the noncontrolling interest carrying value will increase even though their ownership percentage decreases.
  - When the parent pays book value for the new shares, the parent's additional paid in capital will not change.
  - When the parent pays book value for the new shares, the noncontrolling interest carrying value will not change.
  - When the parent pays less than carrying value for the new shares, their additional paid in capital decreases.

## **Chapter 9 – Intercompany Bond Holdings and Miscellaneous Topics – Consolidated Financial Statements**

### **Learning Objectives**

After completing this section of the course, you will be able to:

- Identify the appropriate accounting treatment for constructive retirement of debt.
- Identify the appropriate accounting treatment when a company issues a note to an affiliated company which then discounts it to a third party.
- Determine the effect on the consolidated financial statements when a subsidiary issues a stock dividend and differentiate the impact of this versus a cash dividend on the consolidated financial statements.
- Identify the impact of stock dividends from pre-acquisition earnings versus post-acquisition earnings.
- Determine the purchase price allocation when a subsidiary has both common and preferred stock outstanding and determining controlling interest in income.

# INTERCOMPANY BOND HOLDINGS AND MISCELLANEOUS TOPICS—CONSOLIDATED FINANCIAL STATEMENTS

## CHAPTER CONTENTS

- 9.1 INTERCOMPANY BOND HOLDINGS
- 9.2 ACCOUNTING FOR BONDS—A REVIEW
- 9.3 CONSTRUCTIVE GAIN OR LOSS ON INTERCOMPANY BOND HOLDINGS
- 9.4 ACCOUNTING FOR INTERCOMPANY BONDS ILLUSTRATED
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- 9.8 STOCK DIVIDENDS ISSUED BY A SUBSIDIARY COMPANY
- 9.9 DIVIDENDS FROM PREACQUISITION EARNINGS
- 9.10 SUBSIDIARY WITH BOTH PREFERRED AND COMMON STOCK OUTSTANDING
- 9.11 CONSOLIDATING A SUBSIDIARY WITH PREFERRED STOCK OUTSTANDING

### IN THE NEWS

In 2007, Bain Capital acquired Guitar Center in a leveraged buyout that resulted in Guitar Center carrying over \$1.6 billion in debt. Guitar Center's annual debt payments over the next several years will exceed \$144 billion (in 2012, interest expense was approximately 90% of operating income and its cash coverage ratio was slightly over 2 times interest payments). In its discussion of the risk factors, Guitar Center noted that they cannot provide any assurance that cash from operating activities will be sufficient to cover the principal and interest on debt.<sup>1</sup>

<sup>1</sup> Guitar Center 2012 10K.

In this chapter, we discuss several areas related to the preparation of consolidated financial statements, including:

1. Intercompany bond holdings.
2. Intercompany notes receivable discounted.
3. Stock dividends issued by a subsidiary company.
4. Cash dividends from preacquisition earnings.
5. Preferred stock of a subsidiary.

All new aspects of consolidations introduced in this chapter are the same whether the parent uses the cost or partial equity method. As in prior chapters, the complete equity method differs from the other two in that the beginning retained earnings of the parent always equals the beginning consolidated retained earnings under the complete equity method.<sup>2</sup> Hence no entries are needed to the beginning retained earnings of the parent in the consolidating workpaper. There is, of course, no entry under this method (nor under the partial equity method) to establish reciprocity/convert to equity.

Reporting complications relating to accounting for the difference between the implied value of a subsidiary (based on acquisition cost) and the book value are avoided by assuming that all acquisitions of common stock are made at the book value of the acquired interest in net assets, and that the book values of the subsidiary's assets and liabilities are equal to their fair values on the date of acquisition. Also, deferred tax consequences are avoided by assuming the affiliates file consolidated tax returns. To conserve space, we present the entries for the cost and the complete equity methods only. The workpaper entries for the partial equity method would be identical to those for the cost method with one exception. As in previous chapters, a workpaper entry to reverse the effect of the parent company entries during the year for subsidiary income and dividends replaces the cost method entries to establish reciprocity/convert to equity and eliminate dividend income, if any.



IN  
THE  
NEWS

Avaya managed to grow revenue by 22% thanks to the assets it acquired from Nortel Networks at the end of 2009. Although the acquisition bumped up revenues, it has been costly. Avaya spent millions consolidating operations, paying severance, and closing facilities.

Private-equity firms Silver Lake Partners and TPG took Avaya private in 2007 for \$8.3 billion. That buyout, along with the acquisition of the Nortel assets, led to more than \$500 million in charges and saddled the company with almost \$6 billion in debt as of the end of its fiscal year. As a result, the company was required to pay several million dollars in interest during the year.<sup>3</sup>

## 9.1 INTERCOMPANY BOND HOLDINGS

### LO 1 Constructive retirement of debt.

An affiliate company may purchase bonds issued by another affiliate directly from the issuing company or from outsiders after the original issue. In either case, because the bonds are held within the affiliated group, the intercompany bond investment (a receivable) and the bonds payable (a liability), along with any related intercompany interest expense and interest revenue, must be eliminated. In other words, because the bonds are not held by external parties, they are viewed as being *constructively retired* in the consolidated financial statements. Constructively retired means that the bonds are considered retired from a consolidated entity point of view, but legally the bonds are still outstanding as far as the issuing company is concerned. Since this is viewed as an early retirement of debt, a gain or loss on the constructive retirement is computed and allocated to the affiliated companies. A brief review of accounting for bond transactions is presented in the next section before the preparation of a consolidated statements workpaper involving intercompany bond holdings is illustrated.

<sup>2</sup> An exception occurs under the complete equity method when the treasury stock method is used for reciprocal holdings.

<sup>3</sup> CNN.com, 5/13/2011.



## 9.2 ACCOUNTING FOR BONDS—A REVIEW

To review accounting for bonds, assume that a company issued \$100,000 par value bonds on January 2, 2013, for \$90,000. The bonds mature 10 years later and pay 12% interest each December 31. The bonds were all acquired by one investor, and the fiscal year-end of both entities is December 31. The journal entries for the first year of operations, assuming straight-line amortization of the discount, are:<sup>4</sup>

### Issuing Company

|         |                           | 2013   |         |
|---------|---------------------------|--------|---------|
| Jan. 2  | Cash                      | 90,000 |         |
|         | Discount on Bonds Payable | 10,000 |         |
|         | Bonds Payable             |        | 100,000 |
| Dec. 31 | Interest Expense          | 12,000 |         |
|         | Cash                      |        | 12,000  |
| 31      | Interest Expense          | 1,000  |         |
|         | Discount on Bonds Payable |        | 1,000   |

### Investor Company

|         |                     | 2013   |        |
|---------|---------------------|--------|--------|
| Jan. 2  | Investment in Bonds | 90,000 |        |
|         | Cash                |        | 90,000 |
| Dec. 31 | Cash                | 12,000 |        |
|         | Interest Revenue    |        | 12,000 |
| 31      | Investment in Bonds | 1,000  |        |
|         | Interest Revenue    |        | 1,000  |

### RELATED CONCEPTS

When using *present value* techniques to estimate the fair value of a bond payable, the objective is to estimate the price at which other entities are willing to hold the entity's liabilities as an asset.

From the point of view of the issuing company, \$90,000 was received, but the company must pay \$100,000 to the bondholders when the bonds mature 10 years later. Instead of deferring the \$10,000 discount to be reported as a reduction in income in the year that the bonds mature, one-tenth of the discount (\$1,000) is amortized each year as an increase in interest expense. The increase in expense results in a reduction of \$1,000 in net income each year, which also reduces the retained earnings balance. At the end of 10 years, the issuing company's retained earnings is reduced \$120,000 for the cash interest paid and \$10,000 for the discount amortization. In effect, the \$10,000 discount is recognized as additional interest expense over the life of the bonds. From the investor's point of view, \$90,000 is paid for the bonds, but if the bonds are held to maturity, \$100,000 will be received. One-tenth of this \$10,000 is added to interest revenue each period, which results in an increase in reported income. As a result of acquiring the bond investment at a discount, retained earnings is increased \$1,000 each year for a cumulative total of \$10,000 over the life of the bonds.

If, in the foregoing example, the bonds had been issued for \$110,000, the issuing company receives \$10,000 more on the date of issue than must be paid when the bonds mature, while the investor will receive \$10,000 less than the purchase price when the bonds mature. The investor (issuing) company, rather than reporting a reduction (increase) in income when the bonds mature, records one-tenth of the reduction (increase) each year as the premium on the bonds is amortized to interest revenue (expense) over the remaining life of the bonds. The effect is that the net income of the investor (issuing) company is \$1,000 less (greater) each year as a result of amortizing the premium. The effect on income is, of course, also reflected in the reported retained earnings balance. Another way of viewing the amortization is that both parties are adjusting interest on the income statement from the coupon rate toward the market rate at date of issue.

<sup>4</sup> For simplicity, it is assumed in this chapter that straight-line amortization is used. However, the reader is reminded that the interest method is required unless the straight-line method does not result in a material difference (FASB ASC paragraph 835-30-35-4).

## 9.3 CONSTRUCTIVE GAIN OR LOSS ON INTERCOMPANY BOND HOLDINGS

The purchase of an affiliate's bonds does not alter the accounting in the books of the individual companies. As noted in the preceding section, the issuing company and the purchasing company recognize a gain or loss on the bond transaction indirectly as the related premium or discount is amortized to interest expense and interest revenue over the remaining life of the bonds. Thus, on the books of the individual companies, the bonds are accounted for as if the transactions were with independent parties. In the preparation of consolidated statements, however, the acquisition of an affiliate's outstanding bonds from outsiders is considered a **constructive retirement** of the bond obligation by the consolidated entity.<sup>5</sup> The generally accepted practice of accounting for the early extinguishment of debt is to report an ordinary gain (loss) if the carrying value of the bonds is greater than (less than) the purchase price.<sup>6</sup> Thus, as with the intercompany sale of inventory or other assets, the constructive gain or loss is eventually recognized both on the books of the individual companies and the consolidated financial statements but in different periods.

Observe, however, that the constructive gain or loss on the bond retirement *is recognized in the consolidated income statement prior to the recognition of the gain or loss on the books of the individual companies*. In contrast (see Chapter 6), a gain or loss on the intercompany sale of inventory or other assets *is recognized currently on the books of the selling company, but the gain or loss is deferred for consolidation purposes* until the profit or loss is confirmed by an arm's-length transaction with an independent party. Thus, the objectives of the intercompany bond workpaper entries are essentially opposite the objectives of making workpaper entries for the intercompany sale of inventory or other assets. That is to say, in the period the bonds are purchased, workpaper entries are made to accelerate the recognition of the constructive gain or loss. After the bonds are purchased, workpaper entries are then needed to eliminate the portion of the constructive gain or loss recorded during the period on the books of the individual companies. In the case of the intercompany sale of inventory or other assets, workpaper entries are made in the year of the sale to eliminate or defer the profit or loss recorded on the books of the individual companies. In subsequent periods when the asset is sold to a third party and the profit or loss realized from a consolidated point of view, workpaper entries are made to recognize the profit or loss.

As noted in a preceding paragraph, the gain or loss on the bond retirement is computed as the difference between the carrying value (book value) of the liability and the purchase price of the bonds. There is general agreement on the amount of the gain or loss to be reported, but not on how the gain or loss should be allocated between the affiliated companies involved in the bond transaction for purposes of calculating the controlling and noncontrolling interests in consolidated net income.

### Allocation of Constructive Gain or Loss

**Lo 2** Allocating the constructive gain or loss.

Four methods for allocating the constructive gain or loss between the parent and subsidiary have been supported in practice in the past and in the accounting literature.

1. The constructive gain or loss is allocated entirely to the issuing company. Support for this method is based on the contention that the purchasing affiliate, as a member of the consolidated group operating under the control of common management, was simply

<sup>5</sup> When one affiliate purchases bonds directly from another affiliate, the purchase price of the bond investment will be equal to the issue price of the bonds. Therefore, there is no constructive gain or loss reported in the consolidated income statement. However, under the approach used in this text, if the issue price is greater than or less than par value, one company will be allocated a gain and the other allocated a loss of an equal amount.

<sup>6</sup> A gain or loss on the early extinguishments of debt was once reported as an extraordinary item net of related income tax consequences (*SFAS No. 4*). This treatment is no longer allowed (FASB ASC paragraph 470-50-40-2).

acting as an agent for the issuing company. Thus, any gain or loss on the constructive retirement is allocated entirely to the issuing company.

2. The constructive gain or loss is allocated entirely to the purchasing company. Support for this method rests on the contention that the purchasing company initiated the transaction and should be assigned the full amount of the gain or loss.
3. The constructive gain or loss is allocated entirely to the parent company. Under this approach, it is maintained that the management of the parent company controls the financing decisions of the consolidated affiliates. Since management directed or permitted the purchase of the bonds, any gain or loss is allocated entirely to the parent company.
4. The constructive gain or loss is allocated between the purchasing and issuing companies. This method recognizes that a discount or premium will often be associated with both the issuance and purchase of the bonds on the open market. A gain or loss will be recognized over the remaining life of the bonds as each company amortizes the related discount or premium to interest expense and interest revenue. If the bonds are held to maturity, the full amount of the gain or loss will be recognized by the two entities.

The authors consider the fourth method to be the soundest conceptually. The method is consistent with the allocation of a gain or loss between the parent and subsidiary on other types of intercompany transactions. It also recognizes that if the purchasing company holds the bonds to maturity, the maturity value is paid by the issuing company. In such cases, each company realizes a gain or loss on the bond issuance or purchase that has been recognized on the books of the individual companies over the life of the bonds. Thus, if one of the companies is a partially owned subsidiary, the noncontrolling shareholders have an interest in the portion of the gain or loss allocated to, and recorded by, the subsidiary.

## Computing the Constructive Gain or Loss

On the date that bonds of an affiliate are purchased, a constructive gain or loss is computed and this total gain or loss is allocated between the issuing and purchasing companies. The portion of the gain or loss allocated to the issuing company is the difference between the book value (carrying value) of the bonds issued and their par value; the portion allocated to the purchasing company is the difference between the par value of the bonds and their cost. There is no constructive gain or loss to either the purchasing company or the issuing company if the bonds are issued at par value. If the issue price and the purchase price of the bonds were not equal to par value, there are four possible combinations that can result when a constructive gain or loss to the consolidated entity is allocated between two affiliated companies. The combinations are shown below assuming two different book values of \$110,000 and \$90,000 and two different purchase prices of \$115,000 and \$85,000. The bonds have a par value of \$100,000 in all situations.

| <i>Issuing<br/>Company</i> |   |           |   | <i>Purchasing<br/>Company</i> |  |
|----------------------------|---|-----------|---|-------------------------------|--|
| 1. Book value              | > | Par value | > | Purchase price                |  |
| \$110,000                  |   | \$100,000 |   | \$ 85,000                     |  |
| 2. Book value              | < | Par value | < | Purchase price                |  |
| \$ 90,000                  |   | \$100,000 |   | \$115,000                     |  |
| 3. Book value              | > | Par value | < | Purchase price                |  |
| \$110,000                  |   | \$100,000 |   | \$115,000                     |  |
| 4. Book value              | < | Par value | > | Purchase price                |  |
| \$ 90,000                  |   | \$100,000 |   | \$ 85,000                     |  |

The constructive gain or loss for combination 3 is illustrated below. To compute the gain or loss allocated to each affiliate, the par value is subtracted from the book value and then the purchase price is subtracted from the par value. If the number is positive, it is a gain; if it is negative, it is a loss.

|                    |   |                              |           |   |            |                   |
|--------------------|---|------------------------------|-----------|---|------------|-------------------|
| Issuing company    | { | Book value                   | \$110,000 | } |            |                   |
| Purchasing company | { | Par value                    | \$100,000 | } | + \$10,000 | Constructive gain |
|                    | { | Purchase price               | \$115,000 | } | - \$15,000 | Constructive loss |
|                    |   | Net constructive gain (loss) |           |   | (\$5,000)  |                   |

There is a net constructive loss of \$5,000 to the consolidated entity because the purchase price of the bonds on the open market exceeded the carrying value of the debt.

To illustrate another situation, assume that \$100,000 par value bonds with a book value of \$90,000 were purchased by an affiliated company for \$85,000 (combination 4 above).

|                    |   |                              |           |   |            |                   |
|--------------------|---|------------------------------|-----------|---|------------|-------------------|
| Issuing company    | { | Book value                   | \$ 90,000 | } |            |                   |
| Purchasing company | { | Par value                    | \$100,000 | } | - \$10,000 | Constructive gain |
|                    | { | Purchase price               | \$ 85,000 | } | + \$15,000 | Constructive loss |
|                    |   | Net constructive gain (loss) |           |   | \$ 5,000   |                   |

In this case there is a favorable settlement of debt (carrying value > purchase price) and a constructive gain of \$5,000 is reported in the consolidated income statement, of which a \$10,000 loss is allocated to the issuing company and a \$15,000 gain is allocated to the purchasing company.

| <b>CONSTRUCTIVE GAINS AND LOSSES</b> |                             |                   |
|--------------------------------------|-----------------------------|-------------------|
|                                      | <i>Originally Issued At</i> |                   |
|                                      | <i>Premium</i>              | <i>Discount</i>   |
| Issuing Company                      | Constructive Gain           | Constructive Loss |
|                                      | <i>Purchased At</i>         |                   |
|                                      | <i>Premium</i>              | <i>Discount</i>   |
| Purchasing Company                   | Constructive Loss           | Constructive Gain |

In the year that the bonds are constructively retired, if either the issuing company or the purchasing company is a partially owned subsidiary, the noncontrolling interest in consolidated net income is reduced (increased) by a loss (gain). In subsequent periods, the income of the subsidiary will be decreased or increased as the related discount or premium is amortized. The noncontrolling interest is also affected by this increase or decrease in income.

## 9.4 ACCOUNTING FOR INTERCOMPANY BONDS ILLUSTRATED

To illustrate entries that are necessary on the books of the affiliated companies and in the consolidated statements workpaper when one affiliate holds bonds of another affiliate, the following are assumed:

1. P Company acquired an 80% interest in S Company for \$1,200,000 on January 2, 2012, when the retained earnings and common stock accounts of S Company were \$500,000 and \$1,000,000, respectively.
2. On December 31, 2015, P Company acquired \$300,000 of S Company's par value bonds (60% of S Company's bonds) on the open market for \$310,000 after the semiannual interest payment had been made. At the time of purchase there were \$500,000 par

value bonds outstanding with a book value of \$480,000. The bonds mature in four years on December 31, 2019, and carry a nominal interest rate of 9%. Interest is paid semiannually on June 30 and December 31.

3. Both companies use the straight-line method to amortize bond discounts and premiums because the results obtained do not materially differ from those that would be obtained if the effective-interest method were used.
4. The fiscal year-end of both companies is December 31.

In this illustration, bonds of the subsidiary are purchased by the parent company. Book entries, as well as consolidated statements workpaper entries and procedures, would be similar if the parent company bonds were purchased by a subsidiary company, except that, the Investment in Bonds account is carried on the books of the subsidiary and the bond liability is carried on the parent company's books. Also note that, in this example, the parent purchased the bonds at a premium (on investment), while the subsidiary issued the bonds at a discount (on bonds payable). Clearly it is possible that the reverse might occur (purchase at a discount, issue at a premium) or that both the purchase and the issue might occur at a premium, or both at a discount.

## 9.5 BOOK ENTRY RELATED TO BOND INVESTMENT

P Company will prepare the following entry to record the bond investment:

|   |         |         |
|---|---------|---------|
| Dec. 31, 2015 Investment in S Company Bonds | 310,000 |         |
| Cash  |         | 310,000 |

Note that the usual practice of recording a bond investment does not separate the discount or premium. Since the bonds were purchased on the open market, there is no entry made on the issuing company's books. In this illustration, the bonds were purchased on the last day of the fiscal period after the semiannual interest had been paid. Thus, there is no accrued interest to be recorded in the current period.

### Consolidated Statements Workpaper—2015

The total gain or loss on the constructive retirement to be reported in the 2012 consolidated income statement, and the constructive gain or loss allocated to each company are computed as follows:

|                                   |   |                              |           |   |                   |                   |
|-----------------------------------|---|------------------------------|-----------|---|-------------------|-------------------|
| S company<br>(Issuing company)    | { | Book value                   | \$288,000 | } | -\$12,000         | Constructive loss |
| P company<br>(Purchasing company) | { | Par value                    | \$300,000 | } | -\$10,000         | Constructive loss |
|                                   | { | Purchase price               | \$310,000 | } |                   |                   |
|                                   |   | Net constructive gain (loss) |           |   | <u>(\$22,000)</u> |                   |

If the purchase price were less than the book value of \$288,000, a total constructive gain would result.

On the books of the individual companies, the constructive loss is not recorded in the year that the bonds are purchased on the open market. From a consolidated entity point of view, however, the purchase is a constructive retirement of debt. Thus, the constructive loss is recognized in the determination of combined income in the year of the purchase.

Workpaper entries necessary in the consolidated statements workpaper for the year ended December 31, 2015, are presented in general journal form below. The consolidated statements workpaper for 2015 is presented in Illustration 9-1.

| Cost Method  |           | ILLUSTRATION 9-1  |              |           |                         |                       |
|--|-----------|---|--------------|-----------|-------------------------|-----------------------|
| 80% Owned Subsidiary   |           | Consolidated Statements Workpaper                             |              |           |                         |                       |
| Constructive Retirement of Subsidiary's Bonds—Year of Retirement |           | P Company and Subsidiary for the Year Ended December 31, 2015 |              |           |                         |                       |
| Income Statement   | P         | S   | Eliminations |           | Noncontrolling Interest | Consolidated Balances |
|  | Company   | Company   | Dr.          | Cr.       |                         |                       |
| Sales  | 3,104,000 | 2,200,000   |              |           |                         | 5,304,000             |
| Dividend Income  | 16,000    |   | (5)          | 16,000    |                         | —0—                   |
| Total Revenue  | 3,120,000 | 2,200,000   |              |           |                         | 5,304,000             |
| Cost of Goods Sold   | 1,700,000 | 1,360,000   |              |           |                         | 3,060,000             |
| Interest Expense   |           | 50,000  |              |           |                         | 50,000                |
| Other Expense  | 1,124,000 | 665,000   |              |           |                         | 1,789,000             |
| Loss on Constructive Retirement of Bonds                         |           |   | (2)          | 10,000    |                         |                       |
|  |           |   | (3)          | 12,000    |                         | 22,000                |
| Total Cost and Expense   | 2,824,000 | 2,075,000   |              |           |                         | 4,921,000             |
| Net/Consolidated Income  | 296,000   | 125,000   |              |           |                         | 383,000               |
| Noncontrolling Interest in Income*                               |           |   |              |           | 22,600*                 | 22,600                |
| Net Income to Retained Earnings                                  | 296,000   | 125,000   | 38,000       | —         | 22,600                  | 360,400               |
| <b>Retained Earnings Statement</b>                               |           |   |              |           |                         |                       |
| 1/1 Retained Earnings  |           |   |              |           |                         |                       |
| P Company  | 1,650,000 |   |              | (1)       | 160,000                 | 1,810,000             |
| S Company  |           | 700,000   | (6)          | 700,000   |                         |                       |
| Net Income from above  | 296,000   | 125,000   | 38,000       |           | 22,600                  | 360,400               |
| Dividends Declared   |           |   |              |           |                         |                       |
| P Company  | (150,000) |   |              |           |                         | (150,000)             |
| S Company  |           | (20,000)  |              | (5)       | 16,000                  | (4,000)               |
| 12/31 Retained Earnings to Balance Sheet                         | 1,796,000 | 805,000   | 738,000      | 176,000   | 18,600                  | 2,020,400             |
| <b>Balance Sheet</b>   |           |   |              |           |                         |                       |
| Investment in S Company Bonds                                    | 310,000   |   |              | (4)       | 300,000                 | —0—                   |
|  |           |   |              | (2)       | 10,000                  |                       |
| Investment in S Company Stock                                    | 1,200,000 |   | (1)          | 160,000   | (6)                     | 1,360,000             |
| Other Assets   | 5,420,000 | 2,620,000   |              |           |                         | 8,040,000             |
| Total Assets   | 6,930,000 | 2,620,000   |              |           |                         | 8,040,000             |
| 9% Bonds Payable   |           | 500,000   | (4)          | 300,000   |                         | 200,000               |
| Discount on Bonds Payable  |           | (20,000)  |              | (3)       | 12,000                  | (8,000)               |
| Other Liabilities  | 2,134,000 | 335,000   |              |           |                         | 2,469,000             |
| Capital Stock  |           |   |              |           |                         |                       |
| P Company  | 3,000,000 |   |              |           |                         | 3,000,000             |
| S Company  |           | 1,000,000   | (6)          | 1,000,000 |                         |                       |
| Retained Earnings from above                                     | 1,796,000 | 805,000   | 738,000      | 176,000   | 18,600                  | 2,020,400             |
| 1/1 Noncontrolling Interest in Net Assets**                      |           |   |              | (6)       | 340,000                 | 340,000               |
| 12/31 Noncontrolling Interest in Net Assets                      |           |   |              |           | 358,600                 | 358,600               |
| Total Liabilities and Equity                                     | 6,930,000 | 2,620,000   | 2,198,000    | 2,198,000 |                         | 8,040,000             |

\* Noncontrolling interest in income computation:  $(\$125,000 - \$12,000) \times .20 = \$22,600$ .

\*\*  $\$300,000 + (\$700,000 - \$500,000) \times .20 = \$340,000$ .

(1) To establish reciprocity (convert to equity) as of 1/1/2015  $[(\$700,000 - \$500,000) \times .80 = \$160,000]$ .

(2) To recognize constructive loss not recorded by P Company and adjust the bond investment to par value.

(3) To recognize the constructive loss not recorded by S Company and adjust the intercompany bonds payable to par value.

(4) To eliminate intercompany bond investment and liability.

(5) To eliminate intercompany dividends.

(6) To eliminate investment account and create noncontrolling interest account.

**Consolidated Statements Workpaper Entries—2015**

|   |                  |         |
|---|------------------|---------|
| (1) Investment in S Company Stock   | 160,000          |         |
| Beginning Retained Earnings—P Company   |                  | 160,000 |
| To establish reciprocity, or convert to equity  |                  |         |
| The reciprocity (conversion to equity) entry, computed as follows, is not needed if the partial equity method is used:  |                  |         |
| Retained earnings balance—January 1, 2015   | \$700,000        |         |
| Retained earnings balance—date of acquisition   | <u>500,000</u>   |         |
| Increase in retained earnings   | 200,000          |         |
| Percentage interest held by P Company   | <u>.80</u>       |         |
| Amount to establish reciprocity   | <u>\$160,000</u> |         |
| (2) Loss on Constructive Retirement of Bonds  | 10,000           |         |
| Investment in S Company Bonds   |                  | 10,000  |
| To recognize the constructive loss not recorded by P Company and <i>adjust the bond investment to par value</i> (i.e., the premium paid by P Company over the par value).                             |                  |         |
| (3) Loss on Constructive Retirement of Bonds  | 12,000           |         |
| Discount on Bonds Payable   |                  | 12,000  |
| To recognize the constructive loss not recorded by the subsidiary and <i>adjust the intercompany bonds to par value</i> (i.e., the difference between the carrying value to S Company and par value). |                  |         |

Entries (2) and (3) recognize the constructive loss allocated to each company and adjust the bond investment and carrying value of the intercompany debt to par value in preparation for the elimination of the intercompany receivable and payable.

|   |           |           |
|---|-----------|-----------|
| (4) Bonds Payable   | 300,000   |           |
| Investment in S Company Bonds                                       |           | 300,000   |
| To eliminate intercompany bond investment and liability.            |           |           |
| (5) Dividend Income   | 16,000    |           |
| Dividends Declared—S Company  |           | 16,000    |
| To eliminate intercompany dividends.                                |           |           |
| (6) Beginning Retained Earnings—S Company                           | 700,000   |           |
| Common Stock—S Company  | 1,000,000 |           |
| Investment in S Company Stock                                       |           | 1,360,000 |
| Noncontrolling Interest in Equity                                   |           | 340,000   |
| To eliminate investment account and create noncontrolling interest. |           |           |

Entries (2), (3), and (4) could be combined into one entry as follows:

|  |         |         |
|--|---------|---------|
| Loss on Constructive Retirement of Bonds | 22,000  |         |
| Bonds Payable                            | 300,000 |         |
| Discount on Bonds Payable                |         | 12,000  |
| Investment in S Company Bonds            |         | 310,000 |

**Complete Equity Method** If the complete equity method is used, entry (1), the reciprocity entry, is not needed and the following entry replaces entry (5) above. The consolidated statements workpaper for 2015, assuming the use of the complete equity method, is presented in Illustration 9-2. (Entries (2) and (3) above are also combined into entry (1)).

|   |        |        |
|---|--------|--------|
| Equity in S Company Income                          | 80,400 |        |
| Dividends Declared                                  |        | 16,000 |
| Investment in S Company Stock                       |        | 64,400 |
| To eliminate the intercompany income and dividends. |        |        |

Since the bonds were purchased on the open market on the *last day of the fiscal period*, there is no intercompany interest reported in the 2015 income statement. Accordingly, no elimination of intercompany interest revenue and expense is required in the 2015 consolidated statements workpaper. Since the amount of net income reported by S Company that is included in consolidated net income is reduced by the constructive loss allocated to

## Complete Equity Method

## ILLUSTRATION 9-2

80% Owned Subsidiary

## Consolidated Statements Workpaper

Constructive Retirement of

## P Company and Subsidiary

Subsidiary's Bonds—Year of Retirement

## for the Year Ended December 31, 2015

| Income Statement                               | P<br>Company     | S<br>Company     | Eliminations     |                  | Noncontrolling<br>Interest | Consolidated<br>Balances |
|--|------------------|------------------|------------------|------------------|----------------------------|--------------------------|
|  |                  |                  | Dr.              | Cr.              |                            |                          |
| Sales  | 3,104,000        | 2,200,000        |                  |                  |                            | 5,304,000                |
| Equity Income                                  | 80,400           |                  | (3)              | 80,400           |                            | —0—                      |
| Total Revenue                                  | <u>3,184,400</u> | <u>2,200,000</u> |                  |                  |                            | <u>5,304,000</u>         |
| Cost of Goods Sold                             | 1,700,000        | 1,360,000        |                  |                  |                            | 3,060,000                |
| Interest Expense                               |                  | 50,000           |                  |                  |                            | 50,000                   |
| Other Expense                                  | 1,124,000        | 665,000          |                  |                  |                            | 1,789,000                |
| Loss on Constructive Retirement<br>of Bonds    |                  |                  | (1)              | 22,000           |                            | 22,000                   |
| Total Cost and Expense                         | <u>2,824,000</u> | <u>2,075,000</u> |                  |                  |                            | <u>4,921,000</u>         |
| Net/Consolidated Income                        | 360,400          | 125,000          |                  |                  |                            | 383,000                  |
| Noncontrolling Interest in Income              |                  |                  |                  |                  | 22,600*                    | 22,600                   |
| Net Income to Retained Earnings                | <u>360,400</u>   | <u>125,000</u>   | <u>102,400</u>   | <u>—</u>         | <u>22,600</u>              | <u>360,400</u>           |
| <i>Retained Earnings Statement</i>             |                  |                  |                  |                  |                            |                          |
| 1/1 Retained Earnings                          |                  |                  |                  |                  |                            |                          |
| P Company                                      | 1,810,000        |                  |                  |                  |                            | 1,810,000                |
| S Company                                      |                  | 700,000          | (4)              | 700,000          |                            |                          |
| Net Income from above                          | 360,400          | 125,000          | 102,400          |                  | 22,600                     | 360,400                  |
| Dividends Declared                             |                  |                  |                  |                  |                            |                          |
| P Company                                      | (150,000)        |                  |                  |                  |                            | (150,000)                |
| S Company                                      |                  | (20,000)         |                  | (3)              | 16,000                     | (4,000)                  |
| 12/31 Retained Earnings<br>to Balance Sheet    | <u>2,020,400</u> | <u>805,000</u>   | <u>802,400</u>   | <u>16,000</u>    | <u>18,600</u>              | <u>2,020,400</u>         |
| <i>Balance Sheet</i>                           |                  |                  |                  |                  |                            |                          |
| Investment in S Company Bonds                  | 310,000          |                  |                  | (1) 10,000       |                            | —0—                      |
|  |                  |                  |                  | (2) 300,000      |                            | —0—                      |
| Investment in S Company Stock                  | 1,424,400        |                  |                  | (3) 64,400       |                            | —0—                      |
|  |                  |                  |                  | (4) 1,360,000    |                            |                          |
| Other Assets                                   | 5,420,000        | 2,620,000        |                  |                  |                            | 8,040,000                |
| Total Assets                                   | <u>7,154,400</u> | <u>2,620,000</u> |                  |                  |                            | <u>8,040,000</u>         |
| 9% Bonds Payable                               |                  | 500,000          | (2)              | 300,000          |                            | 200,000                  |
| Discount on Bonds Payable                      |                  | (20,000)         |                  | (1)              | 12,000                     | (8,000)                  |
| Other Liabilities                              | 2,134,000        | 335,000          |                  |                  |                            | 2,469,000                |
| Capital Stock                                  |                  |                  |                  |                  |                            |                          |
| P Company                                      | 3,000,000        |                  |                  |                  |                            | 3,000,000                |
| S Company                                      |                  | 1,000,000        | (4)              | 1,000,000        |                            |                          |
| Retained Earnings from above                   | 2,020,400        | 805,000          | 802,400          | 16,000           | 18,600                     | 2,020,400                |
| 1/1 Noncontrolling Interest<br>in Net Assets** |                  |                  |                  | (4)              | 340,000                    | 340,000                  |
| 12/31 Noncontrolling Interest<br>in Net Assets |                  |                  |                  |                  | <u>358,600</u>             | <u>358,600</u>           |
| Total Liabilities and Equity                   | <u>7,154,400</u> | <u>2,620,000</u> | <u>2,102,400</u> | <u>2,102,400</u> |                            | <u>8,040,000</u>         |

\* Noncontrolling interest in income computation:  $(\$125,000 - \$12,000) \times .20 = \$22,600$ .\*\*  $\$300,000 + (\$700,000 - \$500,000) \times .20 = \$340,000$ .

(1) To recognize the constructive loss and adjust the bond investment and the intercompany bond to par value.

(2) To eliminate intercompany bond investment and liability.

(3) To eliminate intercompany income and dividends.

(4) To eliminate investment account and create noncontrolling interest account.



S Company, noncontrolling interest in consolidated income is 20% of the income reported by S Company reduced by the constructive loss of \$12,000 allocated to the subsidiary [ $.20 \times (\$125,000 - \$12,000) = \$22,600$ ].

A careful review of Illustrations 9-1 and 9-2 will reveal these important points concerning the objectives of the bond elimination entries:

1. Since the bonds were purchased this year, the constructive loss is reported in full in the determination of combined income.
2. Interest expense is the amortized interest paid to outside parties during the fiscal period. In this illustration, the intercompany portion was purchased on December 31. Therefore, the bonds were held by outside parties for the full 12 months. Interest expense reported in the consolidated income statement is for the full year, which is equal to the cash interest paid of \$45,000 plus discount amortization of \$5,000. As shown in the next illustration, if the bonds are held by P Company during the period, interest expense, net of amortization, is eliminated. Thus, for a 12-month period, \$30,000 in interest expense is eliminated, resulting in consolidated interest expense of \$20,000 (\$50,000 times the 40% held by outside parties).
3. The book value of the debt is the amount held by outside parties on the balance sheet date, which is \$192,000 [ $(\$500,000 - \$20,000) \times .40$ ]. The 60% held by the parent is eliminated by workpaper entries (2) and (4) in Illustration 9-1 and (1) and (2) in Illustration 9-2.

Consolidated net income and retained earnings for the year ended December 31, 2015, using the t-account approach, are computed as shown Illustration 9-3. If the equity method is used, the reconciliation of retained earnings is not needed.

#### ILLUSTRATION 9-3

##### T-Account Approach to Controlling Interest in Consolidated Net Income and Consolidated Retained Earnings

###### Controlling Interest in Consolidated Net Income—2015

|  |  |           |                  |
|--|--|-----------|------------------|
|  | Reported net income of P Company   | \$296,000 |                  |
|  | Less: Dividend income  | (16,000)  |                  |
|  | Net income from independent operations   | 280,000   |                  |
|  | Less: Constructive loss not recorded by P Company in the current year (unamortized premium on bond investment) | (10,000)  |                  |
|  | P Company's contribution to consolidated income  | 270,000   |                  |
|  | Reported net income of S Company   | \$125,000 |                  |
|  | Less: Constructive loss not recorded by S Company  | (12,000)  |                  |
|  | S Company's contribution to combined income  | 113,000   |                  |
|  | Percentage interest in S Company   | .80       | 90,400           |
|  | Controlling Interest in Consolidated net income  |           | <u>\$360,400</u> |

###### Consolidated Retained Earnings—December 31, 2015

|  |        |  |                    |
|--|--------|--|--------------------|
| Constructive loss on bond retirement not recorded by P Company | 10,000 | Ending retained earnings—P Company, December 31, 2015 (Cost Method)  | \$1,796,000        |
|  |        | Retained earnings adjusted for unrecorded constructive loss          | 1,786,000          |
|  |        | Ending retained earnings—S Company                                   | \$805,000          |
|  |        | Less: Retained earnings—date of acquisition                          | (500,000)          |
|  |        | Increase in recorded retained earnings                               | 305,000            |
|  |        | Less: Constructive loss on bond retirement not recorded by S Company | (12,000)           |
|  |        | Adjusted increase in recorded retained earnings                      | 293,000            |
|  |        | Percentage interest in S Company                                     | .80                |
|  |        | Consolidated retained earnings on December 31, 2015                  | <u>\$2,020,400</u> |

## Year Subsequent to Acquisition of Bonds, Entries on the Books of Affiliated Companies—2016

During 2016, the two companies record on their individual books the following entries related to the bond transaction:

### P Company's Books

*Entries on June 30 and December 31*

|  |        |        |
|--|--------|--------|
| Cash   | 13,500 |        |
| Interest Revenue   |        | 13,500 |
| To record receipt of interest ( $\$300,000 \times .09 \times 6/12$ ).  |        |        |
| Interest Revenue   | 1,250  |        |
| Investment in S Company Bonds  |        | 1,250  |
| To amortize premium on outstanding bonds ( $\$10,000 \div 8$ periods). |        |        |

For the full year 2016, P Company received total cash of \$27,000, recognized total interest revenue of \$24,500, and recorded amortization of the premium on the bond of \$2,500.

### Complete Equity Method—Additional Entries on the Books of P Company Subsequent to Acquisition of Debt

In the years subsequent to the acquisition of the subsidiary's debt, there are additional entries needed by P Company. The following entries would be made to the Investment in S Company Stock account in the year subsequent to acquisition:

|   |         |         |
|---|---------|---------|
| Investment in S Company Stock   | 112,000 |         |
| Equity in S Company Income  |         | 112,000 |
| To record equity income (80% of \$140,000).   |         |         |
| Cash  | 48,000  |         |
| Investment in S Company Stock   |         | 48,000  |
| To record dividends received (80% of \$60,000).   |         |         |
| Investment in S Company Stock   | 4,900   |         |
| Equity in S Company Income  |         | 4,900   |
| To eliminate the intercompany effect from the amortization of P Company's share of the constructive loss. |         |         |

This last entry ensures that P Company's income equals consolidated income. The \$4,900 can be computed several ways. First, the total constructive loss is \$22,000, of which P Company is allocated \$19,600. Since the total loss will be recognized to income over the term of the bond through amortization and because the bond has four years remaining, one-fourth of the loss is amortized in each period ( $\$19,600/4 = \$4,900$ ). Because this is an intercompany transaction, under the complete equity method, an additional \$4,900 must be added to income to offset the additional expense. Recall that the entire \$22,000 is recognized as a loss in the year of purchase. Alternatively, the \$4,900 can be computed by comparing the amount of interest expense and interest revenue recognized by each company as follows:

|   |                       |
|---|-----------------------|
| Interest Expense (60% of S Company's \$50,000 interest expense reported in 2016)      | \$30,000              |
| Interest Revenue recognized by P Company (2016)                                       | <u>24,500</u>         |
| Excess Expense  | 5,500                 |
| Controlling interest's share of the total constructive loss ( $\$19,600/\$22,000$ ) = | <u><u>× .8909</u></u> |
|   | <u><u>4,900</u></u>   |

### S Company's Books

*Entries on June 30 and December 31*

|   |        |        |
|---|--------|--------|
| Interest Expense  | 22,500 |        |
| Cash  |        | 22,500 |
| To record payment of interest ( $\$500,000 \times .09 \times 6/12$ ).   |        |        |
| Interest Expense  | 2,500  |        |
| Discount on Bonds Payable   |        | 2,500  |
| To amortize discount on outstanding bonds ( $\$20,000 \div 8$ periods). |        |        |



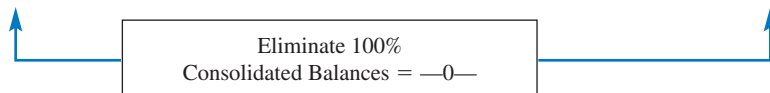
Thus, S Company paid \$45,000 in cash interest and amortized \$5,000 of the bond discount. Since 60% of the bonds (\$300,000) were purchased by P Company, S Company paid \$27,000 cash to P Company and amortized \$3,000 of the related bond discount.

Recall in the prior year, a constructive loss of \$22,000 was reported on the consolidated income statement. This amount is equal to the sum of the premium yet to be amortized by P Company (\$10,000) and the discount yet to be amortized by S Company (\$12,000). Therefore, as the companies amortize these amounts, they, in essence, recognize a portion of the total constructive loss throughout the term of the bond. For the full year (2016), \$2,500 ( $\$1,250 \times 2$ ) of the total constructive loss was recognized on the books of P Company as a result of amortizing the premium on the investment. S Company recognized \$3,000 [ $(\$2,500 \times 2) \times .60$ ] of its share of the loss through the amortization of the discount. To prevent double counting, these amortization amounts must be eliminated for consolidated purposes.

The account balances related to the intercompany bond holdings at the end of 2016 are:

**P Company's Books**

| <i>Investment in S Company's Bonds</i> |         |          |       | <i>Interest Revenue</i> |       |          |        |
|--|---------|----------|-------|-------------------------|-------|----------|--------|
| 12/31/15                               | 310,000 | 6/30/16  | 1,250 | 6/30/16                 | 1,250 | 6/30/16  | 13,500 |
|  |         | 12/31/16 | 1,250 | 12/31/16                | 1,250 | 12/31/16 | 13,500 |
| Balance                                | 307,500 |          |       |                         |       | Balance  | 24,500 |



**S Company's Books**

| <i>9% Bonds Payable</i> |          |         | <i>Discount on Bonds Payable</i> |        |                |
|-------------------------|----------|---------|----------------------------------|--------|----------------|
|                         | 12/31/15 | 500,000 | 12/31/15                         | 20,000 |                |
|                         |          |         |                                  |        | 6/30/16 2,500  |
|                         |          |         |                                  |        | 12/31/16 2,500 |
|                         |          |         | Bal.                             | 15,000 |                |

Consolidated balance =  $\$500,000 \times .40$   
= \$200,000

Consolidated balance =  $\$15,000 \times .40$   
= \$6,000

*Interest Expense*

|             |              |
|-------------|--------------|
| <u>2016</u> |              |
| 6/30/16     | 22,500       |
| 6/30/16     | 2,500        |
| 12/31/16    | 22,500       |
| 12/31/16    | <u>2,500</u> |
| Balance     | 50,000       |

Consolidated balance =  $\$50,000 \times .40$   
= \$20,000

Rationale: For consolidated balances, 60% of the bonds held by the affiliated company must be eliminated. The remaining 40%, held by outside parties, is reported in the consolidated financial statement.

**Consolidated Statements Workpaper Entries—December 31, 2016**

Workpaper entries necessary in the consolidated statements workpaper for the year ended December 31, 2016, are presented in general journal form below. The consolidated statements workpaper for 2016 is presented in Illustration 9-4.

| Cost Method                                  |                  | ILLUSTRATION 9-4                     |                  |                  |                         |                       |
|--|------------------|--------------------------------------|------------------|------------------|-------------------------|-----------------------|
| 80% Owned Subsidiary                         |                  | Consolidated Statements Workpaper    |                  |                  |                         |                       |
| Constructive Retirement of                   |                  | P Company and Subsidiary             |                  |                  |                         |                       |
| Subsidiary's Bonds—One Year after Retirement |                  | for the Year Ended December 31, 2016 |                  |                  |                         |                       |
| Income Statement                             | P                | S                                    | Eliminations     |                  | Noncontrolling Interest | Consolidated Balances |
|  | Company          | Company                              | Dr.              | Cr.              |                         |                       |
| Sales  | 3,546,000        | 2,020,000                            |                  |                  |                         | 5,566,000             |
| Dividend Income                              | 48,000           |                                      | (8)              | 48,000           |                         | —0—                   |
| Interest Income                              | 24,500           |                                      | (6)              | 27,000           | (4)                     | 2,500                 |
| Total Revenue                                | <u>3,618,500</u> | <u>2,020,000</u>                     |                  |                  |                         | <u>5,566,000</u>      |
| Cost of Goods Sold                           | 2,040,000        | 1,200,000                            |                  |                  |                         | 3,240,000             |
| Interest Expense                             |                  | 50,000                               |                  |                  | (5)                     | 3,000                 |
|  |                  |                                      |                  |                  | (6)                     | 27,000                |
| Other Expense                                | 1,124,500        | 630,000                              |                  |                  |                         | 1,754,500             |
| Total Cost and Expense                       | <u>3,164,500</u> | <u>1,880,000</u>                     |                  |                  |                         | <u>5,014,500</u>      |
| Net/Consolidated Income                      | 454,000          | 140,000                              |                  |                  |                         | 551,500               |
| Noncontrolling Interest in Income*           |                  |                                      |                  |                  |                         | 28,600*               |
| Net Income to Retained Earnings              | <u>454,000</u>   | <u>140,000</u>                       | <u>75,000</u>    | <u>32,500</u>    |                         | <u>28,600</u>         |
| <i>Retained Earnings Statement</i>           |                  |                                      |                  |                  |                         |                       |
| 1/1 Retained Earnings                        |                  |                                      |                  |                  |                         |                       |
| P Company                                    | 1,796,000        |                                      | (2)              | 10,000           |                         | 2,020,400             |
| S Company                                    |                  | 805,000                              | (3)              | 9,600            | (1)                     | 244,000               |
| Net Income from above                        | 454,000          | 140,000                              | (9)              | 805,000          |                         |                       |
| Dividends Declared                           |                  |                                      |                  |                  |                         |                       |
| P Company                                    | (150,000)        |                                      |                  |                  |                         | (150,000)             |
| S Company                                    |                  | (60,000)                             |                  |                  | (8)                     | 48,000                |
| 12/31 Retained Earnings to Balance Sheet     | <u>2,100,000</u> | <u>885,000</u>                       | <u>899,600</u>   | <u>324,500</u>   |                         | <u>16,600</u>         |
| <i>Balance Sheet</i>                         |                  |                                      |                  |                  |                         |                       |
| Investment in S Company Bonds                | 307,500          |                                      | (4)              | 2,500            | (2)                     | 10,000                |
|  |                  |                                      |                  |                  | (7)                     | 300,000               |
| Investment in S Company Stock                | 1,200,000        |                                      | (1)              | 244,000          | (9)                     | 1,444,000             |
| Other Assets                                 | 5,812,500        | 2,690,000                            |                  |                  |                         | 8,502,500             |
| Total Assets                                 | <u>7,320,000</u> | <u>2,690,000</u>                     |                  |                  |                         | <u>8,502,500</u>      |
| 9% Bonds Payable                             |                  | 500,000                              | (7)              | 300,000          |                         | 200,000               |
| Discount on Bonds Payable                    |                  | (15,000)                             | (5)              | 3,000            | (3)                     | 12,000                |
| Other Liabilities                            | 2,220,000        | 320,000                              |                  |                  |                         | 2,540,000             |
| Capital Stock                                |                  |                                      |                  |                  |                         |                       |
| P Company                                    | 3,000,000        |                                      |                  |                  |                         | 3,000,000             |
| S Company                                    |                  | 1,000,000                            | (9)              | 1,000,000        |                         |                       |
| Retained Earnings from above                 | 2,100,000        | 885,000                              |                  | 899,600          |                         | 324,500               |
| 1/1 Noncontrolling Interest in Net Assets**  |                  |                                      | (3)              | 2,400            | (9)                     | 361,000**             |
| 12/31 Noncontrolling Interest in Net Assets  |                  |                                      |                  |                  |                         | 358,600               |
| Total Liabilities and Equity                 | <u>7,320,000</u> | <u>2,690,000</u>                     | <u>2,451,500</u> | <u>2,451,500</u> |                         | <u>8,502,500</u>      |

\*  $(\$140,000 + \$3,000) \times .20 = \$28,600$ .

\*\*  $\$300,000 + (\$805,000 - \$500,000) \times .20 = \$361,000$ .

(1) To establish reciprocity (convert to equity) as of 1/1/2016  $[(\$805,000 - \$500,000) \times .80 = \$244,000]$ .

(2) To adjust beginning retained earnings for unrecorded constructive loss recorded in prior years as workpaper entry only and adjust bond investment to par value.

(3) To adjust beginning retained earnings for unrecorded constructive loss at the beginning of year, adjust interest expense for the loss recorded this period, and adjust intercompany bond payable to par value.

(4) To reverse the amortization of premium on investment recorded by P Company during the year.

(5) To reverse the amortization of discount on bonds payable recorded by S Company during the year.

(6) To eliminate intercompany interest.

(7) To eliminate intercompany bond investment and bonds payable.

(8) To eliminate intercompany dividends.

(9) To eliminate the investment account and create noncontrolling interest account.

|     |   |         |         |
|-----|---|---------|---------|
| (1) | Investment in S Company Stock   | 244,000 |         |
|     | Beginning Retained Earnings—P Company                                       |         | 244,000 |
|     | To establish reciprocity/convert to equity                                  |         |         |
|     | [( $\$805,000 - \$500,000$ ) $\times$ .80 = $\$244,000$ ].                  |         |         |
| (2) | Beginning Retained Earnings—P Company                                       | 10,000  |         |
|     | Investment in S Company Bonds   |         | 10,000  |
|     | To adjust beginning retained earnings for constructive loss                 |         |         |
|     | (recorded in prior year as workpaper entry only; see 2015 entry             |         |         |
|     | (2) and to adjust investment to par.  |         |         |
| (3) | Beginning Retained Earnings—P Company                                       | 9,600   |         |
|     | ( $\$12,000 \times .80$ )   |         |         |
|     | Beginning Noncontrolling Interest   | 2,400   |         |
|     | ( $\$12,000 \times .20$ )   |         |         |
|     | Discount on Bonds Payable ( $\$15,000 \times .60$ )                         |         | 12,000  |
|     | To adjust beginning retained earnings balances for unrecorded               |         |         |
|     | constructive loss at beginning of the year (recorded in 2015 as workpaper   |         |         |
|     | entry only; see 2015 entry (3)) and adjust intercompany bonds to par value. |         |         |
| (4) | Investment in S Company Bonds   | 2,500   |         |
|     | Interest Revenue ( $\$1,250 + \$1,250$ )                                    |         | 2,500   |
|     | To reverse the amortization of premium on investment recorded               |         |         |
|     | by P Company during the current year (and not needed by consolidated        |         |         |
|     | entity since the constructive loss was recorded in its entirety in 2015).   |         |         |
| (5) | Discount on Bonds Payable ( $\$5,000 \times .60$ )                          | 3,000   |         |
|     | Interest Expense  |         | 3,000   |
|     | To reverse amortization of discount on bonds payable recorded by            |         |         |
|     | S Company during current year (and not needed by consolidated entity        |         |         |
|     | since the constructive loss was recorded in its entirety in 2015).          |         |         |

Recall that the individual companies record a portion of the loss ( $\$5,500$  in total) this year as amortization of the discount ( $\$5,000 \times .60 = \$3,000$ ) and premium ( $\$2,500$ ). Workpaper entries are necessary to add back this portion of the loss reported as a reduction in the current income of the individual companies because the entire loss was reported in the consolidated income statement in the year that the bonds were acquired by P Company. Failure to do so will result in reporting the constructive loss twice, once in the year of acquisition and again in subsequent periods when the companies record the loss. The credit to interest revenue for  $\$2,500$  [entry (4)] and the credit to interest expense for  $\$3,000$  [entry (5)] increase combined income by  $\$5,500$ .

|     |   |           |           |
|-----|---|-----------|-----------|
| (6) | Interest Revenue ( $\$45,000 \times .60$ ) or ( $\$13,500 + \$13,500$ ) | 27,000    |           |
|     | Interest Expense  |           | 27,000    |
|     | To eliminate intercompany interest.                                     |           |           |
| (7) | Bonds Payable ( $\$500,000 \times .60$ )                                | 300,000   |           |
|     | Investment in S Company Bonds   |           | 300,000   |
|     | To eliminate intercompany bond investment and bonds payable.            |           |           |
| (8) | Dividend Income   | 48,000    |           |
|     | Dividends Declared  |           | 48,000    |
|     | To eliminate intercompany dividends.                                    |           |           |
| (9) | Beginning Retained Earnings—S Company                                   | 805,000   |           |
|     | Common Stock—S Company  | 1,000,000 |           |
|     | Investment in S Company Stock   |           | 1,444,000 |
|     | Noncontrolling Interest in Net Assets                                   |           | 361,000   |
|     | To eliminate the investment account and recognize NCI in Net Assets.    |           |           |

Workpaper entries (2) through (7) could be combined into one entry as follows:

|                                       |         |         |
|---------------------------------------|---------|---------|
| Beginning Retained Earnings—P Company | 19,600  |         |
| Beginning Noncontrolling Interest     | 2,400   |         |
| Interest Revenue                      | 24,500  |         |
| Bonds Payable                         | 300,000 |         |
| Interest Expense                      |         | 30,000  |
| Discount on Bonds Payable             |         | 9,000   |
| Investment in S Company Bonds         |         | 307,500 |

Noncontrolling interest in consolidated net income is 20% of the income reported by S Company plus the portion of the loss recorded by S during 2016, but fully reported in the 2015 consolidated income statement, the year the bonds were constructively retired [ $.20 \times (\$140,000 + \$3,000) = \$28,600$ ].

## Consolidated Statements Workpaper Entries—2016

### The Complete Equity Method



COMPLETE

|     |  |           |           |
|-----|--|-----------|-----------|
| (1) | Investment in S Company Stock  | 19,600    |           |
|     | Beginning NCI  |           | 2,400     |
|     | (\$12,000 × .20)   |           |           |
|     | Investment in S Company Bonds  |           | 10,000    |
|     | Discount on Bonds Payable (\$15,000 × .60)   |           | 12,000    |
|     | To adjust beginning Investment in S Company Stock balance and NCI for unrecorded constructive loss at beginning of the year (recorded in 2015 in workpaper entry only; see 2015 entry 2 and entry 3) and adjust intercompany bonds to par value. |           |           |
| (2) | Investment in S Company Bonds  | 2,500     |           |
|     | Interest Revenue (\$1,250 + \$1,250)   |           | 2,500     |
|     | To reverse the amortization of premium on investment recorded by P Company during the current year (and not needed by consolidated entity since the constructive loss was recorded in its entirety in 2015).                                     |           |           |
| (3) | Discount on Bonds Payable (\$5,000 × .60)  | 3,000     |           |
|     | Interest Expense   |           | 3,000     |
|     | To reverse amortization of discount on bonds payable recorded by Company during current year (and not needed by consolidated entity since the constructive loss was recorded in its entirety in 2015).   |           |           |
| (4) | Bonds Payable (\$500,000 × .60)  | 300,000   |           |
|     | Investment in S Company Bonds  |           | 300,000   |
|     | To eliminate intercompany bond investment and bonds payable.   |           |           |
| (5) | Interest Revenue (\$45,000 × .60) or (\$13,500 + \$13,500)   | 27,000    |           |
|     | Interest Expense   |           | 27,000    |
|     | To eliminate intercompany interest.  |           |           |
| (6) | Equity Income  | 116,900   |           |
|     | Investment in P Company Stock  |           | 68,900    |
|     | Dividends Declared   |           | 48,000    |
|     | To eliminate intercompany dividends and income.  |           |           |
| (7) | Beginning Retained Earnings—S Company  | 805,000   |           |
|     | Common Stock—S Company   | 1,000,000 |           |
|     | Investment in S Company Stock  |           | 1,444,000 |
|     | Beginning NCI  |           | 361,000   |
|     | To eliminate the investment account and recognize NCI.   |           |           |

Whether a single entry or a series of entries are made, the eliminating entries must accomplish the following under the cost (or complete equity) method (Illustration 9-5):

1. Under the *cost* or *partial equity method*, the parent company's beginning retained earnings is reduced by:
  - a. 100% of the constructive loss allocated to P Company that has not been recorded in prior periods as a decrease in interest revenue via the periodic amortization of premium (\$10,000).
  - b. 80% of the constructive loss allocated to S Company that has not been recorded in prior periods as an increase in interest expense via the periodic discount amortization (\$9,600).

## Complete Equity Method

## ILLUSTRATION 9-5

80% Owned Subsidiary

## Consolidated Statements Workpaper

Constructive Retirement of Subsidiary's Bonds—

## P Company and Subsidiary

One Year after Retirement

for the Year Ended December 31, 2016

| Income Statement                            | P<br>Company     | S<br>Company     | Eliminations |                  |          |                  | Noncontrolling Consolidated |                  |
|---|------------------|------------------|--------------|------------------|----------|------------------|-----------------------------|------------------|
|   |                  |                  | Dr.          | Cr.              | Interest | Balances         |                             |                  |
| Sales                                       | 3,546,000        | 2,020,000        |              |                  |          |                  | 5,566,000                   |                  |
| Equity Income                               | 116,900          |                  | (6)          | 116,900          |          |                  | —0—                         |                  |
| Interest Income                             | 24,500           |                  | (5)          | 27,000           | (2)      | 2,500            | —0—                         |                  |
| Total Revenue                               | <u>3,687,400</u> | <u>2,020,000</u> |              |                  |          |                  | <u>5,566,000</u>            |                  |
| Cost of Goods Sold                          | 2,040,000        | 1,200,000        |              |                  |          |                  | 3,240,000                   |                  |
| Interest Expense                            |                  | 50,000           |              |                  | (3)      | 3,000            |                             |                  |
| Other Expense                               | 1,124,500        | 630,000          |              |                  | (5)      | 27,000           | 20,000                      |                  |
| Total Cost and Expense                      | <u>3,164,500</u> | <u>1,880,000</u> |              |                  |          |                  | <u>1,754,500</u>            |                  |
| Net/Consolidated Income                     | 522,900          | 140,000          |              |                  |          |                  | 551,500                     |                  |
| Noncontrolling Interest in Income           |                  |                  |              |                  |          |                  | 28,600*                     |                  |
| Net Income to Retained Earnings             | <u>522,900</u>   | <u>140,000</u>   |              |                  |          |                  | <u>28,600</u>               |                  |
|   |                  |                  |              |                  |          |                  | <u>28,600</u>               |                  |
| <i>Retained Earnings Statement</i>          |                  |                  |              |                  |          |                  |                             |                  |
| 1/1 Retained Earnings                       |                  |                  |              |                  |          |                  |                             |                  |
| P Company                                   | 2,020,400        |                  |              |                  |          |                  |                             | 2,020,400        |
| S Company                                   |                  | 805,000          | (7)          | 805,000          |          |                  |                             |                  |
| Net Income from above                       | 522,900          | 140,000          |              | 143,900          |          | 32,500           | 28,600                      | 522,900          |
| Dividends Declared                          |                  |                  |              |                  |          |                  |                             |                  |
| P Company                                   | (150,000)        |                  |              |                  |          |                  |                             | (150,000)        |
| S Company                                   |                  | (60,000)         |              |                  | (6)      | 48,000           | (12,000)                    |                  |
| 12/31 Retained Earnings to Balance Sheet    | <u>2,393,300</u> | <u>885,000</u>   |              | <u>948,900</u>   |          | <u>80,500</u>    | <u>16,600</u>               | <u>2,393,300</u> |
| <i>Balance Sheet</i>                        |                  |                  |              |                  |          |                  |                             |                  |
| Investment in S Company Bonds               | 307,500          |                  | (2)          | 2,500            | (1)      | 10,000           |                             | —0—              |
| Investment in S Company Stock               | 1,493,300        |                  | (1)          | 19,600           | (4)      | 300,000          |                             | —0—              |
| Other Assets                                | 5,812,500        | 2,690,000        |              |                  | (6)      | 68,900           |                             | 8,502,500        |
| Total Assets                                | <u>7,613,300</u> | <u>2,690,000</u> |              |                  | (7)      | 1,444,000        |                             | <u>8,502,500</u> |
| 9% Bonds Payable                            |                  | 500,000          | (4)          | 300,000          |          |                  |                             | 200,000          |
| Discount on Bonds Payable                   |                  | (15,000)         | (3)          | 3,000            | (1)      | 12,000           |                             | (6,000)          |
| Other Liabilities                           | 2,220,000        | 320,000          |              |                  |          |                  |                             | 2,540,000        |
| Capital Stock                               |                  |                  |              |                  |          |                  |                             |                  |
| P Company                                   | 3,000,000        |                  |              |                  |          |                  |                             | 3,000,000        |
| S Company                                   |                  | 1,000,000        | (7)          | 1,000,000        |          |                  |                             |                  |
| Retained Earnings from above                | 2,393,300        | 885,000          |              | 948,900          |          | 80,500           | 16,600                      | 2,393,300        |
| 1/1 Noncontrolling Interest in Net Assets   |                  |                  | (1)          | 2,400            | (7)      | 361,000**        | 358,600                     |                  |
| 12/31 Noncontrolling Interest in Net Assets |                  |                  |              |                  |          |                  | <u>375,200</u>              | <u>375,200</u>   |
| Total Liabilities and Equity                | <u>7,613,300</u> | <u>2,690,000</u> |              | <u>2,276,400</u> |          | <u>2,276,400</u> |                             | <u>8,502,500</u> |

\*  $(\$140,000 + \$3,000) \times .20 = \$28,600$ .\*\*  $\$300,000 + (\$805,000 - \$500,000) \times .20 = \$361,000$ .

- (1) To adjust the investment in S Company Stock account and beginning retained earnings of S Company for the constructive loss reported in the previous year.
- (2) To reverse the amortization of premium on investment recorded by P Company during the current year.
- (3) To reverse the amortization of discount on bonds payable recorded by S Company during the current year.
- (4) To eliminate intercompany bond investment and bonds payable.
- (5) To eliminate intercompany interest.
- (6) To eliminate intercompany dividends and income.
- (7) To eliminate the investment account and create noncontrolling interest.

Under the *complete equity method*, the parent company's beginning retained earnings does not need to be adjusted for these amounts because each year adjustments are made to the parent company accounts Equity in Subsidiary Income (and hence to retained earnings of P Company) and Investment in S Company. Thus, replacing the entries to Beginning Retained Earnings—P Company with entries to the investment account facilitates the elimination of the investment account under the complete equity method.

The sum of these two components is the controlling interest share of the constructive loss not recorded on the books of the affiliated companies as of the beginning of the current period. This sum is also equal to (a) 100% of the unamortized premium on the books of the parent (\$10,000) plus (b) the parent's share of the unamortized discount related to the intercompany bonds on the subsidiary's books ( $.80 \times \$12,000 = \$9,600$ ) at the beginning of the year.

2. The beginning retained earnings balance of the subsidiary is reduced by the noncontrolling interest share of the constructive loss allocated to the subsidiary that has not been recorded in prior periods through periodic amortization of the discount related to the intercompany bonds.
3. The interest expense and interest revenue related to the intercompany bonds and reported by the respective companies are eliminated from the income statement.
4. The bond investment and the carrying value of the intercompany bonds are eliminated from the balance sheet.

Consolidated net income and retained earnings for the year ended December 31, 2016, using the t-account approach, are computed as shown in Illustration 9-6.

#### ILLUSTRATION 9-6

##### T-Account Approach to Consolidated Net Income and Retained Earnings

| Consolidated Net Income—2016  |   |
|---|---|
|   | Reported net income of P Company \$454,000  |
|   | <i>Less:</i> Dividend income <u>(48,000)</u>  |
|   | Net income from independent operations 406,000  |
|   | <i>Add:</i> Constructive loss recorded by P Company in the current year (premium amortization) <u>2,500</u>   |
|   | P Company's contribution to consolidated income 408,500   |
|   | Reported net income of S Company \$140,000  |
|   | <i>Add:</i> Constructive loss recorded by S Company in the current year (discount amortization) <u>3,000</u>  |
|   | S Company's contribution to consolidated income 143,000   |
|   | Percentage interest in S Company <u>.80</u> 114,400   |
|   | Controlling Interest in consolidated net income <u>\$522,900</u>  |
| Consolidated Retained Earnings—December 31, 2016  |   |
| Constructive loss on bond retirement not recorded by P Company (\$10,000 – \$2,500) 7,500 | Ending retained earnings—P Company, December 31, 2016 (Cost Method) \$2,100,000                               |
|   | Retained earnings adjusted for unrecorded constructive loss 2,092,500   |
|   | Ending retained earnings—S Company \$ 885,000   |
|   | <i>Less:</i> Retained earnings—date of acquisition <u>(500,000)</u>   |
|   | Increase in recorded retained earnings 385,000  |
|   | <i>Less:</i> Constructive loss on bond retirement not recorded by S Company (\$12,000 – 3,000) <u>(9,000)</u> |
|   | Adjusted increase in recorded retained earnings 376,000   |
|   | Percentage interest in S Company <u>.80</u> 300,800   |
|   | Consolidated retained earnings on December 31, 2016 <u>\$2,393,300</u>  |



## Second Year Subsequent to the Debt Acquisition—2017

In subsequent years until the bonds mature, the companies will continue to recognize a portion of the loss each year as the discount and premium are amortized on their separate books. The consolidated statements workpaper entries are similar to those illustrated for 2017. Recall that the constructive loss occurred on the last day of 2015. Thus 2016 was the first year necessitating amortization reversals, and 2017 is the second. Workpaper entries in general journal form related to the intercompany bondholdings in the 2017 consolidated statements workpaper are as follows:

| Consolidated Statement Workpapers Entries—2017 |   |                             |
|--|---|-----------------------------|
| (1)  | Beginning Retained Earnings—P Company*<br>Investment in S Company Bonds<br>To adjust beginning retained earnings for constructive loss (recorded in 2015 as workpaper entry only; see 2015 entry (2)) and to adjust investment to par.  | 10,000<br><br>10,000        |
| (2)  | Beginning Retained Earnings—P Company ( $\$12,000 \times .80$ )*<br>Beginning NCI ( $\$12,000 \times .20$ )<br>Discount on Bonds Payable ( $\$20,000 \times .60$ )<br>To adjust beginning retained earnings balance and NCI for constructive loss (recorded in 2015 as workpaper entry only; see 2015 entry (3) and adjust intercompany bonds to par value. | 9,600<br>2,400<br>12,000    |
| (3)  | Investment in S Company Bonds<br>Retained Earnings—P Company*<br>Interest Revenue ( $\$1,250 + \$1,250$ )<br>To reverse the amortization of premium on investment recorded by P Company during the current year and prior year (and not needed by consolidated entity since the constructive loss was recorded in its entirety in 2015).                    | 5,000<br><br>2,500<br>2,500 |
| (4)  | Discount on Bonds Payable ( $\$10,000 \times .60$ )<br>Retained Earnings—P Company*<br>Interest Expense<br>To reverse amortization of discount on bonds payable recorded by S Company during current year and prior year (and not needed by consolidated entity since the constructive loss was recorded in its entirety in 2015).                          | 6,000<br><br>3,000<br>3,000 |

Under the complete equity method, the amounts in entries (1) through (4) recorded to P Company's beginning retained earnings would be assigned to the Investment in S Company Stock account. These accounts are marked with an asterisk.

|     |  |                      |
|-----|--|----------------------|
| (5) | Interest Revenue<br>Interest Expense<br>To eliminate intercompany interest.                                    | 27,000<br><br>27,000 |
| (6) | Bonds Payable<br>Investment in S Company Bonds<br>To eliminate intercompany bond investment and bonds payable. | 300,000<br>300,000   |

## Three-Year Comparison

Illustrations 9-7 and 9-8 show the entries on P Company's books, S Company's books, and the consolidated workpaper entries using both the cost method and the complete equity method. For the year 2017, S Company income is assumed to be \$200,000 with \$75,000 of dividends declared.

**ILLUSTRATION 9-7****Cost Method  
Three-Year Summary**

| <b>Entries on P Company's Books</b> |                  |                  |                  |        |
|-------------------------------------|------------------|------------------|------------------|--------|
|                                     | <i>Year 2015</i> | <i>Year 2016</i> | <i>Year 2017</i> |        |
| Investment in S Company Bond        | 310,000          |                  |                  |        |
| Cash                                |                  | 310,000          |                  |        |
| Cash                                | 16,000           | 48,000           | 60,000           |        |
| Dividend Income                     |                  | 16,000           | 48,000           | 60,000 |
| Cash (on an annual basis)           |                  | 27,000           | 27,000           |        |
| Investment in S Company Bond        |                  |                  | 2,500            | 2,500  |
| Interest Income                     |                  | 24,500           |                  | 24,500 |

| <b>Entries on S Company's Books</b> |                  |                  |                  |        |
|-------------------------------------|------------------|------------------|------------------|--------|
|                                     | <i>Year 2015</i> | <i>Year 2016</i> | <i>Year 2017</i> |        |
| Interest Expense                    |                  | 30,000           | 30,000           |        |
| Discount on Bond Payable            |                  |                  | 3,000            | 3,000  |
| Cash                                |                  | 27,000           |                  | 27,000 |

| <b>Entries on the Workpaper</b>           |                  |                  |                  |           |
|---|------------------|------------------|------------------|-----------|
|   | <i>Year 2015</i> | <i>Year 2016</i> | <i>Year 2017</i> |           |
| Investment in S Company Stock             | 160,000          | 244,000          | 308,000          |           |
| Beginning Retained Earnings—P Company     |                  | 160,000          | 244,000          | 308,000   |
| Loss on Constructive Retirement of Bond   | 22,000           |                  |                  |           |
| Beginning Retained Earnings—P Company     |                  | 19,600           | 19,600           |           |
| Beginning NCI in Equity                   |                  | 2,400            | 2,400            |           |
| Discount on Bond Payable                  | 12,000           | 12,000           | 12,000           | 12,000    |
| Investment in S Company Bond              | 10,000           | 10,000           | 10,000           | 10,000    |
| Investment in S Company Bond              |                  | 2,500            | 5,000            |           |
| Interest Income                           |                  | 2,500            | 2,500            | 2,500     |
| Beginning Retained Earnings—P Company     |                  |                  |                  | 2,500     |
| Discount on Bond Payable                  |                  | 3,000            | 6,000            |           |
| Interest Expense                          |                  | 3,000            | 3,000            | 3,000     |
| Beginning Retained Earnings—P Company     |                  |                  |                  | 3,000     |
| Interest Income                           |                  | 27,000           | 27,000           |           |
| Interest Expense                          |                  | 27,000           | 27,000           | 27,000    |
| Bond Payable                              | 300,000          | 300,000          | 300,000          |           |
| Investment in S Company Bond              |                  | 300,000          | 300,000          | 300,000   |
| Dividend Income                           | 16,000           | 48,000           | 60,000           |           |
| Dividend Declared                         |                  | 16,000           | 48,000           | 60,000    |
| Beginning Retained Earnings—S Company     | 700,000          | 805,000          | 885,000          |           |
| Common Stock—S Company                    | 1,000,000        | 1,000,000        | 1,000,000        |           |
| Difference between Implied and Book Value | 0                | 0                | 0                |           |
| Investment in S Company Stock             |                  | 1,360,000        | 1,444,000        | 1,508,000 |
| Noncontrolling Interest in Equity         |                  | 340,000          | 361,000          | 377,000   |

**ILLUSTRATION 9-8****Complete Equity Method,  
Three-Year Summary**

| <b>Entries on P Company's Books</b> |                  |                  |                  |         |
|-------------------------------------|------------------|------------------|------------------|---------|
|                                     | <i>Year 2015</i> | <i>Year 2016</i> | <i>Year 2017</i> |         |
| Investment in S Company Bond        | 310,000          |                  |                  |         |
| Cash                                |                  | 310,000          |                  |         |
| Cash (for Interest)                 |                  | 27,000           |                  | 27,000  |
| Investment in S Company Bonds       |                  |                  | 2,500            | 2,500   |
| Interest Income                     |                  | 24,500           |                  | 24,500  |
| Cash (for Dividends)                | 16,000           | 48,000           |                  | 60,000  |
| Investment in S Company Stock       |                  | 16,000           | 48,000           | 60,000  |
| Investment in S Company Stock       | 100,000          | 112,000          |                  | 160,000 |
| Equity in S Income                  |                  | 100,000          | 112,000          | 160,000 |
| Equity in S Income                  | 19,600           |                  |                  |         |
| Investment in S Company Stock       |                  | 19,600           |                  |         |
| Investment in S Company Stock       |                  | 4,900            |                  | 4,900   |
| Equity in S Income (\$19,600/4)     |                  |                  | 4,900            | 4,900   |

| <b>Entries on S Company's Books</b> |                  |                  |                  |        |
|-------------------------------------|------------------|------------------|------------------|--------|
|                                     | <i>Year 2015</i> | <i>Year 2016</i> | <i>Year 2017</i> |        |
| Interest Expense                    |                  | 30,000           |                  | 30,000 |
| Discount on Bond Payable            |                  |                  | 3,000            | 3,000  |
| Cash                                |                  | 27,000           |                  | 27,000 |

| <b>Entries on the Workpaper</b>           |                  |                  |                  |           |
|---|------------------|------------------|------------------|-----------|
|   | <i>Year 2015</i> | <i>Year 2016</i> | <i>Year 2017</i> |           |
| Equity in S Income                        | 80,400           | 116,900          |                  | 164,900   |
| Dividends Declared                        |                  | 16,000           | 48,000           | 60,000    |
| Investment in S Company Stock             |                  | 64,400           | 68,900           | 104,900   |
| Beginning Retained Earnings—S Company     | 700,000          | 805,000          |                  | 885,000   |
| Common Stock—S Company                    | 1,000,000        | 1,000,000        |                  | 1,000,000 |
| Difference between Implied and Book Value | 0                | 0                |                  | 0         |
| Investment in S Company Stock             |                  | 1,360,000        | 1,444,000        | 1,508,000 |
| Noncontrolling Interest in Equity         |                  | 340,000          | 361,000          | 377,000   |
| Loss on Constructive Retirement of Bonds  | 22,000           |                  |                  |           |
| Investment in S Company Stock             |                  | 19,600           |                  | 19,600    |
| Beginning NCI in Equity                   |                  | 2,400            |                  | 2,400     |
| Investment in S Company Bond              |                  | 10,000           | 10,000           | 10,000    |
| Discount on Bonds Payable                 |                  | 12,000           | 12,000           | 12,000    |
| Interest Income                           |                  | 27,000           |                  | 27,000    |
| Interest Expense                          |                  |                  | 27,000           | 27,000    |
| Bonds Payable                             | 300,000          | 300,000          |                  | 300,000   |
| Investment in S Company Bonds             |                  | 300,000          | 300,000          | 300,000   |
| Investment in S Company Bonds             |                  | 2,500            |                  | 5,000     |
| Interest Income                           |                  |                  | 2,500            | 2,500     |
| Investment in S Company Stock             |                  |                  |                  | 2,500     |
| Discount on Bonds Payable                 |                  | 3,000            |                  | 6,000     |
| Interest Expense                          |                  |                  | 3,000            | 3,000     |
| Investment in S Company Stock             |                  |                  |                  | 3,000     |

**TEST YOUR KNOWLEDGE****9.1**

**NOTE:** Solutions to *Test Your Knowledge* questions are found at the end of each chapter before the end-of-chapter questions.

**Multiple Choice**

- Sandler Company is a wholly owned subsidiary of Portnoy Company. On January 1, 2012, Sandler has \$100,000 of 8% bonds outstanding. These bonds were issued at face value and had five years to maturity as of January 1, 2012. Both Sandler and Portnoy amortize any premium or discount using the straight-line method. On January 1, 2012, Portnoy bought Sandler's bonds for \$98,000. The amount(s) that should appear on the consolidated balance sheet of Portnoy and Sandler relative to these bonds is (are):
  - Bonds payable \$100,000
  - Bonds payable \$100,000, discount \$2,000
  - Bonds payable \$100,000, discount \$1,600
  - The bonds do not appear.
- Company Planets Galore owns 100% of the common stock of Saturn Inc. Saturn carries 10-year 8% bonds, issued to yield 7%, on its balance sheet. On January 1 of the current year, Planets Galore bought all Saturn's outstanding bonds at a price reflecting a current effective interest rate of 9%. How should this transaction be reflected in the consolidated financial statements for the current year?
  - Increase \$8,600
  - Decrease \$8,600
  - Increase \$200
  - Decrease \$200
- The bonds remain in the balance sheet and are accounted for at a 9% effective rate.
  - The bonds remain in the balance sheet and are accounted for at a 7% effective rate.
  - The bonds are treated as having been retired, with an ordinary loss shown on the consolidated income statement.
  - The bonds are treated as having been retired, with an ordinary gain shown in the consolidated income statement.

**9.6 INTERIM PURCHASE OF INTERCOMPANY BONDS**

In the preceding illustration, the intercompany bonds were initially purchased on December 31, the fiscal year-end of both affiliates. Had the bonds been held during 2015, P Company would have amortized a portion of the premium and S Company would have amortized a part of the discount that was related to the intercompany bonds. Thus, a part of the constructive loss would have been recorded in 2015 by the individual companies. Assuming that P Company amortized \$500 and S Company amortized \$600 during 2015, the original workpaper entries (2) and (3) for constructive losses are modified as follows:

|  |        |        |
|--|--------|--------|
| (2) Loss on Constructive Retirement Bonds    | 10,000 |        |
| Interest Revenue                             |        | 500    |
| Investment in S Company Bonds                |        | 9,500  |
| (3) Loss on Constructive Retirement of Bonds | 12,000 |        |
| Interest Expense                             |        | 600    |
| Discount on Bonds Payable                    |        | 11,400 |

The consolidated income statement will still show a total loss on the constructive retirement of \$22,000. The credits to interest revenue and interest expense add back the portion of the loss that was recorded by the individual companies, but which is reported in total in 2015, the year the bonds were constructively retired. Failure to add back the \$1,100 (\$500 + \$600) to the reported income of the individual companies will result in reporting this portion of the loss twice, as part of the \$22,000 and again as a reduction in interest revenue and as an increase in interest expense, both of which have reduced reported income.

## 9.7 NOTES RECEIVABLE DISCOUNTED

Accounting for the impact of a discounted note receivable on the consolidated financial statements, when a company issues a note to an affiliated company and then discounts the note with an outside company, can be found in the online content at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter).

## 9.8 STOCK DIVIDENDS ISSUED BY A SUBSIDIARY COMPANY

**LO 4** Stock dividends issued by a subsidiary.

**LO 5** Stock dividends vs. cash dividends.

A subsidiary may issue *stock dividends* in the same class of stock that is held by the parent company. The parent company records the receipt of the shares in a memorandum entry only, since a dividend in like stock is not considered income to the recipient. For consolidated purposes, the stock dividend does not alter the investor's proportionate interest in the subsidiary. On the books of the subsidiary, the declaration of a stock dividend is recorded as a transfer from the retained earnings account to one or more paid-in capital accounts. The amount transferred is dependent on whether the dividend is a large or small stock dividend. (Recall that a large stock dividend, one in which the number of shares issued is greater than 20–25% of the outstanding shares, reduces retained earnings by the par value of the stock issued, while a small stock dividend reduces retained earnings by the market value of the stock issued.) Also, stock dividends are assumed to be distributed from the earliest earnings accumulated in the retained earnings balance. Conversely, a cash dividend is considered to be a distribution of the most recent profits (usually current period income).

To illustrate the effects of a stock dividend on the preparation of the consolidated statements workpaper, assume that P Company purchased 4,000 shares of S Company's \$100 par value common stock on January 2, 2015, for \$560,000. At the time of purchase, S Company reported common stock and retained earnings balances of \$500,000 and \$200,000, respectively. If consolidated statements were prepared on January 2, 2015, the investment eliminating entry would be:

|                                   |         |         |
|-----------------------------------|---------|---------|
| Capital Stock—S Company           | 500,000 |         |
| 1/1 Retained Earnings—S Company   | 200,000 |         |
| Investment in S Company           |         | 560,000 |
| Noncontrolling Interest in Equity |         | 140,000 |

Now assume that S Company reports net income of \$50,000 and declares a 30% stock dividend (1,500 shares) on December 31, 2015. S Company would record the dividend as follows, assuming that the company capitalized the par value of the stock issued:

|  |         |         |
|--|---------|---------|
| Stock Dividend Declared (or Retained Earnings) | 150,000 |         |
| Capital Stock (1,500 shares × \$100)           |         | 150,000 |

Note that this entry has no effect on the total stockholders' equity. Only the composition of the account balances changes as shown here:

| Accounts          | <i>S Company's Capital Account Balances</i> |                           |   |
|-------------------|---|---------------------------|---|
|                   | <i>Before the<br/>Stock<br/>Dividend</i>    | <i>Stock<br/>Dividend</i> | <i>After the<br/>Stock<br/>Dividend</i> |
| Capital Stock     | \$500,000                                   | 150,000                   | \$650,000                               |
| Retained Earnings | 250,000*                                    | (150,000)                 | 100,000                                 |
| Totals            | \$750,000                                   | —0—                       | \$750,000                               |

\*\$200,000 + \$50,000

If the dividend had been considered a small stock dividend, the totals in the schedule above would not change. To record a small stock dividend, the retained earnings account is normally reduced by an amount equal to the number of shares to be issued times the fair market value per share; capital stock and other paid-in capital accounts are increased by the same amount.

The only book entry made by P Company in 2015 is the following memorandum entry to record the receipt of the 1,200 shares from S Company, since no cash dividends were declared during the period.

Memorandum entry—Received 1,200 shares (1,500 × .80) of S Company common stock based on the declaration of a 30% stock dividend.

A condensed consolidated statements workpaper for the year ended December 31, 2015, is presented in Illustration 9-9. In the year that the stock dividend is declared, one additional workpaper eliminating entry is made to eliminate the effects of the dividend on the parent’s interest in the capital accounts of the subsidiary. This entry is necessary because the capital stock account has been increased by \$150,000, but the stock dividend declared account has not been closed to retained earnings. In other words, the balance in the capital stock account is the ending balance and needs to be restored to the beginning of year balance before elimination of the investment account.

The workpaper entries in general journal form are as follows:

| <b>Workpaper Entries—Year Stock Dividends Are Declared</b> |  |         |         |
|--|--|---------|---------|
| (1)  | Capital Stock—S Company  | 120,000 |         |
|  | Stock Dividends Declared—S Company                                     |         | 120,000 |
|  | To reverse effects of stock dividend (\$150,000 × .80).                |         |         |
| (2)  | 1/1 Retained Earnings—S Company  | 200,000 |         |
|  | Capital Stock—S Company  | 500,000 |         |
|  | Investment in S Company  |         | 560,000 |
|  | Noncontrolling Interest in Equity                                      |         | 140,000 |
|  | To eliminate investment account and recognize noncontrolling interest. |         |         |

In the closing process the stock dividends declared account is closed to the retained earnings account. In subsequent periods, the two workpaper entries are combined as follows (this is the entry before the reciprocity entry):

|   |         |         |
|---|---------|---------|
| 1/1 Retained Earnings—S Company (\$200,000 – \$150,000)               | 50,000  |         |
| Capital Stock—S Company (\$500,000 + \$150,000)                       | 650,000 |         |
| Investment in S Company   |         | 560,000 |
| Noncontrolling Interest   |         | 140,000 |
| To eliminate investment account and recognize NCI before reciprocity. |         |         |

The result is that the debit to capital stock is increased \$150,000, and a corresponding decrease is made in the debit to the retained earnings balance.

In the consolidated workpapers the entry to establish reciprocity is based on the undistributed income earned by the subsidiary since the date of acquisition. A cash dividend declared by the subsidiary is generally considered to be a distribution of the most recent profits, which, of course, reduces undistributed profits of the subsidiary accumulated after the date the parent obtained control of the subsidiary. Conversely, the source of a stock dividend is the earliest earnings accumulated in the retained earnings balance.

In this illustration the procedures to compute the amount of the entry to establish reciprocity must be modified to recognize that the retained earnings balance at the date of acquisition has been reduced to \$50,000 as a result of the stock dividend. The workpaper entries for the *second* year December 31, 2016, are as follows:

|     |   |        |        |
|-----|---|--------|--------|
| (1) | Investment in S Company                                 | 40,000 |        |
|     | Beginning Retained Earnings—P Company                   |        | 40,000 |
|     | To establish reciprocity as of 1/1/16 (\$50,000 × .80). |        |        |

## Cost Method

## ILLUSTRATION 9-9

80% Owned Subsidiary

## Consolidated Statements Workpaper

Subsidiary Issued

## P Company and Subsidiary

Stock Dividend

## for the Year Ended December 31, 2015

| Income Statement                                      | P<br>Company     | S<br>Company   | Eliminations               |                | Noncontrolling<br>Interest | Consolidated<br>Balances |
|---|------------------|----------------|----------------------------|----------------|----------------------------|--------------------------|
|   |                  |                | Dr.                        | Cr.            |                            |                          |
| Net/Consolidated Income                               | 240,000          | 50,000         |                            |                |                            | 290,000                  |
| Noncontrolling Interest in<br>Income (\$50,000 × .20) |                  |                |                            |                | 10,000                     | (10,000)                 |
| Net Income to Retained Earnings                       | <u>240,000</u>   | <u>50,000</u>  | <u>      </u>              | <u>      </u>  | <u>10,000</u>              | <u>280,000</u>           |
| <b>Retained Earnings Statement</b>                    |                  |                |                            |                |                            |                          |
| 1/1 Retained Earnings                                 |                  |                |                            |                |                            |                          |
| P Company   | 460,000          |                |                            |                |                            | 460,000                  |
| S Company   |                  | 200,000        | (2) 200,000                |                |                            |                          |
| Net Income from above                                 | 240,000          | 50,000         |                            |                | 10,000                     | 280,000                  |
| Dividends Declared S Company—<br>Stock Dividend       |                  | (150,000)      |                            | (1) 120,000    | (30,000)                   |                          |
| 12/31 Retained Earnings<br>to Balance Sheet           | <u>700,000</u>   | <u>100,000</u> | <u>200,000</u>             | <u>120,000</u> | <u>(20,000)</u>            | <u>740,000</u>           |
| <b>Balance Sheet</b>                                  |                  |                |                            |                |                            |                          |
| Investment in S Company                               | 560,000          |                |                            | (2) 560,000    |                            | —0—                      |
| Fixed Assets  | 1,240,000        | 800,000        |                            |                |                            | 2,040,000                |
| Total Assets  | <u>1,800,000</u> | <u>800,000</u> |                            |                |                            | <u>2,040,000</u>         |
| Total Liabilities                                     | 200,000          | 50,000         |                            |                |                            | 250,000                  |
| Capital Stock   |                  |                |                            |                |                            |                          |
| P Company   | 900,000          |                |                            |                |                            | 900,000                  |
| S Company   |                  | 650,000        | (1) 120,000<br>(2) 500,000 |                | 30,000                     |                          |
| Retained Earnings from above                          | 700,000          | 100,000        | 200,000                    | 120,000        | (20,000)                   | 740,000                  |
| 1/1 Noncontrolling Interest<br>in Net Assets          |                  |                |                            | (2) 140,000    | 140,000                    |                          |
| 12/31 Noncontrolling Interest<br>in Net Assets        |                  |                |                            |                | <u>150,000</u>             | <u>150,000</u>           |
| Total Liabilities and Equity                          | <u>1,800,000</u> | <u>800,000</u> | <u>820,000</u>             | <u>820,000</u> |                            | <u>2,040,000</u>         |

(1) To reverse effects of the stock dividend.

(2) To eliminate investment account and create noncontrolling interest account.

|  |                |                  |
|--|----------------|------------------|
| 1/1 Retained earnings balance                              |                | \$100,000        |
| (\$200,000 – \$150,000 + \$50,000)                         |                |                  |
| Retained earnings balance—date of acquisition              | \$200,000      |                  |
| Less: Stock dividend                                       | <u>150,000</u> |                  |
| Adjusted retained earnings balance—<br>date of acquisition |                | 50,000           |
| Increase in retained earnings since date of acquisition    |                | <u>\$ 50,000</u> |
| (2) Beginning Retained Earnings—S Company                  |                | 100,000          |
| Common Stock—S Company                                     |                | 650,000          |
| Investment in S Company (\$560,000 + \$40,000)             |                | 600,000          |
| Noncontrolling Interest in Equity                          |                | 150,000          |
| To eliminate investment account and recognize NCI.         |                |                  |

A portion of the retained earnings section of the December 31, 2016 workpaper is presented here:

| 1/1 Retained Earnings | P<br>Company | S<br>Company | Eliminations |            | Noncontrolling<br>Interest | Consolidated<br>Balances |
|-----------------------|--------------|--------------|--------------|------------|----------------------------|--------------------------|
|                       |              |              | Dr.          | Cr.        |                            |                          |
| P Company             | 700,000      |              |              | (1) 40,000 |                            | 740,000                  |
| S Company             |              | 100,000      | (2) 80,000   |            | 20,000                     |                          |

Observe that these entries make the beginning retained earnings balances for the second year equal to the first year's ending retained earnings balances reported for the noncontrolling interest and the consolidated retained earnings on the December 31, 2015, workpaper (see Illustration 9-9).

The issuance of a stock dividend does not affect the computation of consolidated retained earnings. As proof, the consolidated retained earnings balance as of December 31, 2015, can be computed as follows:

|  |                  |
|--|------------------|
| P Company's retained earnings balance at December 31, 2015   | \$700,000        |
| P Company's share of the change in the subsidiary's adjusted retained earnings since the date of acquisition ( $\$50,000 \times .80$ ) | <u>40,000</u>    |
| Consolidated retained earnings—December 31, 2015   | <u>\$740,000</u> |

## Stock Dividends Issued from Postacquisition Earnings

**LO 6** Subsidiary stock dividends issued from postacquisition earnings.

In the foregoing illustration, the retained earnings transferred to paid-in capital (\$150,000) was less than the retained earnings balance (\$200,000) at the date of acquisition. If the stock dividend had been more than \$200,000, some of the postacquisition earnings of the subsidiary would have been capitalized. For example, assume that S Company made the following entry to record the stock dividend:

|   |         |         |
|---|---------|---------|
| Stock Dividends Declared (or Retained Earnings) | 220,000 |         |
| Capital Stock                                   |         | 220,000 |

The entry capitalized \$200,000 of the retained earnings that existed at the date of acquisition plus \$20,000 of the net income reported after the date of acquisition. The capitalization of the current earnings does not affect consolidated retained earnings, which is still \$740,000 as determined in Illustration 9-9, but it does result in the inclusion of earnings in the consolidated retained earnings balance that have been capitalized and are not available for the payment of dividends. The amount of the subsidiary's postacquisition earnings that have been capitalized and included in the consolidated retained earnings should be disclosed in the consolidated financial statements. Some may contend that the portion of the retained earnings that has been capitalized should be reported as contributed capital in the consolidated balance sheet. In response to this contention, the Committee on Accounting Procedures of the American Institute of Certified Public Accountants made the following comment:

Occasionally, subsidiary companies capitalize earned surplus [retained earnings] arising since acquisition, by means of a stock dividend or otherwise. This does not require a transfer to capital surplus on consolidation, inasmuch as the retained earnings in the consolidated financial statements should reflect the accumulated earnings of the consolidated group not distributed to the shareholders of, or capitalized by, the parent company.<sup>7</sup>

## 9.9 DIVIDENDS FROM PREACQUISITION EARNINGS

**LO 6** Subsidiary stock dividends issued from preacquisition earnings.

The nature of a liquidating dividend (dividend from preacquisition earnings) and the entries to record a liquidating dividend were discussed in Chapter 3. The objective of this section is to illustrate the effects of a liquidating dividend on the consolidated statements workpaper entries.

To illustrate the workpaper adjustment required when a liquidating dividend is involved, assume that P Company acquired an 80% interest in S Company on January 2, 2015, for \$560,000. At the time of purchase, S Company had capital stock and retained earnings in the amounts of \$500,000 and \$200,000, respectively. During the first year that the investment was held, S Company reported net income of \$200,000. On December 31, 2015,

<sup>7</sup> FASB ASC paragraph 810-10-45-9.



the subsidiary declared and paid a cash dividend of \$250,000. In this case, \$50,000 of the dividend is a distribution of earnings accumulated before the controlling interest was obtained in the subsidiary. As discussed in Chapter 3, there is general agreement that a liquidating dividend should be accounted for as a return of part of the original investment rather than income to the parent company.

Recall that the source of a cash dividend is considered to be the most recent earnings. Under the cost method the following entry is made on the books of P Company to recognize that \$200,000 of the dividend is based on the current earnings and \$50,000 is a distribution of preacquisition earnings:

| P Company's Books                                   |         |         |
|---|---------|---------|
| Cash  | 200,000 |         |
| Dividend Income ( $\$200,000 \times .80$ )          |         | 160,000 |
| Investment in S Company ( $\$50,000 \times .80$ )   |         | 40,000  |
| To record receipt of a cash dividend from S Company |         |         |

This entry reduces the investment account balance to \$520,000. In the year of the liquidating dividend, one additional workpaper entry must be made to reverse the effects of the liquidating dividend, since the dividend has been adjusted to the investment account, but the dividends declared are still shown as a separate amount in the trial balance of S Company. Although the consolidated statements workpaper is not presented, the December 31, 2015, eliminating entries are as follows:

|     |   |         |         |
|-----|---|---------|---------|
| (1) | Dividend Income   | 160,000 |         |
|     | Dividends Declared—S Company  |         | 160,000 |
|     | To eliminate intercompany dividends                                 |         |         |
| (2) | Investment in S Company   | 40,000  |         |
|     | Dividends Declared—S Company  |         | 40,000  |
|     | To reverse the liquidating dividend.                                |         |         |
| (3) | Beginning Retained Earnings—S Company                               | 200,000 |         |
|     | Capital Stock—S Company   | 500,000 |         |
|     | Investment in S Company   |         | 560,000 |
|     | Noncontrolling Interest in Equity                                   |         | 140,000 |
|     | To eliminate investment account and create noncontrolling interest. |         |         |

In the workpapers prepared in subsequent years, the amount of the entry made to establish reciprocity is based on the difference between the current year's beginning retained earnings balance and the retained earnings balance at the date of acquisition reduced by the \$50,000 liquidating dividend. The December 31, 2016 (the second year) workpaper entry would be:

|     |  |         |         |
|-----|--|---------|---------|
| (1) | Beginning Retained Earnings—S Company              |         |         |
|     | ( $\$200,000 - 50,000$ )                           | 150,000 |         |
|     | Capital Stock—S Company                            | 500,000 |         |
|     | Investment in S Company                            |         | 520,000 |
|     | Noncontrolling Interest in Equity                  |         | 130,000 |
|     | To eliminate investment account and recognize NCI. |         |         |

No entry is needed to establish reciprocity, because all the earnings of the subsidiary since acquisition (\$200,000) have been distributed, and the parent's share is reported in the retained earnings balance of P Company.

## 9.10 SUBSIDIARY WITH BOTH PREFERRED AND COMMON STOCK OUTSTANDING

A subsidiary company may have both common and preferred stock outstanding. To justify consolidation, the parent must hold a controlling interest in the outstanding voting stock. At the same time, the parent may or may not hold shares of the preferred stock. In either case,

in the preparation of consolidated financial statements, the shares of the preferred stock not held by the parent company are considered part of the noncontrolling interest.

## Determining Equity Interest of Each Class of Stockholders

**Lo 7** Allocating the purchase price between common and preferred stockholders.

The existence of preferred stock creates special problems in the preparation of consolidated financial statements because each class of stockholders has an interest in the net assets of the firm. To determine the equity interest of each class of stockholders on a certain date, it is necessary to allocate the subsidiary's stockholders' equity between the preferred and common stock interests. In doing so, the provisions of the preferred stock issue, in particular the *call price*, sometimes called the *redemption price*, and dividend provisions, must be analyzed and provided for in making the allocation. After the date of acquiring the controlling interest, the operating results of the subsidiary must also be allocated to determine the interest of the two classes of stockholders in the changes in the retained earnings balance. The dividend preference of the preferred stock issue will determine the amounts allocated to each class of stockholders.

The effects that the various rights and priorities granted to the preferred stockholders have on the determination of the book value interests and the claim to earnings are discussed in other accounting texts. The procedures and the steps (indicated numerically) for determining such allocations for some of the more common alternatives are summarized in Illustration 9-10.

Illustration 9-10 does not include the steps to be taken in the allocation of a deficit balance in the retained earnings account or a subsidiary reporting a net loss during an operating period. If the preferred stock is noncumulative, nonparticipating, and has a call price equal to par value, the full deficit in the retained earnings account or net loss is allocated totally to the common stock interest. If the preferred stock is cumulative and nonparticipating, a deficit balance in retained earnings is assigned to the common stock, unless there are dividends in arrears, in which case the amount of the preferred dividends in arrears increases the book value interest of the preferred stockholders and is added to the deficit assigned to the common equity. In the case of a net loss, the current year's dividends on the preferred stock are added to the preferred interest and added to the net loss (which reduces the common interest) to determine the interest of the common stockholders in current operations. In the case of deficit operations, the participating provision can be ignored.

## Allocation of Difference between Cost of Preferred Stock Investment and Book Value Interest Acquired

In the case of a common stock investment, the difference between implied value of the investment and the book value of the interest acquired is allocated to undervalued or overvalued assets and liabilities. However, because holders of cumulative/nonparticipating preferred stock do not have a residual interest in the firm's net assets, the excess paid for a preferred stock interest is generally not related to the market value of the firm's net assets. If the preferred stock is nonconvertible and nonparticipating, the market price is more closely associated with the preferred dividend return related to the market rate of return on investments of similar risk. In essence, the market factors that cause movements in the market value of the preferred stock are similar to the market factors that cause movements in the market value of the firm's bonds. Thus, the difference between the cost of preferred stock and the book value of the interest acquired is similar to a discount or premium on a bond issue. One of the major differences between preferred stock and debt is that a preferred stock issue does not normally have a maturity date.

Because the preferred stock does not normally have a maturity date, the period selected to amortize the difference would be arbitrary. One approach is to recognize the difference as a loss in the consolidated income statement in the year of the purchase.

## ILLUSTRATION 9-10

**Allocation of Retained Earnings Balance and Net Income When Subsidiary Has Both Common and Preferred Stock Outstanding**

|   | <i>Accumulated Retained Earnings Balance</i>   |   | <i>Allocation of Net Income</i>  |  |
|---|--|---|--|--|
|   | <i>Preferred Stock*</i>  | <i>Common Stock</i>                               | <i>Preferred Stock</i>   | <i>Common Stock</i>  |
| Noncumulative/<br>nonparticipating              | 1. Zero.   | 2. Balance in retained earnings account.          | 1. Current year's dividend if one was declared.  | 2. Net income in excess of preferred dividend.   |
| Cumulative/<br>nonparticipating                 | 1. Dividends in arrears.   | 2. Balance after subtracting dividend in arrears. | 1. Current year's dividend whether declared or not.  | 2. Net income in excess of preferred dividend.   |
| Noncumulative/<br>fully participating           | 1. Allocated between preferred and common stock.   |   | 1. Current year's dividend if one was declared.<br><br>3. Remaining net income is allocated between preferred and common stock. <sup>†</sup>     | 2. Current year's dividend if declared on common, but not to exceed the amount to match the percentage on preferred. |
| Cumulative/<br>fully participating <sup>‡</sup> | 1. Dividends in arrears.<br><br>2. Balance after subtracting any dividend in arrears is allocated between preferred and common stock. <sup>†</sup> |   | 1. Current year's dividend whether declared or not.<br><br>3. Remaining net income is allocated between preferred and common stock. <sup>†</sup> | 2. Current year's dividend if declared on common, but not to exceed the amount to match the percentage on preferred. |

\* It is assumed that the call price of the preferred stock is equal to the stock's par value. If the call price is greater, the preferred stock interest in retained earnings is increased by the amount of the call premium and a corresponding reduction is made in the common stock interest.

<sup>†</sup> It is assumed that the allocation is based on the ratio of the par values of each class of stock.

<sup>‡</sup> It is assumed that a common stock dividend is lost if not declared in any one year to match the preference rate on the preferred stock. In other words, before the participation feature is effective, the common stockholders normally receive a dividend equal to the same percentage paid to the preferred stockholders. However, if an equal percentage is not declared on the common stock during the period, it is lost to the common stockholders and will not be paid in subsequent periods. Since the preferred stock is cumulative, a passed dividend on preferred stock is considered in arrears in the determination of dividend payments in future periods. Such a dividend agreement with the preferred stockholders could be detrimental to the interest of the common stockholders. Alternative agreements could be negotiated, and this is only one possibility.

However, in our view, the acquisition of outstanding preferred stock by the consolidated entity reflects a constructive retirement of the stock and should be accounted for as an equity transaction. Thus, the difference between cost and the book value interest acquired (a debit difference) is accounted for as a reduction in consolidated other contributed capital, or if none exists, is recorded as a reduction in consolidated retained earnings. If the book value of the interest acquired is greater than the cost of the preferred stock, the credit difference is carried to other contributed capital.

Most preferred stock agreements contain the cumulative feature and are nonparticipating. For this reason, the preparation of consolidated financial statements when cumulative/nonparticipating preferred stock is outstanding is illustrated in the next section. The reader must recognize, however, that the illustration is only one of many possibilities, since the rights and priorities granted to the preferred stockholders may take numerous forms. When there is preferred stock outstanding, the stock agreement should be carefully reviewed to assess the rights and priorities of each class of stock. Allocations of the stockholders' equity and net income should be made in accordance with the agreement.

## 9.11 CONSOLIDATING A SUBSIDIARY WITH PREFERRED STOCK OUTSTANDING

To illustrate the accounting for a subsidiary and the consolidated statements workpaper procedures to be followed when the subsidiary has both preferred stock and common stock outstanding, the following information concerning the capital accounts of S Company as of January 2, 2015, is assumed:

|   |                    |
|---|--------------------|
| 8%, \$100 par value preferred stock, cumulative, nonparticipating,<br>dividends in arrears for 2014, call price is \$103 with 5,000 shares<br>outstanding | \$ 500,000         |
| Common stock, \$10 par value  | 1,000,000          |
| Other contributed capital—excess on issue of common stock over par  | 305,000            |
| Retained earnings   | 200,000            |
| Total stockholders' equity  | <u>\$2,005,000</u> |

On January 2, 2015, P Company acquired 80% of the outstanding common stock for \$1,160,000 and 30% of the outstanding preferred stock for \$180,000. The entry to record the purchase is:

### P Company's Books

|   |           |           |
|---|-----------|-----------|
| Investment in S Company Preferred Stock | 180,000   |           |
| Investment in S Company Common Stock    | 1,160,000 |           |
| Cash                                    |           | 1,340,000 |

During the year, S Company reported net income of \$200,000 and declared no cash dividends.

The stockholders' equity accounts of S Company must be allocated to determine the book value interest in the net assets of the preferred and common stockholders. The allocation on the date of acquisition would be made as shown in Illustration 9-11.<sup>8</sup>

In this illustration, if the preferred shares were called, a payment of \$111 (\$103 call price + \$8 dividend in arrears) must be made to acquire each share of stock. Accordingly, retained earnings of \$55,000 (5,000 shares outstanding × \$11 per share) is allocated to the preferred stockholders' interest. Thus, on the date of acquisition the preferred stock interest in the net assets (\$555,000) is equal to the call price of \$515,000 plus the \$40,000 dividends in arrears.

## Consolidated Statements Workpaper—2015

Workpaper procedures are similar to those illustrated in earlier sections of this text. The only difference is that an additional workpaper entry must be made to eliminate the preferred stock investment account. The consolidating statements workpaper at December 31, 2015, is contained in Illustration 9-12. The balances are assumed except for the ones previously given. Note that the beginning retained earnings balance of S Company is allocated between the two classes of stock. Making the allocation in the workpaper is necessary because dividends in arrears are not recorded in the accounts of S Company. If P Company uses the cost method, dividends in arrears are not recorded as dividend income. However, if the complete equity method is used, dividends on cumulative preferred stock are recognized as income regardless of whether they are paid. Therefore, in 2015, under the complete equity method, P Company records equity income from the preferred stock investment of \$12,000 (.3 × \$40,000).

<sup>8</sup> Another approach to determine the allocation of equity interest is:

|   |                    |
|---|--------------------|
| Book value of net assets                  | \$2,005,000        |
| Less: Allocated to preferred stock        |                    |
| Par value of preferred stock              | \$500,000          |
| Call premium (5,000 shares × \$3)         | 15,000             |
| Dividends in arrears (5,000 shares × \$8) | <u>40,000</u>      |
| Total allocated to preferred stock        | 555,000            |
| Residual allocated to common stock        | <u>\$1,450,000</u> |

**ILLUSTRATION 9-11****Allocation of Difference between Implied and Book Value—Date of Acquisition—1/2/2015**

## Computation and Allocation of Difference between Implied and Book Value Acquired—Preferred Stock

|   | <i>Parent Share</i> | <i>Noncontrolling Share</i> | <i>Entire Value</i> |
|---|---------------------|-----------------------------|---------------------|
| Purchase price and implied value          | <b>\$180,000</b>    | <b>420,000*</b>             | 600,000             |
| Less: Book value of equity acquired:      |                     |                             |                     |
| \$100 par preferred stock –8%             | (150,000)           | (350,000)                   | <b>(500,000)</b>    |
| Retained Earnings**                       | (16,500)            | (38,500)                    | <b>(55,000)</b>     |
| Difference between implied and book value | 13,500              | 31,500                      | <b>45,000</b>       |
| Reduce Paid-in-Capital—Parent             | <b>(13,500)</b>     |                             |                     |
| Reduce Noncontrolling Interest in Equity* |                     | <b>(31,500)*</b>            |                     |
| Total allocated                           |                     |                             | (45,000)            |
| Balance                                   | <u>0</u>            | <u>0</u>                    | <u>0</u>            |

\* Noncontrolling interest after adjustment = \$420,000 – \$31,500 = \$388,500

\*\* (\$103 call price + \$8 dividends in arrears – \$100 par value) × 5,000 shares = \$11 × 5,000 = \$55,000

## Computation and Allocation of Difference between Implied and Book Value Acquired—Common Stock

|   | <i>Parent Share</i> | <i>Noncontrolling Share</i> | <i>Entire Value</i> |
|---|---------------------|-----------------------------|---------------------|
| Purchase price and implied value          | <b>\$1,160,000</b>  | <b>290,000</b>              | 1,450,000           |
| Less: Book value of equity acquired:      |                     |                             |                     |
| \$10 par common stock                     | (800,000)           | (200,000)                   | <b>(1,000,000)</b>  |
| Other contributed capital—common stock    | (244,000)           | (61,000)                    | <b>(305,000)</b>    |
| Retained earnings*                        | (116,000)           | (29,000)                    | <b>(145,000)</b>    |
| Difference between implied and book value | <u>0</u>            | <u>0</u>                    | <u>0</u>            |

\* \$200,000 – \$55,000 = \$145,000

**Consolidated Statements Workpaper Entries—2015***Cost Method or Partial Equity Method*

|      |  |         |         |
|------|--|---------|---------|
| (1a) | Beginning Retained Earnings—S Company  | 55,000  |         |
|      | Preferred Stock—S Company  | 500,000 |         |
|      | Difference between Implied and Book Value  | 45,000  |         |
|      | Investment in S Company Preferred Stock  |         | 180,000 |
|      | Noncontrolling Interest in Equity  |         | 420,000 |
|      | To eliminate the preferred stock investment account and recognize the noncontrolling interest in equity. |         |         |
| (1b) | Other Contributed Capital—P Company  | 13,500  |         |
|      | Noncontrolling Interest in Equity  | 31,500  |         |
|      | Difference between Implied and Book Value  |         | 45,000  |
|      | To allocate the difference between implied and book values of preferred stock to equity.                 |         |         |

As shown in Illustration 9-11, the cost of the preferred stock acquired at \$180,000 implies a total value for preferred stock of \$180,000/30%, or \$600,000. The difference between the implied value and the book value of \$555,000 is \$45,000. This amount is not allocated to specific assets or liabilities, as in the case of common stock differences, but is accounted for as an equity transaction. Of the \$45,000 difference, 30%, or \$13,500, is attributable to Company P and is charged to Other Contributed Capital of P. The remaining 70%, or \$31,500, serves to reduce the noncontrolling interest in equity. Thus, the net amount of noncontrolling interest implied by the cost of the preferred stock is \$600,000 × 70%, or \$420,000, less the \$31,500 allocation [from entries (1a) and (1b)], or \$388,500.

|     |   |           |           |
|-----|---|-----------|-----------|
| (2) | Beginning Retained Earnings—S Company                               | 145,000   |           |
|     | Common Stock—S Company  | 1,000,000 |           |
|     | Other Contributed Capital—S Company                                 | 305,000   |           |
|     | Investment in S Company Common Stock                                |           | 1,160,000 |
|     | NCI in Equity   |           | 290,000   |
|     | To eliminate the common stock investment account and recognize NCI. |           |           |

**ILLUSTRATION 9-12**

| <b>Cost Method</b>  |                  | <b>Condensed Consolidated Statements Workpaper</b> |                     |                               |                       |                     |
|---|------------------|--|---------------------|-------------------------------|-----------------------|---------------------|
| 80% Owned Subsidiary                                      |                  | <b>P Company and Subsidiary</b>                    |                     |                               |                       |                     |
| Subsidiary Has Preferred                                  |                  | <b>for the Year Ended December 31, 2015</b>        |                     |                               |                       |                     |
| Stock Outstanding   |                  |  |                     |                               |                       |                     |
| <i>Income Statement</i>                                   | <i>P</i>         | <i>S</i>   | <i>Eliminations</i> |                               | <i>Noncontrolling</i> | <i>Consolidated</i> |
|   | <i>Company</i>   | <i>Company</i>                                     | <i>Dr.</i>          | <i>Cr.</i>                    | <i>Interest</i>       | <i>Balances</i>     |
| Net/Consolidated Income                                   | 800,000          | 200,000  |                     |                               |                       | 1,000,000           |
| Noncontrolling Interest in Dividend Income                |                  |  |                     |                               |                       |                     |
| Preferred Stock (in arrears) (\$40,000 × .70)             |                  |  |                     |                               | 28,000                |                     |
| Common Stock [(200,000 – 40,000) × .20]                   |                  |  |                     |                               | 32,000                | (60,000)            |
| Net Income to Retained Earnings                           | <u>800,000</u>   | <u>200,000</u>                                     | <u>—</u>            | <u>—</u>                      | <u>60,000</u>         | <u>940,000</u>      |
| <b>Retained Earnings Statement</b>                        |                  |  |                     |                               |                       |                     |
| 1/1 Retained Earnings                                     |                  |  |                     |                               |                       |                     |
| P Company   | 1,450,000        |  |                     |                               |                       | 1,450,000           |
| S Company   |                  |  |                     |                               |                       |                     |
| Preferred Stock   |                  | 55,000   | (1a) 55,000         |                               |                       |                     |
| Common Stock  |                  | 145,000  | (2) 145,000         |                               |                       |                     |
| Net Income from above                                     | 800,000          | 200,000  |                     |                               | 60,000                | 940,000             |
| Dividends Declared P Company                              | (500,000)        |  |                     |                               |                       | (500,000)           |
| 12/31 Retained Earnings to Balance Sheet                  | <u>1,750,000</u> | <u>400,000</u>                                     | <u>200,000</u>      | <u>—</u>                      | <u>60,000</u>         | <u>1,890,000</u>    |
| <b>Balance Sheet</b>                                      |                  |  |                     |                               |                       |                     |
| Investment in S Company                                   |                  |  |                     |                               |                       |                     |
| Preferred Stock   | 180,000          |  |                     | (1a) 180,000                  |                       | —0—                 |
| Common Stock  | 1,160,000        |  |                     | (2) 1,160,000                 |                       | —0—                 |
| Difference between Implied and Book Value—Preferred Stock |                  |  | (1a) 45,000         | (1b) 45,000                   |                       |                     |
| Other Assets  | 5,410,000        | 2,805,000  |                     |                               |                       | 8,215,000           |
| Total Assets  | <u>6,750,000</u> | <u>2,805,000</u>                                   |                     |                               |                       | <u>8,215,000</u>    |
| Liabilities   | 1,600,000        | 600,000  |                     |                               |                       | 2,200,000           |
| Preferred Stock   |                  |  |                     |                               |                       |                     |
| S Company   |                  | 500,000  | (1a) 500,000        |                               |                       |                     |
| Common Stock  |                  |  |                     |                               |                       |                     |
| P Company   | 3,000,000        |  |                     |                               |                       | 3,000,000           |
| S Company   |                  | 1,000,000  | (2) 1,000,000       |                               |                       |                     |
| Other Contributed Capital                                 |                  |  |                     |                               |                       |                     |
| P Company   | 400,000          |  | (1b) 13,500         |                               |                       | 386,500             |
| S Company   |                  | 305,000  | (2) 305,000         |                               |                       |                     |
| Retained Earnings from above                              | 1,750,000        | 400,000  | 200,000             |                               | 60,000                | 1,890,000           |
| 1/1 Noncontrolling Interest in Net Assets                 |                  |  | (1b) 31,500         | {(1a) 420,000<br>(2) 290,000} | 678,500               |                     |
| 12/31 Noncontrolling Interest in Net Assets               |                  |  |                     |                               | <u>738,500</u>        | <u>738,500</u>      |
| Total Liabilities and Equity                              | <u>6,750,000</u> | <u>2,805,000</u>                                   | <u>2,095,000</u>    | <u>2,095,000</u>              |                       | <u>8,215,000</u>    |

(1a) To eliminate the preferred stock investment account and create noncontrolling interest account.

(1b) To allocate the difference between implied and book value to equity.

(2) To eliminate the common stock investment account and create noncontrolling interest account.

|                               | \$                 | Noncontrolling<br>Percentage | Total            |
|-------------------------------|--------------------|------------------------------|------------------|
| Total stockholders' equity    | \$2,205,000        |                              |                  |
| Allocated to the preferred:   |                    |                              |                  |
| Par value                     | \$500,000          |                              |                  |
| Call premium                  | 15,000             |                              |                  |
| Dividends in arrears          | 80,000             |                              |                  |
| Book value of preferred stock | <u>595,000</u>     | 0.70                         | \$416,500        |
| Book value of common stock    | <u>\$1,610,000</u> | 0.20                         | <u>322,000</u>   |
| Noncontrolling interest—12/31 |                    |                              | <u>\$738,500</u> |

In computing the noncontrolling interest in consolidated net income, S Company's contribution to consolidated income is first allocated between the two classes of stock. Because of the cumulative feature of the preferred stock, \$40,000 of S Company's net income is first allocated to the cumulative preferred stock even though no cash dividends were declared in this period. This of course reduces the amount of income available for distribution to the common stockholders. The residual net income of \$160,000 is allocated to the common stockholders' interest since the preferred stock is nonparticipating. Noncontrolling interest in the consolidated income for 2015 is computed as follows:

|  | <i>Contribution<br/>to Consolidated<br/>Income</i> | <i>Noncontrolling<br/>Percentage</i> | <i>Noncontrolling<br/>Interest</i> |
|--|--|--------------------------------------|------------------------------------|
| Reported net income of S Company               | \$200,000  |                                      |                                    |
| Income allocated to preferred stock            | 40,000   | .70                                  | \$28,000                           |
| Income allocated to common stock               | <u>\$160,000</u>                                   | .20                                  | <u>32,000</u>                      |
| Noncontrolling interest in consolidated income |  |                                      | <u>\$60,000</u>                    |

**LO 8** Determining controlling interest.

Such an allocation is necessary whether or not P Company holds any of the preferred stock.

Note that the allocation of net income is unaffected by dividends in arrears on preferred stock at the beginning of the year. The allocation of net income reflects the increase in the book value interest of each class of stock due to operations of the current period only. Dividends in arrears at the beginning of the year are recognized as an allocation of the beginning retained earnings balance.

Consolidated net income for 2015 and consolidated retained earnings as of December 31, 2015, can be verified as shown in Illustration 9-13.

**Complete Equity Method** The consolidated workpapers assuming that P Company uses the complete equity method are reported in Illustration 9-14. Recall that the Investment in S Company Common Stock account is increased by equity income (\$128,000) and

**ILLUSTRATION 9-13**

**T-Account Approach to Consolidated Net Income and Retained Earnings**

| <b>Controlling Interest in Consolidated Net Income—2015</b> |  |                    |
|---|--|--------------------|
|   | Net income from independent operations of Company            | \$ 800,000         |
|   | <i>P Company's share of S Company's reported income:</i>     | \$ 12,000          |
|   | Allocated to preferred stock interest: $\$40,000 \times .30$ |                    |
|   | Allocated to common stock interest: $\$160,000 \times .80 =$ | <u>128,000</u>     |
|   | Controlling Interest in Consolidated net income              | <u>\$940,000</u>   |
| <b>Consolidated Retained Earnings—December 31, 2015</b>     |  |                    |
|   | P Company's December 31, 2015, retained earnings balance     | 1,750,000          |
|   | Undistributed net income earned since date of acquisition    |                    |
|   | Preferred stock ( $\$40,000 \times .30$ ) =                  | \$ 12,000          |
|   | Common stock ( $\$160,000 \times .80$ ) =                    | <u>128,000</u>     |
|   | Consolidated retained earnings on December 31, 2015          | <u>\$1,890,000</u> |

\* Undistributed net income can be computed as follows when income statements of prior years are not available:

| <i>Retained Earnings Balance</i> | <i>Retained Earnings Allocation</i> |                     |                  |
|----------------------------------|-------------------------------------|---------------------|------------------|
|                                  | <i>Preferred Stock</i>              | <i>Common Stock</i> | <i>Total</i>     |
| End of current year              | \$95,000                            | \$305,000           | \$400,000        |
| Date of acquisition              | <u>55,000</u>                       | <u>145,000</u>      | <u>200,000</u>   |
| Increase in retained earnings    | 40,000                              | 160,000             | <u>\$200,000</u> |
| Percentage interest              | <u>.30</u>                          | <u>.80</u>          |                  |
| Share of undistributed income    | <u>\$12,000</u>                     | <u>\$128,000</u>    | <u>\$140,000</u> |

decreased by dividends received (none were received in 2015). However, equity income on the cumulative preferred stock must still be recognized even though no dividends were declared in 2015. In this case, the equity income in preferred stock (\$12,000) increases the Investment in S Company Preferred Stock account. Therefore, on the consolidated workpapers, this entry must be reversed (see entry (3) in Illustration 9-14).

### Accounting Subsequent to the Year of Acquisition—2016

Now assume that S Company reported net income of \$300,000 in 2016 and paid cash dividends of \$120,000 to the preferred stockholders (\$80,000 for the arrearages of 2014 and 2015 plus \$40,000 for the current year) and \$50,000 to the common stockholders.

**Cost Method: Entries on the Books of P Company—2016** P Company would record receipt of the cash dividends as follows:

|  |        |        |
|--|--------|--------|
| Cash   | 36,000 |        |
| Dividend Income  |        | 24,000 |
| Investment in S Company Preferred Stock  |        | 12,000 |
| To record receipt of dividends on preferred stock investment<br>(\$12,000 represents dividends in arrears at the acquisition date).<br>(\$120,000 × .30 = \$36,000). |        |        |

Note that the distribution of \$40,000 for preferred dividends in arrears at the date of acquisition is a liquidating dividend, and P Company's 30% thereof is accounted for as a reduction in the investment account.

|   |        |        |
|---|--------|--------|
| Cash  | 40,000 |        |
| Dividend Income   |        | 40,000 |
| To record the receipt of dividends on the common<br>stock investment (\$50,000 × .80 = \$40,000). |        |        |

**Complete Equity Method: Entries on the Books of P Company—2016** P Company would record the receipt of the cash dividends as follows:

|   |        |        |
|---|--------|--------|
| Cash  | 36,000 |        |
| Equity Income—S Company Preferred Stock   |        | 12,000 |
| Investment in S Company Preferred Stock   |        |        |
| (dividends in arrears recognized as revenue in 2015)  |        | 12,000 |
| Investment in S Company Preferred Stock   |        |        |
| (dividends in arrears at date of acquisition, liquidating dividend)                           |        | 12,000 |
| To record receipt of dividends on preferred stock investment<br>(\$120,000 × .30 = \$36,000). |        |        |

Note that the distribution of \$40,000 for preferred dividends in arrears at the date of acquisition is a liquidating dividend, and P Company's 30% (or \$12,000) is accounted for as a reduction in the Investment in S Company Preferred Stock account.

|   |         |         |
|---|---------|---------|
| Investment in S Company Common Stock  | 208,000 |         |
| Equity Income in S Company Common Stock   |         | 208,000 |
| To record equity in subsidiary income<br>(\$300,000 S Company income –<br>\$40,000 allocated to preferred stock) × .80. |         |         |

|   |        |        |
|---|--------|--------|
| Cash  | 40,000 |        |
| Investment in S Company Common Stock  |        | 40,000 |
| To record the receipt of dividends on the common<br>stock investment (\$50,000 × .80 = \$40,000). |        |        |



## Complete Equity Method

## ILLUSTRATION 9-14

| 80% Owned Subsidiary                                      |                  | Condensed Consolidated Statements Workpaper |                  |                  |                               |                  |
|---|------------------|---|------------------|------------------|-------------------------------|------------------|
| Subsidiary Has Preferred                                  |                  | P Company and Subsidiary                    |                  |                  |                               |                  |
| Stock Outstanding   |                  | for the Year Ended December 31, 2015        |                  |                  |                               |                  |
|   | P                | S   | Eliminations     |                  | Noncontrolling Consolidated   |                  |
| <i>Income Statement</i>                                   | <i>Company</i>   | <i>Company</i>                              | <i>Dr.</i>       | <i>Cr.</i>       | <i>Interest</i>               | <i>Balances</i>  |
| Income before Equity Income                               | 800,000          | 200,000                                     |                  |                  |                               | 1,000,000        |
| Equity Income in Common Stock                             | 128,000          |   | (4)              | 128,000          |                               |                  |
| Equity Income in Preferred Stock                          | 12,000           |   | (3)              | 12,000           |                               |                  |
| Net/Consolidated Income                                   | <u>940,000</u>   |   |                  |                  |                               |                  |
| Noncontrolling Interest in Income                         |                  |   |                  |                  |                               |                  |
| Preferred Stock (\$40,000 × .70)                          |                  |   |                  |                  | 28,000                        |                  |
| Common Stock  |                  |   |                  |                  |                               |                  |
| [\$200,000 – \$40,000] × .20                              |                  |   |                  |                  | 32,000                        | (60,000)         |
| Net Income to Retained Earnings                           | <u>940,000</u>   | <u>200,000</u>                              | <u>140,000</u>   | <u>—</u>         | <u>60,000</u>                 | <u>940,000</u>   |
| <i>Retained Earnings Statement</i>                        |                  |   |                  |                  |                               |                  |
| 1/1 Retained Earnings                                     |                  |   |                  |                  |                               |                  |
| P Company   | 1,450,000        |   |                  |                  |                               | 1,450,000        |
| S Company   |                  |   |                  |                  |                               |                  |
| Preferred Stock   |                  | 55,000                                      | (1a)             | 55,000           |                               |                  |
| Common Stock  |                  | 145,000                                     | (2)              | 145,000          |                               |                  |
| Net Income from above                                     | 940,000          | 200,000                                     | 140,000          |                  | 60,000                        | 940,000          |
| Dividends Declared P Company                              | (500,000)        |   |                  |                  |                               | (500,000)        |
| 12/31 Retained Earnings to Balance Sheet                  | <u>1,890,000</u> | <u>400,000</u>                              | <u>340,000</u>   | <u>—</u>         | <u>60,000</u>                 | <u>1,890,000</u> |
| <i>Balance Sheet</i>                                      |                  |   |                  |                  |                               |                  |
| Investment in S Company                                   |                  |   |                  |                  |                               |                  |
| Preferred Stock   | 192,000          |   |                  |                  | {(3) 12,000<br>(1a) 180,000   | —0—              |
| Investment in S Company                                   |                  |   |                  |                  |                               |                  |
| Common Stock  | 1,288,000        |   |                  |                  | {(2) 1,160,000<br>(4) 128,000 | —0—              |
| Difference between Implied and Book Value—Preferred Stock |                  |   | (1a)             | 45,000           | (1b)                          | 45,000           |
| Other Assets  | 5,410,000        | 2,805,000                                   |                  |                  |                               | 8,215,000        |
| Total Assets  | <u>6,890,000</u> | <u>2,805,000</u>                            |                  |                  |                               | <u>8,215,000</u> |
| Liabilities   | 1,600,000        | 600,000                                     |                  |                  |                               | 2,200,000        |
| Preferred Stock   |                  |   |                  |                  |                               |                  |
| S Company   |                  | 500,000                                     | (1a)             | 500,000          |                               |                  |
| Common Stock  |                  |   |                  |                  |                               |                  |
| P Company   | 3,000,000        |   |                  |                  |                               | 3,000,000        |
| S Company   |                  | 1,000,000                                   | (2)              | 1,000,000        |                               |                  |
| Other Contributed Capital                                 |                  |   |                  |                  |                               |                  |
| P Company   | 400,000          |   | (1b)             | 13,500           |                               | 386,500          |
| S Company   |                  | 305,000                                     | (2)              | 305,000          |                               |                  |
| Retained Earnings from above                              | 1,890,000        | 400,000                                     | 340,000          |                  |                               | 60,000           |
| 1/1 Noncontrolling Interest in Net Assets                 |                  |   | (1b)             | 31,500           | {(1a) 420,000<br>(2) 290,000  | 678,500          |
| 12/31 Noncontrolling Interest in Net Assets               |                  |   |                  |                  |                               | <u>738,500</u>   |
| Total Liabilities and Equity                              | <u>6,890,000</u> | <u>2,805,000</u>                            | <u>2,235,000</u> | <u>2,235,000</u> |                               | <u>8,215,000</u> |

(1a) To eliminate the preferred stock investment account and create noncontrolling interest account.

(1b) To allocate the difference between implied and book value to equity.

(2) To eliminate the common stock investment account and create noncontrolling interest account.

(3) To eliminate equity income in preferred stock.

(4) To eliminate equity income in common stock.

## Consolidated Statements Workpaper—2016

Consolidated statements workpapers for December 31, 2016 are presented in Illustration 9-15, using the cost method and in Illustration 9-16 assuming the complete equity method. To facilitate making the eliminating entries, the beginning retained earnings balance of \$400,000 of S Company is allocated between the two classes of stock as follows:

|  |               |                  |
|--|---------------|------------------|
| Retained earnings balance—1/1  |               | \$400,000        |
| Allocated to preferred stock:  |               |                  |
| Undistributed income assigned to preferred stock interest—2014 and 2015— $\$40,000 \times 2$ years = | \$80,000      |                  |
| Call premium (\$3/share)   | <u>15,000</u> | 95,000           |
| Residual assigned to common stock  |               | <u>\$305,000</u> |

## Consolidated Statements Workpaper Entries—2016

**Cost Method** The December 31, 2016, workpaper elimination entries in journal form (Illustration 9-15) are as follows:

|      |  |           |           |
|------|--|-----------|-----------|
| (1)  | Investment in S Company Preferred Stock  | 12,000    |           |
|      | Investment in S Company Common Stock   | 128,000   |           |
|      | Beginning Retained Earnings—P Company  |           | 140,000   |
|      | To establish reciprocity/convert to equity as of 1/1/16.   |           |           |
|      | $(\$95,000 - \$55,000) \times .3 = \$12,000$   |           |           |
|      | $(\$305,000 - \$145,000) \times .80 = \$128,000$   |           |           |
| (2)  | Dividend Income  | 64,000    |           |
|      | Dividends Declared—S Company (Preferred)   |           | 24,000    |
|      | Dividends Declared—S Company (Common)  |           | 40,000    |
|      | To eliminate intercompany dividends.   |           |           |
| (3)  | Investment in S Company Preferred Stock  | 12,000    |           |
|      | Dividends Declared—S Company ( $\$40,000 \times .3$ )  |           | 12,000    |
|      | To reverse the liquidating dividend (dividends in arrears at the date of acquisition).                   |           |           |
| (4a) | Beginning Retained Earnings—S Company  | 95,000    |           |
|      | Preferred Stock—S Company  | 500,000   |           |
|      | Difference between Implied and Book Value  | 45,000    |           |
|      | Investment in S Company Preferred Stock  |           | 192,000   |
|      | Noncontrolling Interest in Equity  |           | 448,000   |
|      | To eliminate the preferred stock investment account and recognize the noncontrolling interest in equity. |           |           |
| (4b) | Other Contributed Capital—P Company  | 13,500    |           |
|      | Noncontrolling Interest in Equity  | 31,500    |           |
|      | Difference between Implied and Book Value  |           | 45,000    |
|      | To allocate the difference between implied and book values of preferred stock to equity.                 |           |           |
| (5)  | Beginning Retained Earnings—S Company  | 305,000   |           |
|      | Common Stock—S Company   | 1,000,000 |           |
|      | Other Contributed Capital—S Company  | 305,000   |           |
|      | Investment in S Company Common Stock   |           | 1,288,000 |
|      | NCI in Equity  |           | 322,000   |
|      | To eliminate common stock investment account and recognize NCI.  |           |           |

At the end of the year, there are no dividends in arrears on the preferred stock. This means that all income allocated to the preferred stock interest since the date of acquisition has been distributed. Thus, at the end of the period, \$15,000 of the ending retained earnings balance is allocated to the preferred stock for the call premium. The residual balance of \$515,000 is allocated to the common stock interest.

## Cost Method

## ILLUSTRATION 9-15

| 80% Owned Subsidiary                                       |                  | Consolidated Statements Workpaper    |                          |                             |                             |                  |
|--|------------------|--------------------------------------|--------------------------|-----------------------------|-----------------------------|------------------|
| Subsidiary Has Preferred                                   |                  | P Company and Subsidiary             |                          |                             |                             |                  |
| Stock Outstanding  |                  | for the Year Ended December 31, 2016 |                          |                             |                             |                  |
| Income Statement   | P                | S                                    | Eliminations             |                             | Noncontrolling Consolidated |                  |
|  | Company          | Company                              | Dr.                      | Cr.                         | Interest                    | Balances         |
| Net/Income before  |                  |                                      |                          |                             |                             |                  |
| Dividend Income  | 636,000          | 300,000                              |                          |                             |                             | 936,000          |
| Dividend Income (\$24,000 preferred + \$40,000 common)     | 64,000           |                                      | (2)                      | 64,000                      |                             | <u>—0—</u>       |
| Net/Consolidated Income                                    | <u>700,000</u>   | <u>300,000</u>                       |                          |                             |                             | 936,000          |
| Noncontrolling Interest in Income                          |                  |                                      |                          |                             |                             |                  |
| Preferred Stock (\$40,000 × .70)                           |                  |                                      |                          |                             | 28,000                      |                  |
| Common Stock (\$260,000 × .20)                             |                  |                                      |                          |                             | 52,000                      | (80,000)         |
| Net Income to Retained Earnings                            | <u>700,000</u>   | <u>300,000</u>                       | <u>64,000</u>            | <u>—</u>                    | <u>80,000</u>               | <u>856,000</u>   |
| <i>Retained Earnings Statement</i>                         |                  |                                      |                          |                             |                             |                  |
| 1/1 Retained Earnings                                      |                  |                                      |                          |                             |                             |                  |
| P Company  | 1,750,000        |                                      |                          | (1) 140,000                 |                             | 1,890,000        |
| S Company  |                  |                                      |                          |                             |                             |                  |
| Preferred Stock  |                  | 95,000                               | (4a) 95,000              |                             |                             |                  |
| Common Stock   |                  | 305,000                              | (5) 305,000              |                             |                             |                  |
| Net Income from above                                      | 700,000          | 300,000                              | 64,000                   |                             | 80,000                      | 856,000          |
| Dividends Declared   |                  |                                      |                          |                             |                             |                  |
| P Company  | (500,000)        |                                      |                          |                             |                             | (500,000)        |
| S Company  |                  |                                      |                          | (2) 24,000                  |                             |                  |
| Preferred Stock  |                  | (120,000)                            |                          | (3) 12,000                  | (84,000)                    |                  |
| Common Stock   |                  | (50,000)                             |                          | (2) 40,000                  | (10,000)                    |                  |
| 12/31 Retained Earnings to Balance Sheet                   | <u>1,950,000</u> | <u>530,000</u>                       | <u>464,000</u>           | <u>216,000</u>              | <u>(14,000)</u>             | <u>2,246,000</u> |
| <i>Balance Sheet</i>                                       |                  |                                      |                          |                             |                             |                  |
| Investment in S Company                                    |                  |                                      |                          |                             |                             |                  |
| Preferred Stock (\$180,000 – \$12,000)                     | 168,000          |                                      | (1) 12,000<br>(3) 12,000 | (4a) 192,000                |                             | <u>—0—</u>       |
| Difference between Implied and Book Value—Preferred Stock, |                  |                                      | (4a) 45,000              | (4b) 45,000                 |                             |                  |
| Investment in S Company                                    |                  |                                      |                          |                             |                             |                  |
| Common Stock   | 1,160,000        |                                      | (1) 128,000              | (5) 1,288,000               |                             | <u>—0—</u>       |
| Other Assets   | <u>5,322,000</u> | <u>2,785,000</u>                     |                          |                             |                             | 8,107,000        |
| Total Assets   | <u>6,650,000</u> | <u>2,785,000</u>                     |                          |                             |                             | <u>8,107,000</u> |
| Liabilities  | 1,300,000        | 450,000                              |                          |                             |                             | <u>1,750,000</u> |
| Preferred Stock  |                  |                                      |                          |                             |                             |                  |
| S Company  |                  | 500,000                              | (4a) 500,000             |                             |                             |                  |
| Common Stock   |                  |                                      |                          |                             |                             |                  |
| P Company  | 3,000,000        |                                      |                          |                             |                             | 3,000,000        |
| S Company  |                  | 1,000,000                            | (5) 1,000,000            |                             |                             |                  |
| Other Contributed Capital                                  |                  |                                      |                          |                             |                             |                  |
| P Company  | 400,000          |                                      | (4b) 13,500              |                             |                             | 386,500          |
| S Company  |                  | 305,000                              | (5) 305,000              |                             |                             |                  |
| Retained Earnings from above                               | 1,950,000        | 530,000                              | 464,000                  | 216,000                     | (14,000)                    | 2,246,000        |
| 1/1 Noncontrolling Interest in Net Assets                  |                  |                                      | (4b) 31,500              | (4a) 448,000<br>(5) 322,000 | 738,500                     |                  |
| 12/31 Noncontrolling Interest in Net Assets                |                  |                                      |                          |                             | <u>724,500</u>              | <u>724,500</u>   |
| Total Liabilities and Equity                               | <u>6,650,000</u> | <u>2,785,000</u>                     | <u>2,511,000</u>         | <u>2,511,000</u>            |                             | <u>8,107,000</u> |

(1) To establish reciprocity (convert to equity) as of 1/1/16.

(2) To eliminate intercompany dividends.

(3) To reverse liquidating dividend.

(4a) To eliminate preferred stock investment account and create noncontrolling interest account.

(4b) To allocate the difference between implied and book value to equity.

(5) To eliminate common stock investment account and create noncontrolling interest account.

(\$290,000 + (\$305,000 – \$145,000) × .20 = \$322,000).

| Complete Equity Method                                    |                  | ILLUSTRATION 9-16                    |                  |                  |                         |                       |
|---|------------------|--------------------------------------|------------------|------------------|-------------------------|-----------------------|
| 80% Owned Subsidiary                                      |                  | Consolidated Statements Worksheet    |                  |                  |                         |                       |
| Subsidiary Has Preferred                                  |                  | P Company and Subsidiary             |                  |                  |                         |                       |
| Stock Outstanding   |                  | for the Year Ended December 31, 2016 |                  |                  |                         |                       |
| Income Statement  | P                | S                                    | Eliminations     |                  | Noncontrolling Interest | Consolidated Balances |
|   | Company          | Company                              | Dr.              | Cr.              |                         |                       |
| Net/Income before   |                  |                                      |                  |                  |                         |                       |
| Dividend Income   | 636,000          | 300,000                              |                  |                  |                         | 936,000               |
| Equity Income in S Company                                |                  |                                      |                  |                  |                         |                       |
| Common Stock  | 208,000          |                                      | (3)              | 208,000          |                         |                       |
| Equity Income in S Company                                |                  |                                      |                  |                  |                         |                       |
| Preferred Stock   | <u>12,000</u>    |                                      | (1)              | 12,000           |                         | <u>—0—</u>            |
| Net/Consolidated Income                                   | 856,000          | 300,000                              |                  |                  |                         | 936,000               |
| Noncontrolling Interest in Income                         |                  |                                      |                  |                  |                         |                       |
| Preferred Stock (\$40,000 × .70)                          |                  |                                      |                  |                  | 28,000                  |                       |
| Common Stock (\$260,000 × .20)                            |                  |                                      |                  |                  | <u>52,000</u>           | <u>(80,000)</u>       |
| Net Income to Retained Earnings                           | <u>856,000</u>   | <u>300,000</u>                       | <u>220,000</u>   | <u>—</u>         | <u>80,000</u>           | <u>856,000</u>        |
| <b>Retained Earnings Statement</b>                        |                  |                                      |                  |                  |                         |                       |
| 1/1 Retained Earnings                                     |                  |                                      |                  |                  |                         |                       |
| P Company   | 1,890,000        |                                      |                  |                  |                         | 1,890,000             |
| S Company   |                  |                                      |                  |                  |                         |                       |
| Preferred Stock   |                  | 95,000                               | (2a)             | 95,000           |                         |                       |
| Common Stock  |                  | 305,000                              | (4)              | 305,000          |                         |                       |
| Net Income from above                                     | 856,000          | 300,000                              |                  | 220,000          | 80,000                  | 856,000               |
| Dividends Declared  |                  |                                      |                  |                  |                         |                       |
| P Company   | (500,000)        |                                      |                  |                  |                         | (500,000)             |
| S Company   |                  |                                      |                  |                  |                         |                       |
| Preferred Stock   |                  | (120,000)                            |                  | (1)              | 36,000                  | (84,000)              |
| Common Stock  |                  | (50,000)                             |                  | (3)              | 40,000                  | (10,000)              |
| 12/31 Retained Earnings                                   |                  |                                      |                  |                  |                         |                       |
| to Balance Sheet  | <u>2,246,000</u> | <u>530,000</u>                       | <u>620,000</u>   | <u>76,000</u>    | <u>(14,000)</u>         | <u>2,246,000</u>      |
| <b>Balance Sheet</b>                                      |                  |                                      |                  |                  |                         |                       |
| Investment in S Company                                   |                  |                                      |                  |                  |                         |                       |
| Preferred Stock (\$192,000 – \$12,000 – \$12,000)         | 168,000          |                                      | (1)              | 12,000           | (2a) 192,000            | <u>—0—</u>            |
| Difference between implied and book value—Preferred stock |                  |                                      | (2a)             | 45,000           | (2b) 45,000             |                       |
| Investment in S Company                                   |                  |                                      |                  |                  | { (3) 168,000           |                       |
| Common Stock  | 1,456,000        |                                      | (1)              | 12,000           | { (4) 1,288,000         | <u>—0—</u>            |
| Other Assets  | <u>5,322,000</u> | 2,785,000                            |                  |                  |                         | <u>8,107,000</u>      |
| Total Assets  | <u>6,946,000</u> | <u>2,785,000</u>                     |                  |                  |                         | <u>8,107,000</u>      |
| Liabilities   | 1,300,000        | 450,000                              |                  |                  |                         | 1,750,000             |
| Preferred Stock   |                  |                                      |                  |                  |                         |                       |
| S Company   |                  | 500,000                              | (2a)             | 500,000          |                         |                       |
| Common Stock  |                  |                                      |                  |                  |                         |                       |
| P Company   | 3,000,000        |                                      |                  |                  |                         | 3,000,000             |
| S Company   |                  | 1,000,000                            | (4)              | 1,000,000        |                         |                       |
| Other Contributed Capital                                 |                  |                                      |                  |                  |                         |                       |
| P Company   | 400,000          |                                      | (2b)             | 13,500           |                         | 386,500               |
| S Company   |                  | 305,000                              | (4)              | 305,000          |                         |                       |
| Retained Earnings from above                              | 2,246,000        | 530,000                              |                  | 620,000          | 76,000                  | (14,000)              |
| 1/1 Noncontrolling Interest in Net Assets                 |                  |                                      | (2b)             | 31,500           | { (2a) 448,000          | 738,500               |
|   |                  |                                      |                  |                  | { (4) 322,000           |                       |
| 12/31 Noncontrolling Interest in Net Assets               |                  |                                      |                  |                  |                         | <u>724,500</u>        |
| Total Liabilities and Equity                              | <u>6,946,000</u> | <u>2,785,000</u>                     | <u>2,539,000</u> | <u>2,539,000</u> |                         | <u>8,107,000</u>      |

(1) To eliminate intercompany dividends of \$36,000 (30% of \$120,000), of which \$12,000 represents a liquidating dividend (dividends in arrears on the date of acquisition of the preferred stock), \$12,000 a reversal of the prior year's equity income previously recognized, and \$12,000 of current year's dividends.

(2a) To eliminate preferred stock investment account and create noncontrolling interest account.

(2b) To eliminate the difference between implied and book value to equity.

(3) To eliminate intercompany income and dividends.

(4) To eliminate common stock investment account and create noncontrolling interest account.  $(\$290,000 + (\$305,000 - \$145,000) \times .20) = \$322,000$ .

Consolidated net income and retained earnings for the year ended December 31, 2016, using the t-account approach, are computed as follows:

**Controlling Interest in Consolidated Net Income**

|  |   |                  |
|--|---|------------------|
|  | Internally generated income of P Company<br>(\$700,000 – \$64,000 dividends)  | \$636,000        |
|  | Other needed adjustments (see Chapters 5 and 6)<br>Percentage of subsidiary adjusted income (%) × (\$ subsidiary income): |                  |
|  | Assigned to preferred stock \$40,000 × .30 =  | 12,000           |
|  | Assigned to common stock \$260,000 × .80 =  | 208,000          |
|  | <b>Controlling interest in income</b>   | <b>\$856,000</b> |

**Consolidated Retained Earnings** P Company's interest in the undistributed net income at the end of 2016 is computed as follows:

| <i>Retained Earnings—S Company</i> | <i>Preferred<br/>Stock</i> | <i>Common<br/>Stock</i> | <i>Total</i>     |
|------------------------------------|----------------------------|-------------------------|------------------|
| End of current year                | \$15,000                   | \$515,000               | \$530,000        |
| Date of acquisition                | 15,000*                    | 145,000                 | 160,000*         |
| Undistributed income               | —0—                        | 370,000                 | \$370,000        |
| Percentage interest                | .30                        | .80                     |                  |
| Share of undistributed income      | <u>\$—0—</u>               | <u>\$296,000</u>        | <u>\$296,000</u> |

\* Dividends in arrears of \$40,000 were paid and accounted for as a liquidating dividend.

**Consolidated Retained Earnings**

|  |                    |
|--|--------------------|
| P Company's ending retained earnings balance   | \$1,950,000        |
| P Company's share of undistributed income of S Company<br>earned since date of acquisition |                    |
| Preferred stock  | —0—                |
| Common stock   | 296,000            |
| Consolidated retained earnings, December 31, 2016  | <u>\$2,246,000</u> |

The entry to establish reciprocity/convert to equity in the December 31, 2017, consolidated statements workpaper is:

|                                       |         |         |
|---------------------------------------|---------|---------|
| Investment in S Company Common Stock  | 296,000 |         |
| Beginning Retained Earnings—P Company |         | 296,000 |

A reciprocity entry is not needed for the preferred stock interest because there is no undistributed income relating to the preferred stock at the end of 2016 (and, as usual, no reciprocity entry is needed under the partial or complete equity methods).

**Complete Equity Method** The December 31, 2016, workpaper elimination entries in journal form (Illustration 9-16) are as follows:

|      |   |         |         |
|------|---|---------|---------|
| (1)  | Investment in S Company Preferred Stock<br>(dividends in arrears recognized in prior year)  | 12,000  |         |
|      | Investment in "S Company Preferred Stock"<br>(dividends in arrears on date of acquisition)  | 12,000  |         |
|      | Equity Income—S Company Preferred Stock<br>(current period dividends)   | 12,000  |         |
|      | Dividends Declared—S Company (Preferred)<br>To eliminate intercompany dividends of \$36,000 (30% of \$120,000),<br>of which \$12,000 represents a liquidating dividend (dividends in arrears<br>on the date of acquisition on the preferred stock), \$12,000 a reversal of<br>the prior year's equity income previously recognized, and \$12,000<br>current year's dividends. |         | 36,000  |
| (2a) | Beginning Retained Earnings—S Company   | 95,000  |         |
|      | Preferred Stock—S Company   | 500,000 |         |
|      | Difference between Implied and Book Value   | 45,000  |         |
|      | Investment in S Company Preferred Stock   |         | 192,000 |
|      | Noncontrolling Interest in Equity<br>To eliminate the preferred stock investment account and recognize<br>the noncontrolling interest in equity.  |         | 448,000 |

|      |  |           |           |
|------|--|-----------|-----------|
| (2b) | Other Contributed Capital—P Company  | 13,500    |           |
|      | Noncontrolling Interest in Equity  | 31,500    |           |
|      | Difference between Implied and Book Value  |           | 45,000    |
|      | To allocate the difference between implied and book values of preferred stock to equity. |           |           |
| (3)  | Equity Income in S Company Common Stock  | 208,000   |           |
|      | Dividends Declared—S Company Common Stock  |           | 40,000    |
|      | Investment in S Company Common Stock   |           | 168,000   |
|      | To eliminate intercompany income and dividends.  |           |           |
| (4)  | Beginning Retained Earnings—S Company  | 305,000   |           |
|      | Common Stock—S Company   | 1,000,000 |           |
|      | Other Contributed Capital—S Company  | 305,000   |           |
|      | Investment in S Company Common Stock   |           | 1,288,000 |
|      | NCI in Equity  |           | 322,000   |
|      | To eliminate common stock investment account and recognize NCI.                          |           |           |

## SUMMARY

- 1 Describe the term “constructive retirement of debt.” An affiliate company may purchase bonds issued by another affiliate directly from the issuing company or from outsiders after the original issue. Because the bonds are held within the affiliated group, they are viewed as being **constructively retired** in the consolidated financial statements. The bonds, however, remain outstanding legally from the perspective of the issuing company.
- 2 Describe how the gain or loss on constructive retirement of intercompany bond holdings is allocated between the purchasing and issuing companies. Although the gain or loss may be allocated entirely to the issuing company, entirely to the purchasing company, or entirely to the parent company, the preferred method allocates it between the purchasing and issuing companies, thus allocating it between the controlling and noncontrolling interests. This method recognizes that a discount or premium is often associated with both the issuance and purchase of the bonds on the open market. The gain or loss is recognized over the life of the bonds as each company amortizes the related discount or premium to interest expense and interest revenue.
- 3 Explain the impact on the consolidated financial statements when a company issues a note to an affiliated company, which then discounts the note with an outside company. A receivable held by one of the affiliated companies should be reported in the consolidated balance sheet only if the note is due from an outside party. A contingent liability should be disclosed if a note has been discounted with an outside party and the endorsement was with recourse.
- 4 Determine the effect on the consolidated financial statements when a subsidiary issues a stock dividend. The parent company records the receipt of the shares in a memorandum entry only, since a dividend in like stock is not considered income to the recipient. For consolidated purposes, the stock dividend does not alter the investor’s proportionate interest in the subsidiary. Although the composition of the subsidiary’s stockholders’ equity accounts is changed, neither the total stockholders’ equity nor the noncontrolling interest is altered.
- 5 Understand the difference in how stock dividends and cash dividends issued by a subsidiary company affect the consolidated financial statements. A cash dividend declared by the subsidiary is generally considered to be a distribution of the most recent profits, which reduces undistributed profits of the subsidiary accumulated after the date the parent obtained control of the subsidiary. Conversely, the source of a stock dividend is the earliest earnings accumulated in the retained earnings balance. Under the cost method, the amount of the entry to establish reciprocity must be modified to recognize that the retained earnings balance at the date of acquisition has been reduced as a result of the stock dividend.
- 6 Determine the impact on the investment account when a subsidiary issues a stock dividend from preacquisition earnings and from postacquisition earnings. The amount of the subsidiary’s postacquisition earnings that have been capitalized and included in the consolidated retained earnings should be disclosed in the consolidated financial statements, but the parent’s investment account is not affected. Stock dividends from preacquisition earnings do not affect the investment account or the computation of consolidated retained earnings.
- 7 Explain how the purchase price is allocated when the subsidiary has both common and preferred stock outstanding. In the preparation of consolidated financial statements, the shares of the preferred stock not held by the parent company are considered part of the noncontrolling interest. To determine the equity interest of each class of stockholders on a certain date, it is necessary to allocate the subsidiary’s stockholders’ equity between the preferred and common stock interests, referring to the provisions of the preferred stock issue and analyzing dividend provisions.
- 8 Determine the controlling interest in consolidated income when the parent company owns both common and preferred stock of the subsidiary. The controlling interest in income includes the internally generated income of the parent plus or minus other needed adjustments discussed in previous chapters plus the parent’s share of the subsidiary’s adjusted income. The parent’s share of the subsidiary’s income includes an amount assigned for its ownership of the subsidiary’s common stock plus an amount assigned for its ownership of the subsidiary’s preferred stock.

## TEST YOUR KNOWLEDGE SOLUTIONS

9.1 1. d. 2. d 3. c

## QUESTIONS

- LO 1** 1. Define “constructive retirement of debt.” How is the total constructive gain or loss computed? **LO 5**
- LO 2** 2. The gain or loss on the constructive retirement of debt is recognized subsequently by the individual companies. Explain. **LO 6**
- LO 2** 3. Allocating the gain or loss on constructive bond retirement between the purchasing and issuing companies is preferred conceptually. Describe how this allocation would be made. **LO 4**
- LO 2** 4. Give the primary argument(s) in favor of assigning the *total* gain or loss on constructive bond retirement to the company that issued the bonds. **LO 7**
- LO 2** 5. Under the allocation method followed in this text, how is the noncontrolling interest in consolidated income affected by intercompany bondholdings? **LO 7**
- LO 2** 6. Investor Company purchased 70% of the \$500,000 par value outstanding bonds of Investee Company, a 70% owned subsidiary. The bonds cost \$338,000 and had a carrying value of \$360,000 on the date of purchase. **LO 8**
- a. What portion of the gain or loss resulting from the constructive bond retirement should be allocated to Investor Company?
- b. What portion of the constructive gain or loss should be allocated to Investee Company?
- LO 3** 7. An outside party issued a note to Affiliate X, who then sold the note to Affiliate Y. Y discounted the note at an unaffiliated bank, endorsing it with recourse. Which party is primarily liable and which party is contingently liable for the note?
- LO 5** 8. Cash dividends are viewed as a distribution of the most recent earnings. How are stock dividends viewed? **LO 5**
9. Explain how the reciprocity calculation is modified in periods after the declaration of a stock dividend for firms using the cost method. **LO 5**
10. What journal entry, if any, would the parent company make to record the receipt of a stock dividend? **LO 6**
11. What effect does a stock dividend have on the consolidated statements workpaper in the year of declaration? In subsequent periods? **LO 4**
12. How does the existence of preferred stock affect the calculation of noncontrolling interest? **LO 7**
13. Explain how to account for the difference between implied and book value interest of an investment in preferred stock of a subsidiary. **LO 7**
14. What effect would cumulative preferred stock have on the allocation of a net loss to the common stockholders? **LO 8**

**Business Ethics**

The company that you work for is a subsidiary of a larger company. At the beginning of each year, the subsidiary prepares a budget for the year that includes a forecast of revenues for the coming year. The subsidiary sells a significant amount of inventory to the parent to be used in the manufacture of another product. The subsidiary’s revenues for the current year are short of the budgeted amount. An error in the books has misclassified an intercompany sale as an ordinary sale. The manager of the subsidiary asks you not to fix the error until after the books are closed.

What is your responsibility? What action, if any, should you take? Why?

## ANALYZING FINANCIAL STATEMENTS

**AFS9-1 Off-Balance Sheet Debt Related to Equity Investments**

Goodman Group is an Australian company reporting under a form of IFRS acceptable in Australia. Under IFRS, associate companies are those entities over whose financial and operating policies the consolidated entity exercises significant influence but not control (under U.S. GAAP, these are referred to as “equity-method investments”). Joint ventures, or entities that are jointly controlled by the consolidated entity and another entity, are also accounted for using the equity method under both U.S. GAAP and IFRS.

The June 30, 2010, balance sheet for Goodman follows:

| <b>Balance Sheet</b>                |                       |                       |
|-------------------------------------|-----------------------|-----------------------|
| <i>\$ millions</i>                  | <i>6/30/2010</i>      | <i>6/30/2009</i>      |
| Cash                                | 474.8                 | 216.7                 |
| Receivables                         | 1,989.2               | 2,461.4               |
| Investments                         | —                     | 182.6                 |
| Other current assets                | 56.5                  | 31.5                  |
| Total current assets                | <u>2,520.5</u>        | <u>2,892.2</u>        |
| Investment properties               | 2,500.2               | 2,870.7               |
| Other non-current                   | 558.4                 | 458.1                 |
| Equity investments                  | 2,071.4               | 2,327.4               |
| Total non-current assets            | <u>5,130.0</u>        | <u>5,656.2</u>        |
| <b>Total Assets</b>                 | <u><b>7,650.5</b></u> | <u><b>8,548.4</b></u> |
| Payables                            | 124.7                 | 204.9                 |
| Provisions                          | 124.8                 | 11.6                  |
| Current maturities of debt          | 84.1                  | 975.4                 |
| Other current liabilities           | 4.8                   | 18.2                  |
| Total current liabilities           | <u>338.4</u>          | <u>1,210.1</u>        |
| Long-term debt                      | 2,193.3               | 3,254.2               |
| Other long-term                     | 228.8                 | 268.4                 |
| Total non-current liabilities       | <u>2,422.1</u>        | <u>3,522.6</u>        |
| <b>Total Liabilities</b>            | <u><b>2,760.5</b></u> | <u><b>4,732.7</b></u> |
| Capital issued                      | 4,459.8               | 3,789.8               |
| Retained earnings                   | (320.3)               | (212.6)               |
| Noncontrolling interest             | 750.5                 | 318.8                 |
| Total stockholders' equity          | <u>4,890.0</u>        | <u>3,896.0</u>        |
| <b>Total Liabilities and Equity</b> | <u><b>7,650.5</b></u> | <u><b>8,628.7</b></u> |

The equity investments (for instance, \$2,071.4 for 2010) include both investments in joint ventures and investments in associate companies. Information on these affiliated company investments follows:

| <b>Affiliated Companies (\$mil)</b>                         | <i>Year</i> | <i>Revenue</i> | <i>Assets</i> | <i>Liabilities</i> | <i>Equity</i> |
|---|-------------|----------------|---------------|--------------------|---------------|
| Joint Ventures<br>(100% of the companies)                   | 2010        | 34.2           | 1023.8        | 727.0              | 296.8         |
|   | 2009        | 24.1           | 667.6         | 509.1              | 158.5         |
| Associate Companies<br>(100% of the companies)              | 2010        | 778.8          | 11,797.3      | 6,118.3            | 5,679.0       |
|   | 2009        | 1,017.6        | 13,379.0      | 6,900.7            | 6,478.3       |
| Joint Ventures (using the<br>% of the companies owned)      | 2010        | 8.0            | 294.3         | 199.2              | 95.1          |
|   | 2009        | 9.6            | 133.7         | 75.4               | 58.3          |
| Associate Companies (using<br>the % of the companies owned) | 2010        | 285.5          | 4,044.7       | 2,068.4            | 1,976.3       |
|   | 2009        | 357.4          | 4,592.5       | 2,341.6            | 2,250.9       |
| Total Equity Investment<br>(% of the companies owned)       | 2010        | 293.5          | 4,339.0       | 2,267.6            | 2,071.4       |
|   | 2009        | 367.1          | 4,726.2       | 2,417.0            | 2,309.2       |

Joint ventures are often used by companies to purchase assets that the firm cannot afford to purchase on its own.

**Required:**

- A. Using the balance sheet, compute the ratio of total liabilities to total assets.
- B. Assume that instead of reporting only the net investment, the standards required the consolidated entity to reflect separately Goodman's percentage of both assets and liabilities for its investment in joint ventures. Compute the ratio of total liabilities to total assets and comment.



- C. Repeat part B, except assume that the standards required the consolidated entity to reflect separately Goodman's percentage of both assets and liabilities for all equity investments. Compute the ratio of total liabilities to total assets and comment.
- D. Assume that the equity investments in joint ventures are fully consolidated instead (typically, the ownership percentage is close to 50%). Compute the ratio of total liabilities to total assets. Compare your answer to part A, and comment.
- E. Assume that all equity investments are fully consolidated. Compute the ratio of total liabilities to total assets. Compare your answer to parts A and B and C and comment.

## EXERCISES

### EXERCISE 9-1 Computing the Constructive Gain or Loss on Retirement of Debt LO2

Pacelli Company issued 10-year, 10% bonds with a par value of \$1,000,000 on January 2, 2013, for \$940,000. Interest is paid semiannually on June 30 and December 31. On December 31, 2014, \$800,000 of the par value bonds were purchased by Salez Company for \$820,000. Salez Company is an 80%-owned subsidiary of Pacelli Company. Both companies use the straight-line method to amortize bond discounts and premiums.

Salez Company declared cash dividends of \$60,000 each year during the period 2014–2015.

#### Required:

- A. Compute the total gain or loss on the constructive retirement of debt.
- B. Allocate the total gain or loss between Pacelli Company and Salez Company.
- C. Prepare the book entries related to the bonds made by the individual companies during 2015.
- D. Assume that the two companies reported net income as follows:

|      | <i>Pacelli<br/>Company</i> | <i>Salez<br/>Company</i> |
|------|----------------------------|--------------------------|
| 2014 | \$260,000                  | \$140,000                |
| 2015 | 280,000                    | 190,000                  |

Compute controlling interest in consolidated net income and the noncontrolling interest in consolidated income for 2014 and 2015.

### EXERCISE 9-2 Intercompany Bond Workpaper Elimination Entries LO2

Refer to the data provided in Exercise 9-1.

#### Required:

Prepare in general journal form the intercompany bond elimination entries required in the preparation of the December 31, 2014, December 31, 2015, and December 31, 2016, consolidated statements workpapers.

### EXERCISE 9-3 Computing the Constructive Gain or Loss on Debt Retirement and Book Entries LO2

Weber Company issued five-year, 10% bonds on January 2, 2014, for 105. Par value is \$850,000. Interest is paid semiannually on June 30 and December 31. Weber Company is a 90%-owned subsidiary of Fairfield Company. On December 31, 2014, Fairfield Company purchased \$510,000 of Weber Company's par value bonds at 90 after the semiannual interest payment had been made. Weber Company declared dividends of \$60,000 in 2014 and \$80,000 in 2015. Both companies use the straight-line method to amortize bond discount and premium.

#### Required:

- A. Compute the total gain or loss on the constructive retirement of the debt.
- B. Allocate the total gain or loss between Weber Company and Fairfield Company.
- C. Prepare the book entries related to the bonds made by the individual companies in 2015.
- D. Assume that the two companies reported net income as follows:

|      | <i>Fairfield<br/>Company</i> | <i>Weber<br/>Company</i> |
|------|------------------------------|--------------------------|
| 2014 | \$275,000                    | \$190,000                |
| 2015 | 350,000                      | 225,000                  |

Compute controlling interest in consolidated net income and the noncontrolling interest in consolidated income for 2014 and 2015.

**EXERCISE 9-4 Intercompany Bond Workpaper Elimination Entries LO 2**

Use the information relating to Weber Company and Fairfield Company in Exercise 9-3.

**Required:**

Prepare in general journal form the intercompany bond elimination entries for the consolidated statements workpapers prepared on December 31, 2014, December 31, 2015, and December 31, 2016.

**EXERCISE 9-5 Computing Carrying Value, Interest Revenue and Expense, Controlling and Noncontrolling Income LO 2**

On January 2, 2014, Peoples, Inc. acquired an 80% interest in Schmidt Corporation for \$900,000. Schmidt reported total stockholders' equity of \$1,000,000 on this date. An examination of Schmidt's books revealed that book value was equal to fair value for all assets and liabilities except for inventory, which was undervalued by \$60,000. All of the undervalued inventory was sold during 2014.

Peoples also purchased 30% of the \$500,000 par value outstanding bonds of Schmidt Corporation for \$140,000 on January 2, 2014. The bonds mature in 10 years, carry an 11% annual interest rate payable on June 30 and December 31, and had a carrying value of \$505,000 on the date of purchase. Both companies use the straight-line method to amortize bond discounts and premiums.

Peoples reported net income of \$300,000 for 2014 and paid dividends of \$130,000 during 2014. Schmidt Corporation reported net income of \$320,000 for 2011 and paid dividends of \$90,000 during the year.

**Required:**

Compute the following items at December 31, 2014:

1. Carrying value of the debt.
2. Interest revenue reported by Peoples, Inc.
3. Interest expense reported by Schmidt Corporation
4. Balance in the Investment in Schmidt Bonds account.
5. Controlling interest in consolidated net income for 2014 using the t-account approach.
6. Noncontrolling interest in consolidated income for 2014.

**EXERCISE 9-6 Subsidiary Stock Dividend—Cost Method LO 4**

Perez, Inc. owns 7,000 shares (70% interest) of Salata Company's \$100 par value common stock. The stock was purchased for \$1,250,000 on January 2, 2013, when Salata reported a common stock balance of \$1,000,000, a retained earnings balance of \$400,000, and other contributed capital balance of \$100,000. Any difference between implied and book value interest acquired is attributable to the under- or overvaluation of land. During 2014, Salata reported net income of \$80,000. Because the company was short of liquid assets, dividends have not been paid since 2009. During 2014, however, the company declared and issued a 15% stock dividend (market price of common stock on the date of issue, \$160 per share). The retained earnings balance at the beginning of 2014 was \$500,000.

**Required:**

- A. Prepare the journal entries required in the books of Perez, Inc. during 2014.
- B. Prepare in general journal form the workpaper entries necessary in the consolidated statements workpaper for the year ended December 31, 2014.
- C. Prepare the workpaper entry to establish reciprocity to be made in the 2015 consolidated statements workpaper.

**EXERCISE 9-7 Liquidating Dividend LO 6**

On January 1, 2014, Pacelli Company acquired a 90% interest in Swartz Corporation for \$720,000. On this date, Swartz Corporation reported common stock of \$500,000 and retained earnings of \$200,000. Any difference between implied and book value interest acquired is attributable to the under- or overvaluation of land.

Other information pertaining to Swartz Corporation follows:

|                     |          |
|---------------------|----------|
| 2014 Net income     | \$65,000 |
| 2014 Cash dividends | 90,000   |
| 2015 Net income     | 80,000   |
| 2015 Cash dividends | 40,000   |

Pacelli Company uses the partial equity method to account for its investment in Swartz Corporation.

**Required:**

- A. Prepare the general journal entries for 2014 and 2015 to record the receipt of the cash dividends.
- B. Prepare all determinable workpaper entries that would be made in the preparation of 2014 consolidated statements workpaper.

- C. Prepare all determinable workpaper entries that would be made in the preparation of consolidated statements for 2015.
- D. How would the entry in part A change if the cost method was used to account for the investment?

**EXERCISE 9-8 Purchase Common and Preferred Stock LO 8**

On January 2, 2014, Pasqual Corporation purchased 80% of the outstanding common stock and 30% of the outstanding cumulative, nonparticipating, preferred stock of Sung Company for \$400,000 and \$70,000, respectively. At this date, Sung Company reported account balances of \$400,000 in common stock, \$200,000 in preferred stock, and \$100,000 in retained earnings. No other contributed capital accounts exist. The difference between implied and book value of the common stock is attributable to under- or overvalued land. Dividends on the 12% cumulative preferred stock (par \$10) were not paid during 2013.

Other information:

|                            | <i>Pasqual<br/>Corporation</i> | <i>Sung<br/>Company</i> |
|----------------------------|--------------------------------|-------------------------|
| 1/2/2015 Retained Earnings | \$45,000                       | \$100,000               |
| 2014 Reported Net Income   | 84,600                         | 90,000                  |
| 2014 Dividends Declared    | 25,000                         | 50,000                  |

**Required:**

- A. Prepare the journal entries made by Pasqual Corporation in 2014 to account for the investments assuming (1) the cost method is used, (2) the partial equity method is used, and (3) the complete equity method is used.
- B. Compute the noncontrolling interest in Sung Company's net income.
- C. Prepare the 2014 workpaper entries related to the foregoing investments assuming (1) the cost method is used to account for the investment, (2) the partial equity method is used to account for the investment, and (3) the complete equity method is used to account for the investment.

**EXERCISE 9-9 Various Preferred Stock Characteristics—Workpaper Entries LO 7**

Sam's Company reported the following stockholders' equity account balances on December 31, 2014.

|   |                  |
|---|------------------|
| Preferred stock (12%, \$100 par value, call price is \$105) | \$100,000        |
| Common stock, \$10 par value                                | 500,000          |
| Other contributed capital—premium on issue of common stock  | 160,000          |
| Retained earnings   | 110,000          |
| Total   | <u>\$870,000</u> |

On December 31, 2014, Peterson, Inc. acquired 60% of Sam Company's common stock for \$550,000 and 40% of its preferred stock for \$55,000.

The difference between the implied value of the common stock (preferred stock) and the book value is allocated entirely to land (other contributed capital and noncontrolling interest).

**Required:**

Prepare in general journal form the December 31, 2014, workpaper entries to eliminate the investment in common and preferred stock for each of the following independent cases:

*Case 1:* The preferred stock is noncumulative and nonparticipating.

*Case 2:* The preferred stock is cumulative and nonparticipating, and dividends were not paid in 2013 and 2014.

*Case 3:* The preferred stock is noncumulative and fully participating.

**EXERCISE 9-10 Various Preferred Stock Characteristics—Compute Consolidated Income LO 7 LO 8**

On January 1, 2014, Perez Company acquired 80% of Serrano Company's \$300,000 par value common stock for \$200,000 and 40% of Serrano Company's 8%, \$100,000 par value preferred stock for \$86,000. During 2014, Serrano Company reported net income of \$80,000 and declared cash dividends of \$45,000. Perez Company reported net income (including dividends from subsidiary) of \$200,000 in 2014.

**Required:**

In each of the following independent cases, compute consolidated net income for 2014.

*Case 1:* The preferred stock is noncumulative and nonparticipating.

*Case 2:* The preferred stock is cumulative and nonparticipating. Dividends were in arrears two years as of January 1, 2014.

*Case 3:* The preferred stock is noncumulative and fully participating.

*Case 4:* The preferred stock is cumulative and fully participating. Dividends were in arrears one year as of January 1, 2014.

**EXERCISE 9-11** Computing the Constructive Gain or Loss on Retirement of Debt (effective interest) **LO 2**

Pacman Company issued 5-year, 8% bonds with a par value of \$100,000 on December 31, 2012, for \$92,278 (sold to yield 10%). Interest is paid semiannually on June 30th and December 31st. On December 31, 2013, \$80,000 of the par value bonds were purchased by Space Invaders Company for \$77,362 (a 9% yield). Space Invaders Company is a 70%-owned subsidiary of Pacman Company. Both companies use the effective interest method to amortize bond discounts and premiums. Space Invaders Company declared cash dividends of \$60,000 each year during the period 2013–2014.

**Required: (round answers to the nearest dollar)**

- Compute the total gain or loss on the constructive retirement of debt.
- Allocate the total gain or loss between Pacman Company and Space Invaders Company.
- Prepare the book entries related to the bonds made by the individual companies during 2014. (*Hint:* It will be helpful to prepare bond amortization schedules. Tables of Present Value factors are presented in Appendix PV at the back of the book.)
- Assume that the two companies reported *net income* as follows:

|      | Pacman Company |                |                 | Space Invaders Company |
|------|----------------|----------------|-----------------|------------------------|
|      | Cost Method    | Partial Equity | Complete Equity |                        |
| 2013 | \$260,000      | \$316,000      | \$312,677       | \$140,000              |
| 2014 | 280,000        | 371,000        | 371,708         | 190,000                |

Compute controlling interest in consolidated net income and the noncontrolling interest in consolidated income for 2013 and 2014.

**EXERCISE 9-12** Intercompany Bond Workpaper Elimination Entries (effective interest) **LO 2**

Refer to the data provided in Exercise 9-12.

**Required:**

Prepare in general journal form the intercompany bond elimination entries required in the preparation of the December 31, 2013, December 31, 2014, and December 31, 2015, consolidated statements workpapers.

**ASC Exercises:** For all ASC exercises indicate as part of your answer: the Codification topic, subtopic, section, and paragraph upon which your answer is based (unless otherwise specified). All ASC questions require access to the FASB Codification.

**ASC9-1** **Disclosure** A company purchased a loan from another company and classified the loan as a receivable. When the cash is collected, how should the company classify the cash received on the statement of cash flows?

**ASC9-2** **Disclosure** A company incurred debt issue costs. Where is the cash paid for debt issue costs classified on the statement of cash flows?

**ASC9-3** **Disclosure** Cash paid for interest expense amounted \$10,000. Where is the cash outflow reported on the statement of cash flows?

**PROBLEMS****PROBLEM 9-1** Constructive Gain or Loss on Bonds **LO 2**

On January 1, 2009, Pace Corporation issued \$500,000 par value, 10-year, 15% bonds. Interest is payable each June 30 and December 31. On January 1, 2012, Supra Corporation, a 90%-owned subsidiary, purchased on the open market all of the parent company bonds. Both companies have a December 31 year-end. For this problem, assume the following four independent cases.

|        | Issue Price by<br>Pace Corporation<br>on January 1, 2009 | Purchase Price by<br>Supra Corporation on<br>January 1, 2012 |
|--------|--|--|
| Case 1 | \$512,000  | \$514,000  |
| Case 2 | 488,000  | 486,000  |
| Case 3 | 512,000  | 486,000  |
| Case 4 | 488,000  | 514,000  |

**Required:**

- A. For cases 1 and 2, compute the total constructive gain or loss and the portion allocated to each company.
- B. For cases 1 and 2 prepare the journal entry or entries to be made by Pace Corporation and Supra Corporation on June 30, 2012. Both companies amortize discounts and premiums each interest payment date and use the straight-line method of amortization. Assume that Pace uses the partial equity method to account for its investment in Supra.
- C. Complete the following schedules as of December 31, 2012, after the December 31 interest payment (receipt) and amortization of discount or premium have been recorded.

| <i>Pace Corporation</i>                             | <i>Issue Price</i> |                  |
|---|--------------------|------------------|
|   | <i>\$512,000</i>   | <i>\$488,000</i> |
| Bond Payable  | _____              | _____            |
| Unamortized Premium (discount)                      | _____              | _____            |
| Carrying Value of Bonds                             | _____              | _____            |
| 2012 Cash Payment for Interest                      | _____              | _____            |
| (Premium) Discount Amortization                     | _____              | _____            |
| 2012 Bond Interest Expense                          | _____              | _____            |
| Increase (decrease) in Net Income from Amortization | _____              | _____            |

| <i>Supra Corporation</i>                            | <i>Purchase Price</i> |                  |
|---|-----------------------|------------------|
|   | <i>\$514,000</i>      | <i>\$486,000</i> |
| Investment in Pace Corp. Bonds                      | _____                 | _____            |
| 2012 Cash Receipts for Interest                     | _____                 | _____            |
| (Premium) Discount Amortization                     | _____                 | _____            |
| 2012 Bond Interest Income                           | _____                 | _____            |
| Increase (decrease) in Net Income from Amortization | _____                 | _____            |

|  | <i>Case</i> |          |          |          |
|--|-------------|----------|----------|----------|
|  | <i>1</i>    | <i>2</i> | <i>3</i> | <i>4</i> |
| Amount of constructive gain (loss) recognized by Pace Corporation  | _____       | _____    | _____    | _____    |
| Amount of constructive gain (loss) recognized by Supra Corporation | _____       | _____    | _____    | _____    |

- D. For cases 1 and 2, prepare in general journal form the intercompany bond elimination entries required in the December 31, 2012, consolidated statements workpaper.

**PROBLEM 9-2****Constructive Gain or Loss on Bond Retirement with Workpaper—Cost Method LO 2**

Prezo Company purchased 80% of Satz Company's common stock for \$880,000 on January 2, 2012. Condensed financial information for Prezo Company and Satz Company is given below.

**Balance Sheet**  
**December 31, 2012**

|   | <i>Prezo Co.</i>   | <i>Satz Co.</i>    |
|---|--------------------|--------------------|
| Current Assets                          | \$ 920,000         | \$ 580,000         |
| Investment in Satz Company Common Stock | 880,000            |                    |
| Investment in Satz Company Bonds        | 227,143            |                    |
| Other Assets                            | 2,345,457          | 1,320,000          |
|   | <u>\$4,372,600</u> | <u>\$1,900,000</u> |
| Bonds Payable (10%)                     | \$ 700,000         | \$ 400,000         |
| Premium on Bonds Payable                | 20,000             | 9,000              |
| Other Liabilities                       | 1,434,600          | 141,000            |
| Common Stock                            | 1,600,000          | 800,000            |
| Retained Earnings                       | 618,000            | 550,000            |
|   | <u>\$4,372,600</u> | <u>\$1,900,000</u> |

**Retained Earnings Statement  
for the Year Ended December 31, 2012**

|               | <i>Prezo Co.</i> | <i>Satz Co.</i>   |
|---------------|------------------|-------------------|
| 1/1 Balance   | \$ 480,000       | \$300,000         |
| Net Income    | 388,000          | 400,000           |
| Dividends     | (250,000)        | (150,000)         |
| 12/31 Balance | <u>618,000</u>   | <u>\$ 550,000</u> |

**Income Statement  
for the Year Ended December 31, 2012**

|                 | <i>Prezo Co.</i>  | <i>Satz Co.</i>   |
|-----------------|-------------------|-------------------|
| Sales           | \$2,680,000       | \$1,860,000       |
| Dividend Income | 120,000           |                   |
| Other Income    | <u>266,000</u>    | <u>120,000</u>    |
| Total Revenue   | 3,066,000         | 1,980,000         |
| Expenses        | <u>2,678,000</u>  | <u>1,580,000</u>  |
| Net Income      | <u>\$ 388,000</u> | <u>\$ 400,000</u> |

On July 1, 2012, Prezo Company purchased 60% of Satz Company's bonds for \$225,000. The bonds mature on December 31, 2015. Interest of 10% per annum is paid on June 30 and December 31 each year. Both companies use the straight-line method to amortize bond discounts and premiums.

**Required:**

- Compute the gain or loss on the constructive retirement of the bonds allocated to each of the affiliated companies.
- Prepare a consolidated financial statements workpaper on December 31, 2012.
- Prepare in good form a schedule showing the calculation of consolidated net income for the year ended December 31, 2012.

**PROBLEM 9-3**

**Workpaper, Cost Method—Constructive Gain or Loss with Stock Dividend LO2 LO4**

On January 1, 2013, Pasta Company purchased an 80% interest in Salsa Company for \$152,000. On this date, Salsa Company reported capital stock and retained earnings of \$100,000 and \$90,000, respectively. During 2013, Salsa Company reported net income of \$30,000 and declared a cash dividend of \$35,000. At the end of 2014, Salsa Company was facing a cash shortage. Rather than distributing a cash dividend to the common stockholders, the board of directors elected to issue a 30% stock dividend. Salsa Company's accountant recorded the stock dividend as follows:

|                         |        |        |
|-------------------------|--------|--------|
| Stock Dividend Declared | 30,000 |        |
| Common Stock            |        | 30,000 |

On December 31, 2014, Pasta Company purchased on the open market bonds of Salsa Company with a par value of \$100,000 for \$94,000. Financial data for the two companies as of December 31, 2014, follows:

| <i>Income Statement</i>  | <i>Pasta Company</i> | <i>Salsa Company</i> |
|--------------------------|----------------------|----------------------|
| Sales                    | \$370,000            | \$200,000            |
| Other Revenues           | 15,000               | 2,000                |
|                          | 385,000              | 202,000              |
| Cost of Goods Sold       | 180,000              | 110,000              |
| Other Expenses           | <u>80,000</u>        | <u>30,000</u>        |
| Net Income               | <u>\$125,000</u>     | <u>\$ 62,000</u>     |
| <i>Retained Earnings</i> | <i>Pasta Company</i> | <i>Salsa Company</i> |
| 1/1 Retained Earnings    | \$ 96,000            | \$ 85,000            |
| Net Income               | 125,000              | 62,000               |
| Less: Dividends Declared |                      |                      |
| Stock Dividend Declared  | <u>(30,000)</u>      | <u>(30,000)</u>      |
| 12/31 Retained Earnings  | <u>\$191,000</u>     | <u>\$117,000</u>     |

| <i>Balance Sheet</i>              | <i>Pasta Company</i> | <i>Salsa Company</i> |
|-----------------------------------|----------------------|----------------------|
| Current Assets                    | \$171,000            | \$169,000            |
| Investment in Salsa Company Stock | 148,000              |                      |
| Investment in Salsa Company Bonds | 94,000               |                      |
| Other Assets                      | <u>300,000</u>       | <u>315,000</u>       |
| Totals                            | <u>\$713,000</u>     | <u>\$484,000</u>     |
| Accounts Payable                  | \$ 72,000            | \$ 40,000            |
| Long-Term Bonds Payable           | 250,000              | 200,000*             |
| Discount on Bonds Payable         | —                    | (3,000)              |
| Common Stock (\$10 par value)     | 200,000              | 130,000              |
| Retained Earnings                 | <u>191,000</u>       | <u>\$117,000</u>     |
| Totals                            | <u>\$713,000</u>     | <u>\$484,000</u>     |

\* 8%, maturity date December 31, 2017.

**Required:**

- A. Prepare a consolidated statements workpaper on December 31, 2014.
- B. Prepare in general journal form the entry that would be made in the December 31, 2015, workpaper to establish reciprocity as of January 1, 2015.

**PROBLEM 9-4**

**Workpaper, Partial Equity Method—Constructive Gain or Loss on Bonds LO 2**

Condensed financial information for Prince Company and South Company follows:

**Balance Sheet  
December 31, 2014**

|                                   | <i>Prince<br/>Company</i> | <i>South<br/>Company</i> |
|-----------------------------------|---------------------------|--------------------------|
| Current Assets                    | \$ 826,000                | \$ 700,000               |
| Investment in South Company Stock | 1,120,000                 |                          |
| Investment in South Company Bonds | 312,000                   |                          |
| Other Assets                      | <u>1,252,000</u>          | <u>1,400,000</u>         |
| Totals                            | <u>\$3,510,000</u>        | <u>\$2,100,000</u>       |
| Bonds Payable                     | \$ 300,000                | \$ 500,000               |
| Premium on Bonds Payable          | 20,000                    | 40,000                   |
| Other Liabilities                 | 380,000                   | 160,000                  |
| Common Stock                      | 2,000,000                 | 1,000,000                |
| Retained Earnings                 | 810,000                   | 400,000                  |
| Totals                            | <u>\$3,510,000</u>        | <u>\$2,100,000</u>       |

**Separate Statements of Income and Retained Earnings  
for the Year Ended December 31, 2014**

|                                 | <i>Prince<br/>Company</i> | <i>South<br/>Company</i> |
|---------------------------------|---------------------------|--------------------------|
| Sales                           | \$3,000,000               | \$2,000,000              |
| Equity in Subsidiary Income     | 160,000                   |                          |
| Other Income                    | <u>100,000</u>            | <u>200,000</u>           |
| Total Revenues                  | 3,260,000                 | 2,200,000                |
| Expenses                        | <u>2,800,000</u>          | <u>2,000,000</u>         |
| Net Income                      | 460,000                   | 200,000                  |
| 1/1 Retained Earnings Balance   | <u>600,000</u>            | <u>300,000</u>           |
|                                 | 1,060,000                 | 500,000                  |
| Dividends                       | (250,000)                 | (100,000)                |
| 12/31 Retained Earnings Balance | <u>\$ 810,000</u>         | <u>\$ 400,000</u>        |

Prince Company purchased 80% of South Company's common stock for \$1,000,000 at the beginning of 2013 and uses the partial equity method to account for the investment. At the time of purchase, South Company reported a common stock balance of \$1,000,000 and a retained earnings balance of \$250,000.

On July 1, 2014, Prince Company purchased 60% of South Company's 10% bonds for \$315,000. The bonds mature on December 31, 2016. Interest is paid on June 30 and December 31.

**Required:**

- A. Prepare the entries made on the books of Prince Company during 2014 to record its interest in South Company and account for the bond investment.
- B. Prepare a consolidated financial statements workpaper on December 31, 2014.

**PROBLEM 9-5 Workpaper, Cost Method—Preferred Stock LO 7 LO 8**

On January 1, 2009, Pabst Company acquired 80% of Secor Company's common stock and 30% of Secor Company's 10% preferred stock. Pabst Company paid \$680,000 for the common stock and \$135,000 for the preferred stock. The preferred stock is cumulative and nonparticipating and has a call price of \$104. On the date of acquisition, there were no dividends in arrears. On January 1, 2009, Secor Company reported the following account balances:

|  |                    |
|--|--------------------|
| 10% Preferred Stock (\$100 par value)                                      | \$ 400,000         |
| Common Stock (\$10 par value)  | 500,000            |
| Other Contributed Capital (Sale of common stock<br>in excess of par value) | 100,000            |
| Retained Earnings  | 230,000            |
| Total  | <u>\$1,230,000</u> |

Condensed preclosing trial balances for the two companies at December 31, 2014 are presented below.

| <i>Income Statement</i>     | <i>Pabst<br/>Company</i> | <i>Secor<br/>Company</i> |
|-----------------------------|--------------------------|--------------------------|
| Sales                       | \$ 700,000               | \$ 450,000               |
| Expenses                    | (580,000)                | (350,000)                |
| Net Income                  | <u>\$ 120,000</u>        | <u>\$ 100,000</u>        |
| <i>Retained Earnings</i>    |                          |                          |
| 1/1 Balance                 | \$ 507,000               | \$ 430,000               |
| Net Income                  | 120,000                  | 100,000                  |
| Less: Dividends Declared    | (100,000)                |                          |
| 12/31 Balance               | <u>\$ 527,000</u>        | <u>\$ 530,000</u>        |
| <i>Balance Sheet</i>        |                          |                          |
| Current Assets              | \$1,618,000              | \$ 890,000               |
| Investment in Secor Company | 680,000                  |                          |
| Common Stock                |                          |                          |
| Investment in Secor Company | 135,000                  |                          |
| Preferred Stock             |                          |                          |
| Other Assets                | 1,025,000                | 1,000,000                |
| Totals                      | <u>\$3,458,000</u>       | <u>\$1,890,000</u>       |
| Liabilities                 | \$ 931,000               | \$ 360,000               |
| Preferred Stock             | 400,000                  | 400,000                  |
| Common Stock                | 1,000,000                | 500,000                  |
| Other Contributed Capital   | 600,000                  | 100,000                  |
| Retained Earnings           | 527,000                  | 530,000                  |
| Totals                      | <u>\$3,458,000</u>       | <u>\$1,890,000</u>       |

On December 31, 2014, dividends on the preferred stock were in arrears for 2013 and 2014.

**Required:**

Prepare a consolidated statements workpaper for the year ended December 31, 2014. Assume that any difference between the implied value and book value of Secor is attributable to an undervaluation in the land of Secor Company in the case of common stock, and any difference between the implied value of preferred stock and the book value is assignable to other contributed capital or to the noncontrolling interest.

**PROBLEM 9-6 Workpaper, Cost Method—Preferred Stock LO 7 LO 8**

PAL Corporation acquired 40% of the outstanding preferred stock of Saltz, Inc. for \$60,000 and 90% of that firm's outstanding common stock for \$600,000 on January 1, 2013. On the date that the controlling interest was acquired, the stockholders' equity section of Saltz, Inc. was as follows.



|  |                  |
|--|------------------|
| Preferred stock—10%, cumulative, fully participating,<br>liquidation value is equal to par value | \$100,000        |
| Common stock—\$10 par value  | 400,000          |
| Retained earnings  | <u>200,000</u>   |
| Total  | <u>\$700,000</u> |

There were no dividends in arrears on January 1, 2013. For the fiscal year ended December 31, 2013, Saltz, Inc. reported net income of \$130,000. No cash or stock dividends were declared by the company during 2013.

The difference between the implied and book value of the equity interest in the common stock relates to the land owned by Saltz, Inc. Condensed financial information for the two companies at December 31, 2013, is presented below.

| <i>Income Statement Date</i>                | <i>PAL Corp.</i>   | <i>Saltz Inc.</i> |
|---|--------------------|-------------------|
| Sales                                       | \$ 890,000         | \$750,000         |
| Interest, Dividends, and Other Revenues     | 91,000             | 50,000            |
| Cost of Goods Sold                          | (500,000)          | (400,000)         |
| Selling, Administrative, and Other Expenses | (330,000)          | (280,000)         |
| Net Income                                  | <u>\$151,000</u>   | <u>\$120,000</u>  |
| <i>Retained Earnings</i>                    |                    |                   |
| 1/1 Balance                                 | \$560,000          | \$330,000         |
| Net Income                                  | 151,000            | 120,000           |
| Less: Dividends Declared                    |                    | (90,000)          |
| 12/31 Balance                               | <u>\$711,000</u>   | <u>\$360,000</u>  |
| <i>Balance Sheet</i>                        |                    |                   |
| Current Assets                              | \$ 810,000         | \$380,000         |
| Investment in Common Stock                  | 600,000            |                   |
| Investment in Preferred Stock               | 60,000             |                   |
| Other Assets                                | <u>1,276,000</u>   | <u>600,000</u>    |
| Totals                                      | <u>\$2,746,000</u> | <u>\$980,000</u>  |
| Liabilities                                 | \$1,335,000        | \$120,000         |
| Preferred Stock                             |                    | 100,000           |
| Common Stock                                | 700,000            | 400,000           |
| Retained Earnings                           | <u>711,000</u>     | <u>360,000</u>    |
| Totals                                      | <u>\$2,746,000</u> | <u>\$980,000</u>  |

**Required:**

- A. Prepare a schedule to compute the difference between the implied value of the common stock and the book value of Saltz.
- B. Prepare consolidated statements workpapers for the year ended December 31, 2014.

**PROBLEM 9-7 Preferred Stock LO7 LO8**

P Company owns 80% of S Company's common stock (cost \$650,000) and 20% of its preferred stock (cost \$50,000). Both interests were acquired on January 1, 2012. On the date of purchase, S Company's stockholders' equity consisted of the following accounts.

|                   |           |
|-------------------|-----------|
| Preferred stock   | \$200,000 |
| Common stock      | 500,000   |
| Retained earnings | 160,000   |

The preferred stock is \$25 par value, 9% cumulative, and nonparticipating. The call price is \$27 per share. Dividends have been declared in all years except for 2013.

An examination of S Company's assets and liabilities revealed that their book values were equal to fair values except for the inventory and equipment.

|                 | <i>Book Value</i> | <i>Fair Value</i> |
|-----------------|-------------------|-------------------|
| Inventory       | \$120,000         | \$150,000         |
| Equipment (net) | 560,000           | 640,000           |



The equipment had a remaining life of five years at the date of the equity purchase, and the FIFO cost flow assumption is used in costing inventory.

S Company sells inventory to P Company at 25% above cost. During 2013 and 2014, such sales amounted to \$350,000 and \$390,000, respectively. The 2013 and 2014 ending inventories of P Company included goods purchased from S Company for \$77,500 and \$54,000, respectively.

The companies file consolidated tax returns. Ignore deferred income taxes when assigning the difference between implied and book value.

Selected data for the 2014 December 31 fiscal year-end are given below:

|  | <i>P Company</i> | <i>S Company</i> |
|--|------------------|------------------|
| Net income (including dividend income and sales to affiliates) | \$234,500        | \$100,000        |
| 1/1/14 Retained earnings                                       | 430,000          | 310,000          |
| Dividends declared and paid                                    | 80,000           | 50,000           |

**Required:**

- A. Prepare a schedule to compute the book value interest acquired for each equity investment.
- B. Prepare a schedule to assign the difference between the implied value of the common stock investment and the book value of S.
- C. Compute the following items:
  - (1) Dividends received during 2014 by P Company from S Company for each equity interest held.
  - (2) Noncontrolling interest in 2014 consolidated net income.
  - (3) Controlling interest in consolidated net income for 2014.
  - (4) Consolidated retained earnings on January 1, 2014.

**PROBLEM 9-8**

**Comprehensive Workpaper—Cost Method**

Parson Industries purchased 80% of the common stock of Succo Company on January 1, 2013, for \$300,000 when Succo Company's capital consisted of common stock of \$200,000, preferred stock of \$100,000, other contributed capital of \$50,000, and retained earnings of \$62,000.

The \$100 par value preferred is 15%, cumulative and nonparticipating, and has a call price of \$104 per share. Dividends on the preferred stock were not paid in 2012.

Trial balances for the parent and subsidiary for the December 31, 2014, year-end are presented below.

| <i>Income Statement</i> | <i>Parson<br/>Industries</i> | <i>Succo<br/>Company</i> |
|-------------------------|------------------------------|--------------------------|
| Sales                   | \$ 404,000                   | \$300,000                |
| Dividend Income         | 4,000                        |                          |
| Cost of Goods Sold      | (200,000)                    | (160,000)                |
| Operating Expenses      | (36,400)                     | (50,000)                 |
| Income Taxes            | (40,200)                     | (27,000)                 |
| Net Income              | <u>\$ 131,400</u>            | <u>\$ 63,000</u>         |

| <i>Retained Earnings</i> | <i>Parson<br/>Industries</i> | <i>Succo<br/>Company</i> |
|--------------------------|------------------------------|--------------------------|
| 1/1 Retained Earnings    | \$ 157,400                   | \$107,000                |
| Net Income               | 131,400                      | 63,000                   |
| Less: Dividends Declared | (65,000)                     | (50,000)                 |
| 12/31 Retained Earnings  | <u>\$ 223,800</u>            | <u>\$120,000</u>         |



COMPREHENSIVE

| <i>Balance Sheet</i>         | <i>Parson<br/>Industries</i> | <i>Succo<br/>Company</i> |
|------------------------------|------------------------------|--------------------------|
| Cash and Receivables         | \$ 396,800                   | \$205,000                |
| Inventories                  | 200,000                      | 170,000                  |
| Land                         | 300,000                      | 120,000                  |
| Buildings and Equipment      | 697,000                      | 245,000                  |
| Accumulated Depreciation     | (100,000)                    | (70,000)                 |
| Investment in Succo Company  | 300,000                      |                          |
| Totals                       | <u>\$1,793,800</u>           | <u>\$670,000</u>         |
| Current Liabilities          | \$ 370,000                   | \$100,000                |
| Bonds Payable                | 400,000                      | 100,000                  |
| Preferred Stock              |                              | 100,000                  |
| Common Stock, \$10 par value | 600,000                      | 200,000                  |
| Other Contributed Capital    | 200,000                      | 50,000                   |
| Retained Earnings            | 223,800                      | 120,000                  |
| Totals                       | <u>\$1,793,800</u>           | <u>\$670,000</u>         |

*Additional Information:*

- At the beginning of 2014, dividends on the preferred stock were in arrears for 2012 and 2013.
- Succo Company owed Parson Industries \$10,000 for purchases of inventory on account.
- At the date of acquisition, the portion of the difference between the implied value and book value of Succo that was attributed to tangible assets of Succo Company was allocated as follows:

|                 |          |
|-----------------|----------|
| Equipment (net) | \$12,500 |
| Inventories     | 6,250    |
| Land            | 6,250    |

The amount not allocated to tangible assets was allocated to goodwill (excess of implied over fair value). The equipment had a remaining life of 20 years at the date of acquisition. Succo Company uses the FIFO cost flow assumption in pricing inventory.

- The building and equipment account of Parson Industries includes \$50,000 of equipment acquired from Succo Company on July 1, 2013. When sold to Parson Industries, the asset was carried on the books of Succo Company at a cost of \$100,000 and accumulated depreciation of \$20,000. The asset is being depreciated by Parson Industries over a remaining life of five years. Parson Industries uses the straight-line method of depreciation.
- The 2013 and 2014 ending inventories of Succo Company included goods purchased from Parson Industries for \$15,000 and \$25,000, respectively. Parson Industries sells merchandise to Succo Company at 20% above cost. During 2014, such sales amounted to \$100,000.
- The affiliates file consolidated tax returns. Ignore deferred income taxes in the assignment of the difference between implied and book value.

**Required:**

- Compute the difference between implied value and book value of Succo Company equity at the date of acquisition and allocate the difference to undervalued assets of Succo Company.
- Prepare a consolidated statements workpaper for the year ended December 31, 2014.
- Prepare a schedule showing the calculation of controlling interest in consolidated net income for the year ended December 31, 2014.

**PROBLEM 9-9****Comprehensive Workpaper—Complete Equity Method LO7 LO8**

Parson Industries purchased 80% of the common stock of Succo Company on January 1, 2013, for \$300,000 when Succo Company's capital consisted of common stock of \$200,000, preferred stock of \$100,000, other contributed capital of \$50,000, and retained earnings of \$62,000.

The \$100 par value preferred is 15%, cumulative and nonparticipating, and has a call price of \$104 per share. Dividends on the preferred stock were not paid in 2012.

Trial balances for the parent and subsidiary for the December 31, 2014, year-end are presented below.

| <i>Income Statement</i>      | <i>Parson<br/>Industries</i> | <i>Succo<br/>Company</i> |
|------------------------------|------------------------------|--------------------------|
| Sales                        | \$ 404,000                   | \$300,000                |
| Equity Income                | 31,433                       |                          |
| Cost of Goods Sold           | (200,000)                    | (160,000)                |
| Operating Expenses           | (36,400)                     | (50,000)                 |
| Income Taxes                 | (40,200)                     | (27,000)                 |
| Net Income                   | <u>\$ 158,833</u>            | <u>\$ 63,000</u>         |
| <br><i>Retained Earnings</i> |                              |                          |
| 1/1 Retained Earnings        | \$ 192,000                   | \$107,000                |
| Net Income                   | 158,833                      | 63,000                   |
| Less: Dividends Declared     | (65,000)                     | (50,000)                 |
| 12/31 Retained Earnings      | <u>\$ 285,833</u>            | <u>\$120,000</u>         |
| <br><i>Balance Sheet</i>     |                              |                          |
| Cash and Receivables         | \$ 396,800                   | \$205,000                |
| Inventories                  | 200,000                      | 170,000                  |
| Land                         | 300,000                      | 120,000                  |
| Buildings and Equipment      | 697,000                      | 245,000                  |
| Accumulated Depreciation     | (100,000)                    | (70,000)                 |
| Investment in Succo Company  | 362,033                      |                          |
| Totals                       | <u>\$1,855,833</u>           | <u>\$670,000</u>         |
| Current Liabilities          | \$ 370,000                   | \$100,000                |
| Bonds Payable                | 400,000                      | 100,000                  |
| Preferred Stock              |                              | 100,000                  |
| Common Stock, \$10 par value | 600,000                      | 200,000                  |
| Other Contributed Capital    | 200,000                      | 50,000                   |
| Retained Earnings            | 285,833                      | 120,000                  |
| Totals                       | <u>\$1,855,833</u>           | <u>\$670,000</u>         |

*Additional Information:*

- At the beginning of 2014, dividends on the preferred stock were in arrears for 2012 and 2013.
- Succo Company owed Parson Industries \$10,000 for purchases of inventory on account.
- At the date of acquisition, the portion of the difference between the implied and book value interest acquired that was attributed to tangible assets of Succo Company was allocated as follows:

|                 |          |
|-----------------|----------|
| Equipment (net) | \$12,500 |
| Inventories     | 6,250    |
| Land            | 6,250    |

The amount not allocated to tangible assets was allocated to goodwill (excess of implied over fair value). The equipment had a remaining life of 20 years at the date of acquisition. Succo Company uses the FIFO cost flow assumption in pricing inventory.

- The building and equipment account of Parson Industries includes \$50,000 of equipment acquired from Succo Company on July 1, 2013. When sold to Parson Industries, the asset was carried on the books of Succo Company at a cost of \$100,000 and accumulated depreciation of \$20,000. The asset is being depreciated by Parson Industries over a remaining life of five years. Parson Industries uses the straight-line method of depreciation.
- The 2013 and 2014 ending inventories of Succo Company included goods purchased from Parson Industries for \$15,000 and \$25,000, respectively. Parson Industries sells merchandise to Succo Company at 20% above cost. During 2014, such sales amounted to \$100,000.
- The affiliates file consolidated tax returns. Ignore deferred income taxes in the assignment of the difference between implied and book value.

**Required:**

- A. Compute the difference between implied value and book value of Succo Company equity at the date of acquisition and allocate the difference to undervalued assets of Succo Company.
- B. Prepare a consolidated statements workpaper for the year ended December 31, 2014.
- C. Prepare a schedule showing the calculation of controlling interest in consolidated net income for the year ended December 31, 2014.

**PROBLEM 9-10 Constructive Gain or Loss on Bond Retirement with Workpaper—Cost Method (effective interest method) LO 2**

Prezo Company purchased 80% of Satz Company's common stock for \$880,000 on January 2, 2014. Condensed financial information for Prezo Company and Satz Company is given below.

**Balance Sheet  
December 31, 2014**

|   | <i>Prezo Co.</i>   | <i>Satz Co.</i>    |
|---|--------------------|--------------------|
| Current Assets                          | \$ 920,000         | \$ 580,000         |
| Investment in Satz Company Common Stock | 880,000            |                    |
| Investment in Satz Company Bonds        | 246,189            |                    |
| Other Assets                            | 2,326,411          | 1,320,000          |
|   | <u>\$4,372,600</u> | <u>\$1,900,000</u> |
| Bonds Payable (10%)                     | \$ 700,000         | \$ 400,000         |
| Premium on Bonds Payable                |                    | 20,968             |
| Other Liabilities                       | 1,454,600          | 129,032            |
| Common Stock                            | 1,600,000          | 800,000            |
| Retained Earnings                       | 618,000            | 550,000            |
|   | <u>\$4,372,600</u> | <u>\$1,900,000</u> |

**Retained Earnings Statement  
for the Year Ended December 31, 2014**

|               | <i>Prezo Co.</i>  | <i>Satz Co.</i>   |
|---------------|-------------------|-------------------|
| 1/1 Balance   | \$ 480,000        | \$ 300,000        |
| Net Income    | 388,000           | 400,000           |
| Dividends     | (250,000)         | (150,000)         |
| 12/31 Balance | <u>\$ 618,000</u> | <u>\$ 550,000</u> |

**Income Statement  
for the Year Ended December 31, 2014**

|                 | <i>Prezo Co.</i>  | <i>Satz Co.</i>   |
|-----------------|-------------------|-------------------|
| Sales           | \$2,680,000       | \$1,860,000       |
| Dividend Income | 120,000           |                   |
| Other Income    | 266,000           | 120,000           |
| Total Revenue   | 3,066,000         | 1,980,000         |
| Expenses        | 2,678,000         | 1,580,000         |
| Net Income      | <u>\$ 388,000</u> | <u>\$ 400,000</u> |

On July 1, 2014, Prezo Company purchased 60% of Satz Company's bonds for \$ 247,071 (a 9% yield). The bonds mature on December 31, 2017. Interest of 10% per annum is paid on June 30 and December 31 each year. Both companies use the effective interest method to amortize bond discounts and premiums. The Satz Co. bond was originally issued to yield 8% and Prezo Company's bond was issued at par.

**Required:**

- A. Compute the gain or loss on the constructive retirement of the bonds allocated to each of the affiliated companies.
- B. Prepare a consolidated financial statements workpaper on December 31, 2014.
- C. Prepare in good form a schedule showing the calculation of consolidated net income for the year ended December 31, 2014.

# Chapter 9

## ONLINE

### 9.7 NOTES RECEIVABLE DISCOUNTED

**LO 3** Discounting a note issued to an affiliated company with an outside company.

Occasionally a company may issue a note to an affiliated company that may then discount the note with an outside party, or a company holding a note receivable from an outside party may discount the note with an affiliated company. The affiliate acquiring the note may discount the note again with an outside party. From a consolidation point of view, a receivable held by one of the affiliated companies should be reported in the consolidated balance sheet only if the note is due from an outside party. A contingent liability should be disclosed if a note has been discounted with an outside party and the endorsement was with recourse.

To illustrate the workpaper elimination entries required, assume that P Company issued a \$100,000 note to its subsidiary, S Company, for cash. The two companies prepare the usual entries on their own books when the debt is issued, that is, P Company debits cash and establishes a note payable account and S Company credits cash and records a note receivable. Assume further that S Company discounted the note at a nonaffiliated bank before maturity. Ignoring interest for simplicity, one of two methods might be used by Company S to record the discounting of a note. These methods are:

#### S Company's Books

|           |                             |         |         |
|-----------|-----------------------------|---------|---------|
| Method 1: | Cash                        | 100,000 |         |
|           | Notes Receivable            |         | 100,000 |
| Method 2: | Cash                        | 100,000 |         |
|           | Notes Receivable Discounted |         | 100,000 |

If consolidated statements are prepared before the note matures, an elimination entry may be required, depending on the method used by S Company to record the discounting of the note. If Method 1 is used to record the discounted note, the credit to notes receivable would cancel the debit made to notes receivable when the note was received. The consolidated balance sheet would appropriately report the \$100,000 note held by the bank and still reported on the books of P Company as a liability. If the second method was used, the notes receivable and the notes receivable discounted accounts would have to be eliminated, because the consolidated group is not contingently liable for the note, but is the primary maker of the note held by an outside party.

Now assume that P Company discounts with S Company a note that had originally been received from one of its customers. Now, P Company might record the transfer in one of two ways. Again, if the first method (above) is used, no elimination would be required, for the reasons discussed in the preceding paragraph. However, if the second method was used, both companies would report the same note receivable as an asset, and P Company would show a contingent liability for a note receivable discounted. In the consolidating workpaper, one note receivable must be eliminated, along with the note receivable

discounted account, as shown below in the partial balance sheet section of a consolidated statements workpaper:

| <i>Debits</i>                  | <i>P<br/>Company</i> | <i>S<br/>Company</i> | <i>Eliminations</i> |             | <i>Consolidated<br/>Balances</i> |
|--------------------------------|----------------------|----------------------|---------------------|-------------|----------------------------------|
|                                |                      |                      | <i>Dr.</i>          | <i>Cr.</i>  |                                  |
| Notes Receivable               | 100,000              | 100,000              |                     | (1) 100,000 | 100,000                          |
| <i>Credits</i>                 |                      |                      |                     |             |                                  |
| Notes Receivable<br>Discounted | 100,000              |                      | (1) 100,000         |             | —0—                              |

The consolidated balance sheet would report one receivable from an outside party. The note was discounted to an affiliated company and, therefore, there is no contingent liability to an outside party.

Next, assume that S Company discounted the customer's note with an outside firm. If both companies used Method 1 to record the two discounting transactions, no elimination entry would be required. If the second method was used, the accounts would appear as follows in the trial balances of the two companies:

| <i>Debits</i>               | <i>P<br/>Company</i> | <i>S<br/>Company</i> |
|-----------------------------|----------------------|----------------------|
| Notes Receivable            | 100,000              | 100,000              |
| <i>Credits</i>              |                      |                      |
| Notes Receivable Discounted | 100,000              | 100,000              |

In this case, one of the notes receivable and one of the notes receivable discounted should be eliminated. The consolidated balance sheet would report:

|                                   |            |
|-----------------------------------|------------|
| Notes Receivable                  | \$100,000  |
| Less: Notes Receivable Discounted | 100,000    |
|                                   | <u>—0—</u> |

Alternatively, both notes receivable and both discount accounts could be eliminated and the contingent liability disclosed in a footnote to the consolidated statement.

In the foregoing examples the notes were always transferred from the parent to the subsidiary. The same analysis is appropriate if the notes were transferred from the subsidiary to the parent.

### EXERCISE 9-13 Discounting a Note, Computing Proceeds, and Workpaper Eliminating Entry

Wyatt Corporation, an 80%-owned subsidiary, accepted a \$60,000, 12%, 90-day note from a customer for services performed. On that same date, because Wyatt Corporation was in need of cash for operations, the subsidiary endorsed the note over to its parent company in exchange for \$60,000. After holding the note for 30 days, the parent discounted the note with an independent bank. The discount rate was 13%. Both companies record discounted notes in a Discounted Notes Receivable account.

#### Required:

- A. Compute the proceeds received by the parent company from discounting the note.
- B. Prepare the workpaper entry, if any, needed to eliminate the note. If none is needed, explain why.

## Chapter 9 – Review Questions

The review questions accompanying this course are designed to assist you in achieving the course learning objectives. The review section is not graded; do not submit it in place of your qualified assessment. While completing the review questions, it may be helpful to study any unfamiliar terms in the glossary in addition to course content. After completing the review questions, proceed to the review question answers and rationales.

61. Which of the following statements is accurate regarding the intercompany holding of bonds?
  - a. Although the bonds will be shown as outstanding for each individual company, for purposes of the consolidated entity, they are shown as retired.
  - b. GAAP normally requires recognition of gain or loss on an early extinguishment of debt; however, on a constructive retirement of debt within the entity, no gain or loss would be recognized.
  - c. The calculation of a gain or loss on early extinguishment of debt for a consolidated entity is the subject of disagreement among accounting professionals.
  - d. Any gain or loss calculated would be retained by the controlling interest.
  
62. Which of the following statements is accurate regarding stock dividends?
  - a. A stock dividend by a subsidiary will alter the proportionate share of the parent's investment in the subsidiary.
  - b. A large stock dividend will reduce the retained earnings of the issuer by the market value of the stock issued.
  - c. A large stock dividend is one that is greater than 20-25% of the outstanding shares.
  - d. A small stock dividend will reduce the retained earnings of the issuer by the par value of the stock issued.
  
63. In the second year after a subsidiary issues a stock dividend:
  - a. The reciprocity entry will change to account for the stock dividend.
  - b. The ownership percentage applied to earnings will change.
  - c. The consolidating entry to eliminate the investment account will be unchanged from the years prior to the stock dividend.
  - d. The stock dividends declared account will need to be adjusted in consolidation.



64. Which of the following statements is accurate regarding a liquidating dividend?
- A liquidating dividend will eliminate the retained earnings of the issuing company.
  - A liquidating dividend declared by the subsidiary will impact the journal entries made on the subsidiary books but not on the parent's books.
  - A liquidating dividend is another name for a stock dividend.
  - A liquidating dividend declared by the subsidiary will impact the books for the parent when the dividend comes from pre-acquisition earnings and will require adjusting the consolidating entries.
65. When a subsidiary has preferred stock as well as common:
- The preferred stock must be majority owned by the parent to justify consolidation.
  - The shares of preferred not owned by the parent are considered part of the noncontrolling interest.
  - The preferred stock cannot be eliminated in consolidation.
  - The preferred shares are irrelevant to the consolidation.
66. Which of the following preferred stock features would allocate none of the accumulated retained earnings balance to the preferred shareholders when determining the equity interest of each class of shareholders?
- Cumulative, nonparticipating.
  - Noncumulative, fully participating.
  - Cumulative, fully participating.
  - Noncumulative, nonparticipating.

## Chapter 10 – Insolvency – Liquidation and Reorganization

### Learning Objectives

After completing this section of the course, you will be able to:

- Recognize differences between a Chapter 7 and a Chapter 11 bankruptcy, voluntary and involuntary proceedings and cite the requirements and schedules required in bankruptcy proceedings.
- Identify the five priority categories of unsecured claims as well as the order in which they are settled.
- Recognize differences between fully secured, partially secured, and unsecured claims of creditors.
- Identify contractual agreements that the debtor and its creditors may enter into outside of formal bankruptcy proceedings to resolve the debtor's insolvent position.
- Identify ways that debt may be restructured in a reorganization and calculate the resulting gain or loss to be recognized.
- Cite the accounting and reporting requirements for a trustee when a company goes into receivership.

# INSOLVENCY—LIQUIDATION AND REORGANIZATION

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## CHAPTER CONTENTS

- 10.1 CONTRACTUAL AGREEMENTS
- 10.2 BANKRUPTCY
- 10.3 LIQUIDATION (CHAPTER 7)
- 10.4 REORGANIZATION UNDER THE REFORM ACT (CHAPTER 11)
- 10.5 TRUSTEE ACCOUNTING AND REPORTING
- 10.6 REALIZATION AND LIQUIDATION ACCOUNT

During November 2008, the CEOs of General Motors (GM), Ford, and Chrysler flew in separate corporate jets to Washington, D.C., to request \$25 billion in federal bailout loans. This event turned into a public relations nightmare for the auto companies seeking relief from poor economic times. For the third quarter of 2008, GM posted a \$2.5 billion loss. General Motors stated in its quarterly report that during the first half of the next year (2009), its liquidity would fall significantly short of the amount needed to continue operations. GM announced a 10% cut in salaried employment costs, staffing reductions, and incentive pay cuts. Further steps to save cash included cutting planned capital expenditures by \$2.4 billion. Clearly, GM hoped to weather the downturn on a government bailout. When the CEOs returned to Washington in December, the GM CEO drove a hybrid Chevrolet Malibu. On December 11, 2008, the Senate rejected legislation that would have provided \$14 billion in federal loans to keep GM afloat.

On June 1, 2009, General Motors (GM) filed for Chapter 11 reorganization in the Manhattan, New York, federal bankruptcy court. The filing reported \$82.29 billion in assets and \$172.81 billion in debt. This was the 4th largest bankruptcy in U.S. history. GM was organized into the “new” GM with the U.S. and Canadian governments owning a little over 70% of the company. Brands such as Hummer, Pontiac, and Saturn were discontinued and others such as SAAB were sold. The number of dealerships was reduced by over 15% with long-term intentions to reduce the number by 30%.

After filing for Chapter 11, GM qualified for “fresh start” reporting (ASC 852-10-45-19). The new GM reported on February 24, 2011, that the company had returned to profitability with reported earnings of \$4.7 billion, and had achieved four consecutive quarters of profitability. In addition, cash from operations was \$6.8 billion.

Previous chapters have treated problems relating to the expansion of business activity through mergers and stock acquisitions, as well as the procedures followed in reporting the effects of the expanded operations. But just as some companies expand, others face financial circumstances that cause contraction or cessation of business activities. Every year many businesses, small and large, encounter financial difficulties, and many are forced to seek relief through accommodations with creditors or some form of reorganization in order to survive. Those that are unable to obtain such relief generally terminate operations by liquidating the business unit.

This chapter deals with the various relief procedures available to an insolvent debtor. **Insolvency** refers to the inability of a debtor to pay its obligations as they become due. Our discussion includes relief procedures not requiring court actions, as well as the legal procedures available under the Bankruptcy Reform Act of 1978, relevant provisions of which are discussed in later sections of this chapter. Although the Bankruptcy Reform Act provides for relief of all types of insolvent debtors, including individuals, our discussion will concentrate on the provisions of the act dealing with insolvent business entities. Another view of insolvency, sometimes referred to as deepening insolvency, focuses on the cases where a company incurs debt that would be beyond its ability to repay in the future—cash flow insolvency. In 2007, Bain Capital acquired Guitar Center in a leveraged buyout that resulted in Guitar Center carrying over \$1.6 billion in debt. Guitar Center's annual debt payments exceeded \$144 billion (in 2012, interest expense was approximately 90% of operating income and its cash coverage ratio was slightly over 2 times interest payments). Guitar Center noted in its 10K that they cannot provide any assurance that cash from operating activities will be sufficient to cover the principal and interest on debt.

#### RELATED CONCEPTS

This view could fuel added scrutiny of the auditor's role in assessing going concern likelihood.

When a business becomes insolvent, it generally has three possible courses of action: (1) the debtor and its creditors may enter into a contractual agreement, outside of formal bankruptcy proceedings; (2) the debtor or its creditors may file a bankruptcy petition, after which the debtor is liquidated under Chapter 7 of the Bankruptcy Reform Act; or (3) the debtor or its creditors may file a petition for reorganization under Chapter 11 of the Bankruptcy Reform Act.

## 10.1 CONTRACTUAL AGREEMENTS

### Lo 5 Contractual agreements.

A business that is unable to pay its obligations as they mature may attempt to reach an accommodation with its creditors without recourse to legal action. The procedures are relatively simple. The debtor and its creditors meet and develop a voluntary agreement or plan for settlement of obligations. The possibilities generally include (1) an extension of payment periods, (2) composition agreements, (3) formation of a creditors' committee, or (4) a voluntary assignment of assets.

### Extension of Payment Periods

When the insolvency results from temporary financial difficulties and the debtor is expected to operate profitably in the future if it receives some minor relief, its creditors may find it advantageous in the long run to extend the period of payment of outstanding debts. In this situation, the debtor continues to manage the business with the expectation of obtaining sufficient profitability and financial strength to settle existing debts in full. Such an agreement is often effective for a business with few creditors. No particular accounting problem is encountered, in that interest on the debt normally continues at the originally contracted rate(s) and is paid or accrued periodically. No accounting entries are needed to reflect the extension of the payment period(s), although the nature of the new agreement should be disclosed in notes to the financial statements. FASB ASC paragraph 470–50–40–6 provides that where a debt restructuring involves only a modification of terms of payment, the debtor should account for the effects of the restructuring *prospectively* from the time of restructuring and should not change the carrying amount of the payable, unless the carrying amount

exceeds the total future cash payments of principal and interest specified by the new terms.<sup>1</sup> Thus, no gain is recognized when the restructuring involves an extension of the payment period only.

## Composition Agreements (Creditors Accept Less Than Full Amount)

A composition agreement is an agreement between the debtor and its creditors under which the creditors agree to accept less than the full amount of their claims. In addition, accrued interest is sometimes canceled or the interest rate lowered. Creditors are often given some immediate cash payment, and the amount of the remaining debts and their interest rates are renegotiated. The benefit to the creditors is that they receive an immediate cash payment and expect to eventually receive more than they would if the debtor were forced to liquidate. The benefit to the debtor, of course, is that it can continue to operate with the expectation of returning to profitable operations and, therefore, survive.

## Formation of a Creditors' Committee

The debtor and its creditors may agree to the formation of a creditors' committee that is responsible for managing the debtor's business affairs for the period during which plans are developed to rehabilitate, reorganize, or liquidate the business. Often, an extension of payment periods for debtor obligations is agreed to while the committee deliberates the ultimate disposition of the business. If the decision is to rehabilitate the business, the agreement may include the cancellation or restructuring of existing debts and possible infusion of new capital by the creditors. When the rehabilitation plan is completed, operating control of the business is generally returned to the debtor. If the decision is to reorganize or liquidate the business, the debtor's property may be turned over to a trustee who is responsible for conducting the affairs of the business during the period of reorganization or liquidation.

## Voluntary Assignment of Assets

A debtor may elect to place its property under the control of a trustee for the benefit of its creditors. The purpose of the assignment is to permit the trustee to sell the property and distribute the proceeds among the creditors. If the creditors agree, the assignment results in the full discharge of the debtor's obligations to them. If there are proceeds remaining after payment of the creditors, they are returned to the debtor.

IN  
THE  
NEWS

After failing to come to an agreement with its bakers union, Hostess Brands Inc.'s plan to liquidate its assets was approved by a federal judge. Hostess laid off over 15,000 of its employees and expected to sell off its coveted brand names such as Twinkies, Wonder Bread, and Hostess Cup Cakes.<sup>2</sup>

IN  
THE  
NEWS

During 2008, the number of failed banks totaled 25 equaling then cumulative number of bank failures since 2001. However, in 2009 and 2010, this number skyrocketed to 157 and 140 banks failing respectively. The number of failed banks declined in the subsequent years to a recent low of 24 failed banks in 2013.<sup>3</sup>

<sup>1</sup> FASB ASC paragraph 470-60-35-5 (*Statement of Financial Accounting Standards No.15*, "Accounting by Debtors and Creditors for Troubled Debt Restructurings" (Norwalk, CT.: FASB, 1997), par. 16).

<sup>2</sup> www.cnn.money.com, "Judge approves sale of Twinkies, Wonder Bread," 2013/02/19.

<sup>3</sup> Federal Deposit Insurance Corporation, www.fdic.gov, failed bank list.

## 10.2 BANKRUPTCY

Article I, Section 8 of the U.S. Constitution gives the Congress authority to enact uniform bankruptcy laws. Congress passed the first bankruptcy law in 1800 and has repealed and enacted new laws on several occasions since that time. The most significant revision is the Bankruptcy Reform Act of 1978 (hereafter referred to as the Reform Act), which became effective in October 1979. The Bankruptcy Act was amended in 1984, 1988, 1990, and 1994. The Reform Act consists of eight chapters:

|            |   |
|------------|---|
| Chapter 1  | General Provisions  |
| Chapter 3  | Case Administration   |
| Chapter 5  | Creditors, the Debtor, and the Estate                                 |
| Chapter 7  | Liquidation   |
| Chapter 9  | Adjustment of Debts of a Municipality                                 |
| Chapter 11 | Reorganization  |
| Chapter 12 | Adjustment of Debts of Family Farmers with Regular Income             |
| Chapter 13 | Adjustment of Debts of an Individual with Regular Income <sup>4</sup> |

Chapters 1, 3, and 5 cover general issues, a description of the administrative process, and definitions of various terms that apply to bankruptcy proceedings. The Reform Act provides that a bankruptcy petition may be filed under one of Chapters 7, 9, 11, 12, or 13. Chapter 9, which applies to municipalities seeking voluntary relief, and Chapter 13, which applies to bankruptcy petitions by individuals, will not be discussed here. We will concentrate on petitions by business entities under Chapter 7 (Liquidation) and Chapter 11 (Reorganization).

Provisions of the Reform Act apply to individuals, corporations, and partnerships, all of which are referred to as *persons*, as well as to municipalities seeking voluntary relief from their creditors (municipalities cannot be forced into bankruptcy proceedings). Insurance companies and most financial institutions are excluded because they are covered by other specific statutes.

As mentioned earlier, when a business is unable to pay its obligations as they mature, it may attempt to negotiate some type of contractual agreement with its creditors without initiating a bankruptcy proceeding. If a satisfactory agreement cannot be reached, a legal petition for bankruptcy will be initiated by either the debtor (a voluntary petition) or its creditors (an involuntary petition). The Reform Act uses the single term *debtor* to refer to the subject of a bankruptcy proceeding.



IN  
THE  
NEWS

The 2005 revision of the bankruptcy statute was designed to make it more difficult for consumers to shed their debts. It aimed to steer more debtors into Chapter 13, where debtors work out a repayment plan, instead of Chapter 7, where filers forfeit their assets and their debts are forgiven. But only about a third of debtors file under Chapter 13.

The bankruptcy law was passed prior to the housing slump and the deep recession that pushed unemployment to nearly 10%. Combined with tightened access to consumer credit, which tends to spur a rise in bankruptcies, the downturn has pushed filings to levels higher than backers of the law anticipated.<sup>5</sup>

In April 2005, the Bankruptcy Abuse Prevention and Consumer Protection Act of 2005 was signed; it became effective in October 2005. The aim of this law is to protect creditors from abuses related to Chapter 7 bankruptcies. Most debts have been discharged completely under Chapter 7 in past years; while attractive to struggling debtors, creditors view this leniency as an invitation to abuse. The alternatives under Chapters 11 and 13

<sup>4</sup> Several revisions to the bankruptcy statute over time have resulted in the elimination of some chapters by their consolidation with others. For example, Chapters VIII, X, XI, and XII (before the Reform Act, Roman numerals were used) were consolidated into Chapter 11 of the Reform Act.

<sup>5</sup> *WSJ*, "Bankruptcy Filings Leapt 9% Last Year," by Sara Murray, 1/4/11.

focus instead on helping the debtor to work out realistic payment plans and become financially stable rather than discharging their debts with ease. However, the major changes under the 2005 act relate to individual debtors rather than to businesses.

## Voluntary Petitions

**Lo 3** Voluntary vs. involuntary petitions.

A debtor may file a voluntary petition with a bankruptcy court for liquidation under Chapter 7 or for reorganization under Chapter 11. Filing of a voluntary or involuntary petition constitutes an *order for relief*, which prohibits the start or continuation of legal action against the debtor by its creditors. The bankruptcy judge, however, may refuse a voluntary petition if refusal is considered to be in the best interest of the creditors.

The bankruptcy petition (either voluntary or involuntary) is an official form that initiates bankruptcy proceedings and establishes an *estate* consisting of the debtor's assets. The debtor must file a form listing all its property (at current market values) and its debts. This form, called a Statement of Assets and Liabilities, consists of the following separate schedules:

**IN THE NEWS**  
Chapter 11 filings by physician practices have increased in 2013. The weak economy has resulted in fewer office visits by patients and a reduced number of elective procedures. Doctors also faced higher malpractice insurance rates and reduced insurance reimbursements. Many of the physician practices were forced to shut down.<sup>6</sup>

|  |   |
|--|---|
| Schedule A. Statement of All Liabilities of Debtor |   |
| Schedule A-1.                                      | Creditors Having Priority (with amount of claims)                               |
| A-2.   | Creditors Holding Security (with market value of security and amount of claims) |
| A-3.   | Creditors Having Unsecured Claims without Priority (with amount of claims)      |
| Schedule B. Statement of All Property of Debtor.   |   |
| Schedule B-1.                                      | Real Property (with market values)  |
| B-2.   | Personal Property (with market values)  |
| B-3.   | Property Not Otherwise Scheduled (property discovered later)                    |
| Schedule B-4.                                      | Property Claimed as Exempt (pertains to individuals only)                       |

In addition, the debtor must complete a questionnaire, called a Statement of Affairs, containing questions concerning all aspects of its financial condition and operations.

## Involuntary Petitions

In an involuntary proceeding, creditors initiate the action by filing a petition for liquidation or reorganization with the bankruptcy court. If there are 12 or more creditors, the petition must be signed by 3 or more such creditors whose claims aggregate at least \$13,475 more than the value of any liens on the property of the debtor.<sup>7</sup> If there are fewer than 12 creditors, the petition may be filed by one or more such creditors whose claims aggregate at least \$10,000 more than the value of any liens on the debtor's property. Involuntary petitions may be filed under either Chapter 7 or Chapter 11 of the Reform Act. The bankruptcy court will generally enter an order for relief against the debtor only if evidence indicates that the debtor, in fact, has not been paying its debts as they become due.

## Secured and Unsecured Creditors

**Lo 4** Secured and unsecured creditors.

Creditors are classified by law as *secured* or *unsecured*. Secured creditors are those whose claims are secured by liens or pledges of specific assets. If the proceeds from the sale of a pledged asset(s) exceed the secured claim, the excess proceeds are available for distribution to unsecured creditors. If the secured claim exceeds the proceeds from the sale of a pledged

<sup>6</sup> Money.cnn.com, "Doctors driven to bankruptcy," by Parija Kavilanz, 4/8/2013.

<sup>7</sup> Section 104 provides for an adjustment every three years.

asset(s), the remaining claim constitutes an unsecured claim. Unsecured creditors do not have claims to proceeds received from the sale of specific assets but are paid from whatever total money remains after secured creditors have been satisfied. That is, secured creditors are paid first with the proceeds from the sale of specific assets upon which they have liens. Thereafter, unsecured creditors, including those having priority, are paid from whatever proceeds remain from the realization process. Thus, it is probably better to classify claims as fully secured, partially secured, or unsecured. Fully secured claims are those with liens against assets whose realizable value is equal to or in excess of the claim. Partially secured claims are those with liens against assets whose realizable value is less than the amount of the claim.

**Lo 2** Five priority categories for unsecured claims.

The Reform Act assigns priorities to certain claims, and each rank must be satisfied in full before the next-lower rank is paid. The following order of priority for *unsecured* creditors is specified as follows:

1. Administration expenses, fees, and charges incurred in administering the bankrupt's estate.
2. Unsecured claims for wages, salaries, or commissions earned by an employee within 90 days before the date of filing of the petition, but limited to the extent of \$4,650 per employee.
3. Unsecured claims for contributions to employee benefit plans from services rendered within 180 days before the date of the filing of the petition, but subject to certain limitations.
4. Unsecured claims of individuals, to the extent of \$2,100 for each such individual, arising from the deposit of money in connection with the purchase, lease, or rental of property or services that were not delivered or performed.
5. Unsecured claims of governmental units for unpaid taxes.

After all these priorities have been satisfied, any remaining unsecured creditors participate pro rata in any remaining realization proceeds. The distribution to unsecured creditors is termed a *dividend* and is generally expressed in terms of the percentage of the total unsecured claims that will be paid. For example, if \$100,000 of proceeds remains after all secured claims and claims having priority have been paid, and total unsecured claims amount to \$400,000, each unsecured creditor will receive a 25% dividend.

IN  
THE  
NEWS

#### Ten Largest Bankruptcies

| Company                  | Date Filed | Assets          |
|--------------------------|------------|-----------------|
| Lehman Brothers Holdings | 09/15/08   | \$691 billion   |
| Washington Mutual        | 09/26/08   | \$327.9 billion |
| WorldCom                 | 07/21/02   | \$103.9 billion |
| General Motors           | 06/01/09   | \$91 billion    |
| CIT                      | 11/01/09   | \$71 billion    |
| Enron                    | 12/02/01   | \$65.5 billion  |
| MF Global                | 10/31/11   | \$41 billion    |
| Conseco                  | 12/17/02   | \$61 billion    |
| Chrysler                 | 04/30/09   | \$39 billion    |
| Thornburg Mortgage       | 05/01/09   | \$36.5 billion  |

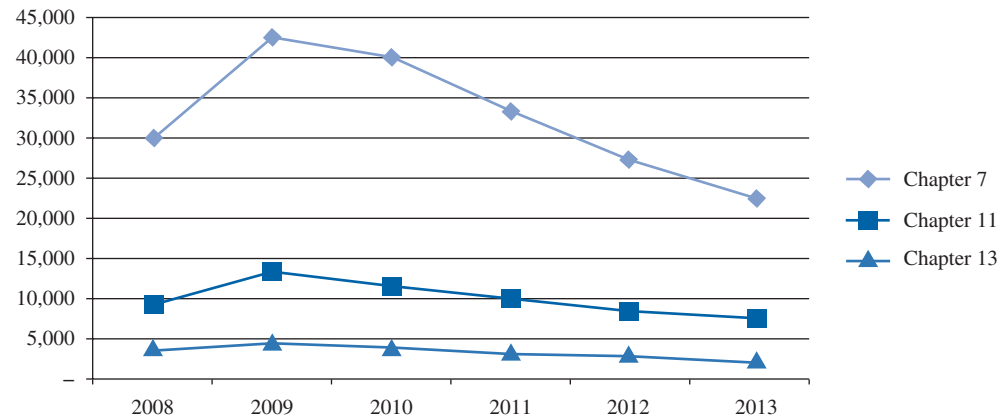
Source: [www.businessinsider.com](http://www.businessinsider.com) 11/29/2011.

In Illustration 10-1, the number of business bankruptcies filed between 2009 and 2013 have been declining to levels approaching the pre-financial industry crisis.



## ILLUSTRATION 10-1

## Business Bankruptcies by Chapter



## 10.3 LIQUIDATION (CHAPTER 7)

### LO 1 Chapter 7 versus Chapter 11.

#### RELATED CONCEPTS

A primary underlying concept in accounting has traditionally been historical cost. This principle only makes sense if the going concern assumption is met. For instance, depreciation allocations do not make sense if the firm is not expected to continue to exist.

#### IN THE NEWS

Since 2001, the 10 major U.S. airlines have been reduced to 4 after

a series of bankruptcies and mergers.<sup>8</sup>

In addition to a voluntary assignment of assets, which constitutes a liquidation without bankruptcy proceedings, a voluntary or involuntary petition for liquidation may be filed under Chapter 7 of the Reform Act. Upon filing, the bankruptcy court must decide whether to accept or dismiss the petition. Although dismissals occur infrequently, the debtor may dispute an *involuntary petition*, in which case a trial will be held to determine whether the petition should be dismissed.

If the petition is accepted, an order for relief is entered and the bankruptcy court will appoint an interim trustee to oversee activities until a permanent trustee is selected. In addition, the court must call a meeting of the debtor's creditors, who will select a trustee and elect a creditors' committee to assist the trustee in the administration of the estate. If the creditors cannot agree on a trustee, the interim trustee becomes the trustee. Only creditors who have filed a claim at or before the meeting are entitled to vote. The interim trustee examines the claims and accepts them or, if improper, disallows them. The debtor must attend the creditors' meeting to answer questions by the creditors and the trustee, to clarify the contents of the Statement of Affairs included with the petition, and to generally assist the trustee in the preparation of an inventory of property and the examination of claims.

#### Duties of the Trustee

The duties of the trustee in liquidation are specified in the Reform Act. The trustee shall:

1. Collect and reduce to money the property of the estate.
2. Account for all money and property received.
3. Investigate the financial affairs of the debtor.
4. Examine claims and disallow any that are improper.
5. Furnish reasonable requests for information about the estate and its administration to parties of interest.
6. Operate the business of the debtor during the liquidation period if authorized by the court, and file periodic reports and summaries of operations.
7. Pay creditors as promptly as possible, giving due regard to secured claims and priorities.
8. File a final report on the administration of the estate, including a statement of receipts and disbursements.

<sup>8</sup> www.money.cnn.com 4/17/2014.

In addition, the trustee has the authority to hire attorneys, accountants, appraisers, and other professionals to assist in carrying out his or her duties.

## 10.4 REORGANIZATION UNDER THE REFORM ACT (CHAPTER 11)

### LO 1 Chapter 7 versus Chapter 11.

Creditors of an insolvent debtor may believe that their long-range interests would be better served by rehabilitating or reorganizing the debtor than by having it liquidated. In such a case, the creditors and debtor may agree to a plan for re-organization without recourse to the judicial process by employing one or more of the contractual agreements discussed earlier in this chapter. Alternatively, the debtor or creditors may prefer to file with the bankruptcy court a petition for reorganization under Chapter 11 of the Reform Act. The company has the exclusive right to develop its reorganization plan within the first 120 days, after which any interested parties may propose a bankruptcy plan. The court can extend the exclusivity period, but the exclusivity period cannot extend beyond 18 months.

The Reform Act provides that, as soon as practicable after the acceptance of a petition for reorganization, the court shall appoint a committee of creditors holding unsecured claims, ordinarily consisting of those holding the seven largest claims against the debtor. The court may appoint additional committees of creditors or of stockholders if necessary to assure adequate representation of creditors and stockholders. If a committee of stockholders is appointed, it will normally consist of the persons who hold the seven largest amounts of equity securities.

The committee appointed by the court has the following powers and duties:

1. Select and authorize the appointment of one or more attorneys, accountants, or other agents, to represent or perform services for the committee.
2. Consult with the trustee or debtor concerning the administration of the case.
3. Investigate the acts, conduct, assets, liabilities, and financial condition of the debtor, the operation of the debtor's business and the desirability of the continuance of such business, and any other matter relevant to the case or to the formulation of a plan.
4. Participate in the formulation of a plan, advise those represented by the committee of the committee's recommendations as to any plan formulated, and collect and file with the court acceptances of a plan.
5. Request the appointment of a trustee if a trustee has not previously been appointed in the case.<sup>9</sup>
6. Perform such other services as are in the interest of those represented.

The court may permit the debtor to maintain possession of its assets and conduct the affairs of the business, or it may appoint a trustee. If a trustee is appointed, his or her primary duties in reorganization are:

1. Be accountable for all property received.
2. Examine claims and object to the allowance of any claim that is improper.
3. Furnish such information concerning the estate and the estate's administration as is requested by a party in interest.
4. If the business of the debtor is authorized to be operated, file with the court and with any governmental unit charged with responsibility for collection of any tax arising out of such operation, periodic reports and summaries of the operation of the business.
5. If the debtor has not done so, file with the court a list of creditors, a schedule of assets and liabilities, and a statement of the debtor's financial affairs.
6. File a plan of reorganization.
7. After confirmation of a plan, file such reports as are required by the court.

The reorganization plan may propose the alteration of legal, contractual, and equity interests of any class of creditors or equity security holders. Unsecured creditors will generally accept payment of a portion of their claims and cancellation of the remainder of

<sup>9</sup> A trustee must be appointed if the debtor's debts (other than debts for goods, services, or taxes) exceed \$5,000,000.

their claims. The plan must be equitable to all parties by providing for the same treatment for each claim or interest of a particular class. The plan must also contain adequate means for its own execution; that is, it must contain specific provisions for such things as (1) the retention of any property by the debtor, (2) the transfer of property to other entities, (3) the merger or consolidation of the debtor with another company, (4) the sale of property or the distribution of property to parties of interest, and (5) the issuance of securities of the debtor for cash, property, or existing securities of the debtor. After the plan is filed with the court, it must be accepted by two-thirds in amount and one-half in number of the allowed claims of each class of creditors, and by two-thirds in amount of the allowed interests of each class of stockholders. In addition, the court must approve of the overall fairness of the plan before it will be accepted.



IN  
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When a firm files for bankruptcy, one of the first things that it will do is to ask the bankruptcy-court judge to approve a loan in the form of senior secured debtor-in-possession financing. This type of debt provides the banks a 'superiority' status, which means that they will be paid for new loans before anyone else.<sup>10</sup>



IN  
THE  
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### Chapter 11 Proceedings

"Accounting Standards Codification (ASC) 852, 'Reorganizations', is applicable to entities operating under Chapter 11 of the Bankruptcy Code. ASC 852 generally does not affect the application of U.S. GAAP used to prepare prior consolidated financial statements. It does require increased disclosures for transactions and events that were directly related to the Chapter 11 proceedings.<sup>11</sup>

### TEST YOUR KNOWLEDGE 10.1

**NOTE:** Solutions to *Test Your Knowledge* questions are found at the end of each chapter before the end-of-chapter questions.

#### Multiple Choice

1. The highest priority for payment of unsecured claims in a bankruptcy proceeding is
  - a. Wages up to \$4,650 earned within three months before the petition
  - b. Unpaid federal income taxes
  - c. Administrative expenses of the bankruptcy
  - d. Wages owed to an insolvent employee

#### True or False

2. \_\_\_\_\_ Insolvency means that a debtor has more current liabilities than current assets.
3. \_\_\_\_\_ If an insolvent debtor has more than 12 creditors, an involuntary petition must be signed by at least 3 of those creditors.
4. \_\_\_\_\_ Unsecured creditors with priority will receive full satisfaction before secured creditors are paid.
5. \_\_\_\_\_ Either a debtor or its creditors may file a petition for reorganization under Chapter 11 of the Reform Act.

## Fresh Start Accounting and Quasi Reorganization

In 1990, the AICPA released *Statement of Position (SOP) 90-7* providing guidance on reporting standards for firms in bankruptcy and emerging from bankruptcy (now incorporated in FASB ASC topic 852 [Reorganizations]). When firms emerge from bankruptcy (also referred to as confirmation of the plan of reorganization), FASB ASC paragraphs 852-10-45-19 to 20 provide for *fresh start* accounting. Basically, the implication is that a new firm exists. Because of this, assets and liabilities are reported at fair values and beginning retained earnings is reported at zero (the prior balance, positive or negative, is eliminated). Two conditions must exist before fresh start accounting can be used. The fair

<sup>10</sup> *WSJ*, "WorldCom Plans Bankruptcy Filing," by Shawn Young, Carrick Mollenkamp, Jared Sandberg, and Henny Sender, 7/22/02, p. A3.

<sup>11</sup> GM 10-K, 12/31/10, p. 154.

value of the assets must be less than the post liabilities and allowed claims, and the original owners must own less than 50% of the voting stock after reorganization.

While fresh start accounting applies only to firms emerging from bankruptcy, a less formal procedure, known as quasi reorganization, is often applied in periods of declining prices. Three steps are required:

1. Authorization from creditors and stockholders is required.
2. All assets are revalued to fair values with losses recorded in retained earnings.
3. The deficit in retained earnings is eliminated by charging to (reducing) paid-in capital.

If paid-in capital is not sufficient to eliminate retained earnings, the capital stock account is reduced, thus causing a reduction in the par value of the stock. No retained earnings can be created in a quasi reorganization, and retained earnings must be “dated” for 10 years. This means that the firms disclose on the balance sheet that the balance in retained earnings has only been accumulated since the date of the quasi reorganization.

## Fresh Start Accounting and General Motors

The first step after filing for Chapter 11 is that the company must reorganize. Then, depending on the circumstances, the firm might qualify for fresh start accounting. *Fresh start accounting* is exactly what the name implies. The company provides a fresh presentation of newly valued assets and adjusted liabilities. Basically, it cleans up the balance sheet, eliminates accumulated losses, and improves the chances of survival for the new company coming out of bankruptcy.

Two conditions must be met in order to qualify for fresh start accounting (FASB ASC paragraph 852-10-45-19):

1. The reorganization value of the assets of the emerging entity immediately before the date of confirmation is less than the total of all postpetition liabilities and allowed claims.
2. The holders of existing voting shares immediately before confirmation receive less than 50% of the voting shares of the emerging entity.

If the firm qualifies, the company’s reorganized value is assigned to the entity’s assets and liabilities in accordance with FASB ASC subtopic 805-20 (Business Combinations—Identifiable Assets, Liabilities, and any Noncontrolling Interest).

Additionally, the effects of the adjustments on the reported amounts of individual assets and liabilities resulting from the adoption of fresh start reporting and the effects of the forgiveness of debt shall be reflected in the predecessor entity’s final statement of operations. Forgiveness of debt, if any, shall be reported as an extinguishment of debt and classified in accordance with FASB ASC subtopic 225-20 (Income Statement—Extraordinary and Unusual Items).

Adopting fresh start reporting results in a new reporting entity with no beginning retained earnings or deficit. When fresh start reporting is adopted, the notes to the initial fresh start financial statements shall disclose the following additional information (FASB ASC paragraph 852-10-50-7):

- a. Adjustments to the historical amounts of individual assets and liabilities
- b. The amount of debt forgiveness
- c. Significant matters relating to the determination of reorganization value, including all of the following:
  1. The method or methods used to determine reorganization value and factors such as discount rates, tax rates, the number of years for which cash flows are projected, and the method of determining terminal value
  2. Sensitive assumptions—that is, assumptions about which there is a reasonable possibility of the occurrence of a variation that would have significantly affected measurement of reorganization value
  3. Assumptions about anticipated conditions that are expected to be different from current conditions, unless otherwise apparent

As a result of fresh start accounting, GM reduced its liabilities by \$93.4 billion and increased its assets by \$34.6 billion. One interesting (and rather ironic) aspect of GM's fresh start was the creation of additional recorded goodwill of \$30.2 billion. This asset results from the application of several accounting rules. For instance, in valuing liabilities, the firm's creditworthiness must be considered. Since GM's creditworthiness was considered somewhat problematic, higher discount rates are used to value liabilities, resulting in lower valuations for liabilities and higher goodwill amounts. Similarly, lower tax asset carrying values (which are lower than market) also contributed to higher goodwill amounts.

## Accounting for Reorganizations—Troubled Debt Restructurings

Standards followed in debt restructurings are contained in FASB ASC subtopic 310-40 (debt restructuring by creditors) and FASB ASC subtopic 470-60 (debt restructuring by debtors). The standards deal primarily with valuation problems, the recognition of gain or loss on restructuring, and general disclosure requirements. In general, these subtopics do not apply to bankruptcy cases where there is a general restatement of liabilities; they apply only when dealing with individual creditors or debtors. In the appropriate section below, we highlight the primary differences between a bankruptcy and a nonbankruptcy. FASB ASC subtopic 310-40 dictates the accounting for a creditor in a debt restructuring.

Debt may be restructured in any one (or a combination) of the following methods:

1. The debtor may transfer assets in full settlement of the payable.
2. The debtor may give an equity interest in its firm in full settlement of the payable.
3. The creditor may modify terms of the payable.

### LO 6 Debt restructuring.

**Transfer of Assets** A debtor that transfers assets to a creditor in full settlement of a payable recognizes a gain on the restructuring. The gain is measured by the excess of the carrying value of the payable over the fair value of the assets transferred. The **carrying value** of the payable is the face amount increased or decreased by applicable accrued interest and applicable unamortized premium, discount, finance charges, or issue costs. The **fair value** of the assets transferred is the amount that the debtor could reasonably expect to receive in a current sale between a willing buyer and a willing seller, that is, other than in a forced sale. The difference between the fair value and the carrying amount of the assets transferred is a gain or loss on the transfer of assets and is reported as a component of net income for the period of transfer. The gain on restructuring is included in net income in the period of restructuring. Assume, for example, that a debtor transferred land with a cost of \$20,000 and a fair value of \$15,000 to a creditor in full settlement of a \$25,000 payable. Ignoring income tax effects, the debtor would report a \$5,000 loss ( $\$20,000 - \$15,000$ ) from the transfer of assets and a \$10,000 ordinary gain ( $\$25,000 - \$15,000$ ) from debt restructuring.

**Grant of an Equity Interest** A debtor that issues an equity interest in its firm to a creditor in full settlement of a payable shall account for the equity interest at its fair value. The difference between the fair value of the equity interest issued and the carrying amount of the payable is reported as a gain on restructuring. The debtor determines its gain based on undiscounted cash flows.

**Modification of Terms** A debtor, in a troubled debt restructuring involving only modification of terms of a payable, accounts for the effects of the restructuring *prospectively* from the time of restructuring. The carrying value of the payable is not changed at the time of restructuring unless the carrying value exceeds the total future cash payments specified by the new terms. That is, the effects of changes in the amounts or timing (or both) of future cash payments designated as either interest or face amount are reflected in future periods. Interest expense is computed in such a way that a constant effective interest rate is applied to the carrying value of the payable at the beginning of each period between restructuring and maturity. The new effective interest rate is the discount rate that equates

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For cash-strapped companies in bankruptcy proceedings caught in the

balance between staying open and shutting down, debtor-in-possession loan agreements have become the lifeline that keeps employees paid, vendors delivering, and the doors open.

Such loans, known as DIP financing, have gained more attention as household names in Chapter 11, such as retailer Kmart Corp., with \$2 billion in DIP financing, and cable company Adelphia Communications Corp., with a \$1.5 billion DIP loan, have secured this type of lending to stay afloat.<sup>13</sup>

the present value of the future cash payments specified by the new terms with the carrying value of the payable. This is the approach that is followed in bankruptcy regardless of whether the total future cash payments exceed the existing carrying value of the debt plus accrued interest.

If, however, in a nonbankruptcy case, the total future cash payments specified by the new terms, including both payments designated as interest and those designated as face amount, are less than the carrying value of the payable, the debtor should reduce the carrying value to an amount equal to the total future cash payments specified by the new terms and recognize a gain on restructuring. Thereafter, all cash payments under the terms of the payable should be accounted for as reductions of the carrying value of the payable, and no interest expense should be recognized on the payable for any period between the restructuring and maturity.

A restructuring may involve a combination of asset transfer, grant of an equity interest, and modification of terms. In those cases, assets transferred or the equity interest given are treated first and measured as described earlier. The carrying value of the payable is reduced by the total fair value of the assets transferred or equity interest given, and a gain or loss on the transfer of assets is recognized for the difference between the fair value and carrying value of the assets transferred. A gain on restructuring is then recognized only if the remaining carrying value of the payable exceeds the total future cash payments specified by the terms of the debt remaining unsettled.<sup>12</sup>

A creditor in a modification of the terms computes the loss by discounting all the future cash flows (face value and interest) using the original effective interest rate. If this amount is less than the carrying value of the existing debt (plus accrued interest), the difference is charged to bad debt expense with a credit to a valuation allowance account (less accrued interest). Then, as interest payments are received, the valuation allowance account is amortized and the cash interest receipts are recorded as interest revenue over the remaining life of the debt.

## Restructuring Illustration

To illustrate the accounting process, assume that Box Company filed a petition for reorganization with the bankruptcy court. The reorganization plan has been approved by the parties of interest and the court. Box Company's balance sheet on April 30, 2015 prior to reorganization, is shown in Illustration 10-2.

Provisions of the reorganization plan and the appropriate journal entries to account for the restructuring follow:

1. Creditors represented by the unsecured accounts payable agree to accept the accounts receivable of Box Company in full settlement of their claims. The fair value of the receivables, which is not guaranteed by Box Company, is \$100,000. CV indicates carrying value, while FV indicates fair value.

|  |         |         |
|--|---------|---------|
| Allowance for Uncollectibles                                 | 13,000  |         |
| Loss on Transfer of Assets (CV less FV)                      | 7,000   |         |
| Accounts Receivable  |         | 20,000  |
| To reduce the receivable to fair value.                      |         |         |
| Accounts Payable—Unsecured                                   | 134,000 |         |
| Accounts Receivable (at fair value)                          |         | 100,000 |
| Gain on Restructuring of Debt                                |         | 34,000  |
| To record the settlement of the payable with the receivable. |         |         |

Notice that a loss on transfer of assets is recognized for the difference between the book value of the receivables (\$107,000) and their fair value (\$100,000). A gain on

<sup>12</sup> FASB ASC paragraph 470-60-35-8 (*Statement of Financial Accounting Standards No. 15*, Par. 19).

<sup>13</sup> *The Wall Street Journal*, "Debtor Loans Help Cash-Poor Firms," by Marc Hopkins, 7/24/02, p. B3G.

**ILLUSTRATION 10-2****Box Company Balance Sheet April 30, 2015**

|   |                  |                  |
|---|------------------|------------------|
| Current Assets                                      |                  |                  |
| Cash  |                  | \$ 86,000        |
| Accounts Receivable                                 | \$120,000        |                  |
| Less: Allowance for Uncollectibles                  | <u>13,000</u>    | 107,000          |
| Inventories   |                  | <u>142,000</u>   |
| Total Current Assets                                |                  | 335,000          |
| Plant and Equipment                                 | 680,000          |                  |
| Less: Accumulated Depreciation                      | <u>275,000</u>   | 405,000          |
| Land Held as an Investment                          |                  | <u>80,000</u>    |
| Total Assets  |                  | <u>\$820,000</u> |
| Current Liabilities                                 |                  |                  |
| Accounts Payable—Secured by Inventory               |                  | \$ 60,000        |
| Accounts Payable—Unsecured                          |                  | 134,000          |
| Notes Payable—Unsecured                             |                  | 200,000          |
| Accrued Expenses—with Priority                      |                  | 24,000           |
| Accrued Interest Payable                            |                  | <u>50,000</u>    |
| Total Current Liabilities                           |                  | 468,000          |
| Bonds Payable—Unsecured                             |                  | <u>450,000</u>   |
| Total Liabilities                                   |                  | 918,000          |
| Stockholders' Equity                                |                  |                  |
| Common Stock, \$1 par value                         | \$500,000        |                  |
| Retained Earnings (deficit)                         | <u>(598,000)</u> |                  |
| Total Stockholders' Deficiency                      |                  | (98,000)         |
| Excess of Liabilities over Stockholders' Deficiency |                  | <u>\$820,000</u> |

restructuring is then recognized for the difference between the carrying value of the payable (\$134,000) and the fair value of the receivables (\$100,000).

**2.** Accrued expenses with priority are paid in full.

|                  |        |        |
|------------------|--------|--------|
| Accrued Expenses | 24,000 |        |
| Cash             |        | 24,000 |

**3.** A creditor holding a \$120,000 note from Box Company agrees to accept the land held as an investment in full settlement of the note plus accrued interest of \$8,000. The land has a fair value of \$95,000.

|   |         |        |
|---|---------|--------|
| Land (increase to fair value)           | 15,000  |        |
| Gain on Transfer of Assets (FV less CV) |         | 15,000 |
| Notes Payable (at carrying value)       | 120,000 |        |
| Accrued Interest Payable                | 8,000   |        |
| Land (at fair value)                    |         | 95,000 |
| Gain on Restructuring of Debt           |         | 33,000 |

The land is increased to its fair value and a gain on transfer of assets is recognized in the amount of \$15,000. The land and payable are then written off and a gain on restructuring is recognized for the difference between the carrying value of the payable (\$128,000) and the fair value of the land (\$95,000).

**4.** A creditor holding a 14%, \$80,000 note from Box Company (on which \$4,000 interest has accrued) agrees to extend the maturity date of the note for two years (until April 30, 2017) and reduce the interest rate to 8%.

|                          |        |        |
|--------------------------|--------|--------|
| Note Payable             | 80,000 |        |
| Accrued Interest Payable | 4,000  |        |
| Restructured Debt        |        | 84,000 |

Since the total future cash payments of \$92,800 (principal of \$80,000 and interest of \$12,800) exceed the carrying value of the debt (\$84,000), no gain on restructuring is recognized. Interest expense is recorded in the future by computing the effective interest rate that, when applied to the carrying amount of the payable at the beginning of the period, will amortize the debt over the period to maturity.

5. Bondholders agree to accept an equity interest in Box Company of 150,000 shares of common stock in exchange for the par value of the bonds. Accrued interest of \$38,000 is to be paid in cash by January 1, 2016. The market value of the common stock is \$1.25 per share.

|   |         |         |
|---|---------|---------|
| Bonds Payable                               | 450,000 |         |
| Common Stock (150,000 × \$1)                |         | 150,000 |
| Other Contributed Capital (150,000 × \$.25) |         | 37,500  |
| Gain on Restructuring of Debt               |         | 262,500 |

Since the carrying value of the bonds payable exceeds the fair value of the equity interest given, a gain on restructuring is recognized.

6. Bankruptcy administration expenses totaling \$16,000 are paid in cash.

|                                    |        |        |
|------------------------------------|--------|--------|
| Bankruptcy Administration Expenses | 16,000 |        |
| Cash                               |        | 16,000 |

The net gain on transfer of assets (\$15,000 – \$7,000) will be reported as a part of operations on the income statement, and the gain on restructuring of debt of \$329,500 (\$34,000 + \$33,000 + \$262,500) is reported in net income. If the conditions are met, the gain on restructuring may be reported as an extraordinary item. After giving effect to the reorganization entries, Box Company's balance sheet will be as shown in Illustration 10-3.

Notice that, although the stockholders' deficiency has been eliminated, there is still a retained earnings deficit. If desired by the parties of interest, the reorganization plan could have included a provision to decrease the par value of the common stock and eliminate the accumulated deficit.

### ILLUSTRATION 10-3

#### Box Company Balance Sheet May 1, 2015

|  |           |                   |
|--|-----------|-------------------|
| Current Assets   |           |                   |
| Cash   |           | \$ 46,000         |
| Inventories  |           | 142,000           |
| Total Current Assets   |           | 188,000           |
| Plant and Equipment  | \$680,000 |                   |
| Less: Accumulated Depreciation                                       | 275,000   | 405,000           |
| Total Assets   |           | <u>\$593,000</u>  |
| Current Liabilities  |           |                   |
| Accounts Payable   |           | \$ 60,000         |
| Accrued Interest Payable (due 1/1/2016)                              |           | 38,000            |
| Total Current Liabilities  |           | 98,000            |
| Restructured Debt—due 4/30/17  |           | 84,000            |
| Total Liabilities  |           | 182,000           |
| Stockholders' Equity   |           |                   |
| Common Stock, \$1 par value  | \$650,000 |                   |
| Other Contributed Capital  | 37,500    |                   |
| Retained Earnings (deficit) (\$598,000 + 16,000 – 8,000 – \$329,500) | (276,500) |                   |
| Total Stockholders' Equity   |           | 411,000           |
| Total Liabilities and Stockholders' Equity                           |           | <u>\$ 593,000</u> |



**TEST YOUR KNOWLEDGE** 10.2

**NOTE:** Solutions to *Test Your Knowledge* questions are found at the end of each chapter before the end-of-chapter questions.

**Short Answer**

Assume that a debtor owes a creditor a \$10,000 note payable with \$2,000 accrued interest. Determine the amount of the gain or loss included in ordinary income and/or the amount of the gain or loss from restructuring. Assume that land with a book value of \$8,000 and a fair value of \$9,000 is given in full payment of the amount owed.

**The “Accounting” Statement of Affairs<sup>14</sup>**

The Reform Act provides that a plan for reorganization will not be approved by the court unless it can be shown that creditors will receive at least as much as they would receive if the debtor were liquidated. Consequently, it is important that the estimated amounts to be received by all parties be determined before filing either a liquidation or reorganization petition with the court. The *Statement of Affairs* is a report designed to show the estimated amount that would be received by each class of claim in the event of liquidation. It is essentially a balance sheet prepared on the basis of an assumption of liquidation rather than on the going-concern assumption. The appropriate emphasis is no longer one of reporting residual costs, but one of reporting on the legal status of resources and claims against those resources. Thus, assets are reported at their expected realizable values, rather than at book values.

In addition, the current/noncurrent distinction is set aside, and assets are segregated into those that are pledged with fully secured creditors, those that are pledged with partially secured creditors, and those that are essentially “free” and therefore available to settle unsecured claims. Likewise, the current/noncurrent distinction for liabilities is meaningless; that is, if the company liquidates, all liabilities are current. Thus, liabilities are classified on the basis of their legal status as those having priority, those that are fully secured, those that are partially secured, and those that are unsecured.

In summary, the Statement of Affairs is an accounting report that is designed to permit the user to determine the total expected amounts that could be realized on the disposition of the assets, the priorities in the use of the realization proceeds in satisfying claims, and the potential net deficiency that would result if the assets were realized and claims liquidated. In that respect, stockholders’ or owners’ equity balances have no significance.

**Illustration of a Statement of Affairs** As an illustration of a Statement of Affairs, assume that the Preston Company had the following balance sheet on April 30, 2015, at which time the company is contemplating filing a petition for liquidation or reorganization.

Additional information concerning estimated realizable values and other balance sheet relationships follows:

1. The notes receivable are expected to be fully realized, and they have been pledged as collateral on a bank note in the principal amount of \$20,000 plus accrued interest of \$600.
2. Accounts receivable have an estimated collectible value of \$28,000.
3. Inventories have a realizable value of \$102,280.

<sup>14</sup> This statement is an accounting report and should not be confused with the Statement of Affairs the Bankruptcy Reform Act requires from the debtor company, which is simply a series of questions concerning the debtor company’s financial position.

**Preston Company**  
**Balance Sheet April 30, 2015**

| <i>Assets</i>  |                  |
|--|------------------|
| Cash   | \$ 8,200         |
| Notes Receivable   | 24,000           |
| Accounts Receivable (net)                                      | 47,000           |
| Inventories  | 119,000          |
| Prepaid Expenses   | 1,200            |
| Investment in Beta Company Stock, 1,000 Shares at Market Value | 26,500           |
| Land   | 42,000           |
| Buildings (net)  | 198,000          |
| Machinery and Equipment (net)                                  | 93,000           |
| Total Assets   | <u>\$558,900</u> |
| <i>Liabilities and Stockholders' Equity</i>                    |                  |
| Bank Notes Payable   | \$ 32,000        |
| Accounts Payable   | 195,000          |
| Accrued Salaries and Wages                                     | 13,500           |
| Accrued Interest   |                  |
| On bank notes  | 1,100            |
| On mortgage note   | 8,500            |
| Mortgage Note Payable  | 200,000          |
| Capital Stock  | 250,000          |
| Retained Earnings (deficit)                                    | (141,200)        |
| Total Liabilities and Stockholders' Equity                     | <u>\$558,900</u> |

4. The recovery value of prepaid expenses is \$600.
5. The Investment in Beta Company stock is pledged as collateral on a bank note payable in the principal amount of \$12,000 plus accrued interest of \$500.
6. Land and buildings have an appraised value of \$140,000 and serve as collateral on the mortgage note payable.
7. The machinery and equipment have an estimated disposal value of \$38,000.

The Statement of Affairs for Preston Company, along with a *deficiency account* summarizing estimated gains and losses on the realization of assets, is presented in Illustration 10-4.

Several comments concerning Illustration 10-4 should be noted:

1. Assets pledged with fully secured creditors—notes receivable and the investment in stock of Beta Company—have realizable values in excess of the secured debts in an amount of \$17,400, which becomes available for distribution to unsecured creditors.
2. Assets pledged with partially secured creditors—land and buildings—have a realizable value that is \$68,500 less than the total related debt. Thus, mortgage holders have a \$68,500 remaining claim that ranks as an unsecured one.
3. Free assets are those that have not been pledged with specific liabilities and are, therefore, available to satisfy general unsecured creditors. Note that the “free” assets include the excess of the realizable value of pledged assets over the related debts of fully secured creditors.
4. In the Deficiency Account, the capital stock and retained earnings deficit are included in the estimated gains column only to indicate the extent to which total potential deficiency is covered by stockholders' equity.
5. The final settlement with the unsecured creditors can be computed by dividing the “net free assets” by the total amount owed to unsecured creditors:

$$\frac{\$180,980}{\$263,500} = 68.7\%$$

Thus, it is estimated that each unsecured creditor will receive approximately 69% of the amount due under the claim.

**IN  
THE  
NEWS**

In rare cases, DIP (debtor-in-possession) lending is provided by

the company buying the assets of the firm in **bankruptcy** proceedings, as in AMR Corp.'s purchase, through its American Airlines unit, of Trans World Airlines for \$500 million. “They provided the DIP so they could get the transaction done,” said Harvey L. Tepner, an attorney with Loeb Partners Corp., an investment and merchant-banking firm in New York City. “In that case, the exit strategy was [American Airlines] would pay themselves back through the operation of the airline,” he said. “**Chapter 11** is a great marketplace for M&A activity.”<sup>15</sup>

<sup>15</sup> *The Wall Street Journal*, “Debtor Loans Help Cash-Poor Firms,” by Marc Hopkins, 7/24/02, p. B3G.

**ILLUSTRATION 10-4****Preston Company Statement of Affairs April 30, 2015**

| <i>Book Value</i> | <i>Assets</i>  | <i>Realizable Value</i>      | <i>Deficiency Account</i> |
|-------------------|--|------------------------------|---------------------------|
|                   | <b>Assets Pledged with Fully Secured Creditors</b>             |                              | (Loss)/Gain               |
| \$ 24,000         | Notes Receivable   | \$ 24,000                    |                           |
|                   | Bank Note Payable  | \$20,000                     |                           |
|                   | Accrued Interest   | 600                          |                           |
|                   |  | <u>20,600</u>                | \$ 3,400                  |
| 26,500            | Investment in Stock of Beta Company                            | 26,500                       |                           |
|                   | Bank Note Payable  | \$12,000                     |                           |
|                   | Accrued Interest   | 500                          |                           |
|                   |  | <u>12,500</u>                | 14,000                    |
|                   | <b>Assets Pledged with Partially Secured Creditors</b>         |                              |                           |
| 240,000           | Land and Buildings   | 140,000                      | (100,000)                 |
|                   | Mortgage Note Payable  | 200,000                      |                           |
|                   | Accrued Interest   | 8,500                        |                           |
|                   | Unsecured amount (see below)                                   | <u>(68,500)</u>              |                           |
|                   | <b>Free Assets</b>   |                              |                           |
| 8,200             | Cash   | 8,200                        |                           |
| 47,000            | Accounts Receivable  | 28,000                       | (19,000)                  |
| 1,200             | Prepaid Expenses   | 600                          | (600)                     |
| 119,000           | Inventories  | 102,280                      | (16,720)                  |
| 93,000            | Machinery and Equipment  | <u>38,000</u>                | (55,000)                  |
|                   | Total Net Realizable Value                                     | 194,480                      |                           |
|                   | Liabilities having Priority—                                   |                              |                           |
|                   | Salaries and Wages   | <u>13,500</u>                |                           |
|                   | Net Free Assets  | 180,980                      |                           |
|                   | Estimated Deficiency to Unsecured Creditors (balancing amount) | <u>82,520</u>                |                           |
| <u>\$558,900</u>  |  | <u>\$263,500</u>             | <u>(191,320)</u>          |
| <i>Book Value</i> | <i>Equities</i>  | <i>Unsecured Liabilities</i> |                           |
|                   | <b>Liabilities Having Priority</b>                             |                              |                           |
| \$ 13,500         | Accrued Salaries and Wages                                     | <u>\$ 13,500</u>             |                           |
|                   | <b>Fully Secured Creditors</b>                                 |                              |                           |
| 32,000            | Notes Payable  | 32,000                       |                           |
| 1,100             | Accrued Interest   | <u>1,100</u>                 |                           |
|                   | <b>Partially Secured Creditors</b>                             |                              |                           |
| 200,000           | Mortgage Note Payable  | 200,000                      |                           |
| 8,500             | Accrued Interest   | <u>8,500</u>                 |                           |
|                   | Total  | <u>208,500</u>               |                           |
|                   | Land and Buildings   | <u>140,000</u>               | \$ 68,500                 |
|                   | <b>Unsecured Creditors</b>                                     |                              |                           |
| 195,000           | Accounts Payable   | 195,000                      |                           |
|                   | <b>Stockholders' Equity</b>                                    |                              |                           |
| 250,000           | Capital Stock  |                              | 250,000                   |
| (141,200)         | Retained Earnings (deficit)                                    |                              | (141,200)                 |
| <u>\$558,900</u>  |  | <u>\$263,500</u>             | <u>\$108,800</u>          |
|                   | Estimated deficiency   |                              | <u>\$(82,520)</u>         |

**Preston Company  
Deficiency Account April 30, 2015**

| <i>Estimated Losses</i> |                  | <i>Estimated Gains</i>                      |                  |
|-------------------------|------------------|---|------------------|
| Accounts Receivable     | \$ 19,000        | Capital Stock                               | \$250,000        |
| Inventory               | 16,720           | Retained Earnings                           | (141,200)        |
| Prepaid Expenses        | 600              | Estimated Deficiency to Unsecured Creditors | 82,520           |
| Land and Buildings      | 100,000          |   |                  |
| Machinery and Equipment | 55,000           |   |                  |
| Total                   | <u>\$191,320</u> | Total                                       | <u>\$191,320</u> |

## 10.5 TRUSTEE ACCOUNTING AND REPORTING

As indicated earlier, a trustee is often appointed to assume the responsibility of managing the debtor's business for the period during which a reorganization plan is developed or the business is liquidated. The trustee takes title to the debtor's assets and is accountable to the court, the creditors, and other parties of interest for the subsequent utilization or realization of the assets. From an accounting standpoint, two main approaches are available to the trustee. He or she may continue to use the debtor's accounting records, which is the approach often used when it is expected that the business will be rehabilitated and returned to the control of the debtor at some future date or when the business is expected to be sold as an operating unit. Or the trustee may open a new set of books, the approach frequently used when the assets are to be realized and liabilities liquidated. In either case, the better approach is probably to open a new set of books, because it will make it easier to distinguish between the assets and liabilities of the debtor that existed before the appointment of the trustee and those arising after his or her appointment.

When new books are opened, the trustee records, at their book values, the assets (as well as any related valuation accounts) that have been placed under trustee control. The net credit in the entry is to an account normally titled with the name of the debtor company and the term "in receivership," for example, "Axon Company—In Receivership." No existing liabilities are recorded by the trustee, but liabilities incurred later are recorded. Although liabilities existing at the date the trustee takes control are not recorded, the trustee may pay these liabilities in the course of operating the company or as part of the realization and liquidation process. This payment of preexisting debts, of course, reduces the assets for which the trustee is accountable.

The transfer of the assets to the trustee is recorded on the debtor's books by crediting the various asset accounts (with debits to related valuation accounts) and debiting an account in the name of the trustee. Subsequent activities engaged in by the trustee are recorded on the trustee's books with entries on the debtor's books where appropriate, for example, to record the payment of preexisting debts by the trustee.

As an example of the accounting procedures used where the trustee opens a new set of books, assume that Axon Company has the following account balances on October 1, 2015, at which time Gary Trent was appointed trustee.

|                              |                  |
|------------------------------|------------------|
| Cash                         | \$ 6,400         |
| Receivables                  | 32,000           |
| Inventory                    | 48,600           |
| Property and equipment       | <u>120,000</u>   |
| Total                        | <u>\$207,000</u> |
| Allowance for uncollectibles | \$ 2,900         |
| Accumulated depreciation     | 44,100           |
| Accounts payable             | 75,000           |
| Capital stock                | 180,000          |
| Retained earnings (deficit)  | <u>(95,000)</u>  |
| Total                        | <u>\$207,000</u> |

During the period from October 1, 2015, through December 31, 2015, the following transactions occurred:

- (1) All Axon Company's assets were transferred to the trustee.
- (2) Additional merchandise inventory was purchased by the trustee on account in amount of \$26,000.
- (3) Sales for the period were: on account, \$52,000; cash, \$7,000.
- (4) Cash was collected by the trustee on
 

|                           |          |
|---------------------------|----------|
| Accounts receivable (old) | \$18,000 |
| Accounts receivable (new) | 46,000   |
- (5) Payments were made by the trustee for
 

|                        |          |
|------------------------|----------|
| Accounts payable (old) | \$43,000 |
| Accounts payable (new) | 14,000   |
| Operating expenses     | 10,500   |
| Trustee's expenses     | 2,000    |

- (6) Adjusting entries recorded by the trustee on December 31, 2015 were:
- |                                 |          |
|---------------------------------|----------|
| Estimated uncollectibles on     |          |
| Accounts receivable (old)       | \$ 3,500 |
| Accounts receivable (new)       | 400      |
| Accounts receivable written off |          |
| on accounts receivable (old)    | 4,500    |
| Depreciation expense            | 7,600    |
- (7) The merchandise inventory balance on December 31 was \$42,000.

Entries to record the effect of these transactions on the trustee's and the debtor's books are presented in Illustration 10-5. In order to prepare financial statements for Axon Company on December 31, 2015, the trustee's accounts must be combined with Axon Company's accounts. A combining workpaper for this purpose is presented in Illustration 10-6.

**ILLUSTRATION 10-5****Journal Entries**

| <i>Trustee's Books</i>             |         | <i>Axon Company's Books</i>  |         |
|------------------------------------|---------|------------------------------|---------|
| (1) Cash                           | 6,400   | Gary Trent, Trustee          | 160,000 |
| Receivables (old)                  | 32,000  | Allowance for Uncollectibles | 2,900   |
| Inventory                          | 48,600  | Accumulated Depreciation     | 44,100  |
| Property and Equipment             | 120,000 | Cash                         | 6,400   |
| Allowance for Uncollectibles       | 2,900   | Receivables                  | 32,000  |
| Accumulated Depreciation           | 44,100  | Inventory                    | 48,600  |
| Axon Company—in Receivership       | 160,000 | Property and Equipment       | 120,000 |
| (2) Purchases                      | 26,000  | No entry                     |         |
| Accounts Payable (new)             | 26,000  |                              |         |
| (3) Cash                           | 7,000   | No entry                     |         |
| Accounts Receivable (new)          | 52,000  |                              |         |
| Sales                              | 59,000  |                              |         |
| (4) Cash                           | 64,000  | No entry                     |         |
| Accounts Receivable (old)          | 18,000  |                              |         |
| Accounts Receivable (new)          | 46,000  |                              |         |
| (5) Axon Company—in Receivership   | 43,000  | Accounts Payable             | 43,000  |
| Accounts Payable (new)             | 14,000  | Gary Trent, Trustee          | 43,000  |
| Operating Expenses                 | 10,500  |                              |         |
| Trustee's Expenses                 | 2,000   |                              |         |
| Cash                               | 69,500  |                              |         |
| (6) Bad Debts Expense              | 3,900   | No entry                     |         |
| Depreciation Expense               | 7,600   |                              |         |
| Allowance for Uncollectibles (old) | 3,500   |                              |         |
| Allowance for Uncollectibles (new) | 400     |                              |         |
| Accumulated Depreciation           | 7,600   |                              |         |
| Allowance for Uncollectibles (old) | 4,500   | No entry                     |         |
| Accounts Receivable (old)          | 4,500   |                              |         |
| (7) Sales                          | 59,000  | Gary Trent, Trustee          | 2,400   |
| Inventory                          | 6,600   | Income Summary               | 2,400   |
| Purchases                          | 26,000  | Income Summary               | 2,400   |
| Operating Expenses                 | 10,500  | Retained Earnings            | 2,400   |
| Trustee's Expenses                 | 2,000   |                              |         |
| Bad Debts Expense                  | 3,900   |                              |         |
| Depreciation Expense               | 7,600   |                              |         |
| Income Summary                     | 2,400   |                              |         |
| Income Summary                     | 2,400   |                              |         |
| Axon Company in Receivership       | 2,400   |                              |         |

## ILLUSTRATION 10-6

**Axon Company—in Receivership Combining Workpaper  
December 31, 2015**

| <i>Debits</i>                      | <i>Trial Balance</i> |                         | <i>Adjustments and<br/>Eliminations</i> |                | <i>Combined</i>             |                          |
|------------------------------------|----------------------|-------------------------|---|----------------|-----------------------------|--------------------------|
|                                    | <i>Trustee</i>       | <i>Axon<br/>Company</i> | <i>Dr.</i>                              | <i>Cr.</i>     | <i>Income<br/>Statement</i> | <i>Balance<br/>Sheet</i> |
| Cash                               | 7,900                |                         |   |                |                             | 7,900                    |
| Accounts Receivable (old)          | 9,500                |                         |   |                |                             | 9,500                    |
| Accounts Receivable (new)          | 6,000                |                         |   |                |                             | 6,000                    |
| Inventory                          | 48,600               |                         |   | (1) 6,600      |                             | 42,000                   |
| Property and Equipment             | 120,000              |                         |   |                |                             | 120,000                  |
| Purchase                           | 26,000               |                         |   | (1) 26,000     |                             |                          |
| Operating Expenses                 | 10,500               |                         |   |                | 10,500                      |                          |
| Trustee Expenses                   | 2,000                |                         |   |                | 2,000                       |                          |
| Bad Debts Expense                  | 3,900                |                         |   |                | 3,900                       |                          |
| Depreciation Expense               | 7,600                |                         |   |                | 7,600                       |                          |
| Cost of Goods Sold                 |                      |                         | (1) 32,600                              |                | 32,600                      |                          |
| Gary Trent, Trustee                |                      | 117,000                 |   | (2) 117,000    |                             |                          |
| <b>Total</b>                       | <u>242,000</u>       | <u>117,000</u>          |   |                | <u>56,600</u>               | <u>185,400</u>           |
| <b><i>Credits</i></b>              |                      |                         |   |                |                             |                          |
| Allowance for Uncollectibles (old) | 1,900                |                         |   |                |                             | 1,900                    |
| Allowance for Uncollectibles (new) | 400                  |                         |   |                |                             | 400                      |
| Accumulated Depreciation           | 51,700               |                         |   |                |                             | 51,700                   |
| Accounts Payable (old)             |                      | 32,000                  |   |                |                             | 32,000                   |
| Accounts Payable (new)             | 12,000               |                         |   |                |                             | 12,000                   |
| Capital Stock                      |                      | 180,000                 |   |                |                             | 180,000                  |
| Retained Earnings (deficit)        |                      | (95,000)                |   |                |                             | (95,000)                 |
| Sales                              | 59,000               |                         |   |                | 59,000                      |                          |
| Axon Company, in Receivership      | 117,000              |                         | (2) 117,000                             |                |                             |                          |
| <b>Total</b>                       | <u>242,000</u>       | <u>117,000</u>          | <u>149,600</u>                          | <u>149,600</u> | <u>59,000</u>               |                          |
| Net Income                         |                      |                         |   |                | 2,400                       | 2,400                    |
| <b>Total</b>                       |                      |                         |   |                | <u>56,600</u>               | <u>185,400</u>           |

(1) To adjust inventory and set up cost of goods sold.

(2) To eliminate reciprocal accounts.

**10.6 REALIZATION AND LIQUIDATION ACCOUNT**

When a trustee is appointed to handle the affairs of a company in financial difficulty, the court expects to receive periodic reports summarizing the realization and distribution activities of the fiduciary.<sup>16</sup> Although the traditional financial statements may be prepared by the fiduciary, court officials are interested primarily in the changes that have occurred in the monetary items during a period. The legal form used to report these activities is termed a *realization and liquidation account*. The report has three main sections—assets, liabilities, and revenues and expenses. The asset section consists of four parts, illustrated as follows:

| <b>Assets</b>         |                     |
|-----------------------|---------------------|
| Assets to be realized | Assets realized     |
| Assets acquired       | Assets not realized |

<sup>16</sup> A fiduciary is a person to whom property is entrusted to hold, control, or manage for another.

The *assets to be realized* part identifies the individual assets to which the trustee has taken title from the debtor. Cash is not included in the report because it is already realized. Although cash is excluded, the court is given a copy of the cash account of the trustee, which shows the beginning amount received from the debtor, as well as all the individual receipts and disbursements for the period covered. The *assets acquired* part itemizes the assets either discovered or received from operating activities during the period. The *assets realized* part identifies proceeds received from the conversion of specific assets. The *assets not realized* part identifies the assets remaining with the trustee at the end of the reporting period.

In a similar manner, the liabilities section consists of four parts, as indicated below:

| Liabilities                |                              |
|----------------------------|------------------------------|
| Liabilities liquidated     | Liabilities to be liquidated |
| Liabilities not liquidated | Liabilities incurred         |

The *liabilities to be liquidated* part identifies the liabilities that the trustee took responsibility for at the date of appointment. *Liabilities incurred* reflect the liabilities incurred by the trustee for operating activities during the period. *Liabilities liquidated* identify specific liabilities paid by the trustee, and *liabilities not liquidated* reflect those that remain to be paid by the trustee.

The revenues and expenses section of the report lists the supplementary expenses incurred and revenues received by the trustee during the period, as follows:

| Revenues and Expenses |                       |
|-----------------------|-----------------------|
| Supplementary charges | Supplementary credits |

The realization and liquidation account is prepared in the typical account form with debits on the left side and credits on the right side of the account. Any figure needed to balance the account reflects a gain or loss for the reported period.

As an example of a realization and liquidation account, assume Illustration 10-6 concerning the receivership of Gary Trent for Axon Company. The realization and liquidation account is presented in Illustration 10-7.

A copy of the Cash account of the trustee that would be included with the report is presented below:

| Cash                      |        |                        |        |
|---------------------------|--------|------------------------|--------|
| Balance, 10/1             | 6,400  | Accounts payable (old) | 43,000 |
| Sales                     | 7,000  | Accounts payable (new) | 14,000 |
| Accounts receivable (old) | 18,000 | Operating expenses     | 10,500 |
| Accounts receivable (new) | 46,000 | Trustee's expenses     | 2,000  |
| Balance, 12/31            | 7,900  |                        |        |

Note that the balancing figure (labeled “net gain”) in the realization and liquidation account is the same as the \$2,400 net income reported for the period October 1 to December 31, 2015, in Illustration 10-6. This is as it should be, since no assets were realized during the period except through normal operating activities. If assets had been realized by other than normal operating activities (for example, the sale of land), any gain or loss would increase or decrease the net gain reported in the Realization and Liquidation account. The transaction could be treated in one of two ways. Assets realized could be reported at the amount received from the sale of the asset (the traditional approach), or they might be reported at the book value of the asset sold and any gain or loss on the sale reported as a supplemental credit or supplemental charge. For example, assume that the property and equipment account of Axon Company included a parcel of land that cost \$25,000 and that the parcel was sold by the trustee for \$35,000. The traditional approach would report assets realized at \$35,000 with a decrease in assets not realized of \$25,000. The \$10,000 difference between the two would be reflected as part of a net gain of

## ILLUSTRATION 10-7

**Axon Company, Gary Trent, Trustee, Realization and Liquidation Account, October 1, 2012, to December 31, 2015**

|                                    |               |                  |                                     |               |                  |
|------------------------------------|---------------|------------------|-------------------------------------|---------------|------------------|
| <b>Assets to Be Realized</b>       |               |                  | <b>Assets Realized</b>              |               |                  |
| Receivables (old)                  | \$ 32,000     |                  | Accounts Receivable (old)           |               | \$ 18,000        |
| Less: Allowance for Uncollectibles | <u>2,900</u>  | \$ 29,100        | Accounts Receivable (new)           |               | 46,000           |
| Inventory                          |               | 48,600           | <b>Assets Not Realized</b>          |               |                  |
| Property and Equipment             | 120,000       |                  | Accounts Receivable (old)           | \$ 9,500      |                  |
| Less: Accumulated Depreciation     | <u>44,100</u> | 75,900           | Less: Allowance for Uncollectibles  | <u>1,900</u>  | 7,600            |
| <b>Assets Acquired</b>             |               |                  | Accounts Receivable (new)           | <u>6,000</u>  |                  |
| Accounts Receivable (new)          |               | 52,000           | Less: Allowance for Uncollectibles  | <u>400</u>    | 5,600            |
| <b>Supplementary Charges</b>       |               |                  | Inventory                           |               | 42,000           |
| Purchases                          |               | 26,000           | Property and Equipment              | 120,000       |                  |
| Operation Expenses                 |               | 10,500           | Less: Accumulated Depreciation      | <u>51,700</u> | 68,300           |
| Trustee's Expenses                 |               | 2,000            | <b>Supplementary Credits</b>        |               |                  |
| <b>Liabilities Liquidated</b>      |               |                  | Sales                               |               | 59,000           |
| Accounts Payable (old)             |               | 43,000           | <b>Liabilities to Be Liquidated</b> |               |                  |
| Accounts Payable (new)             |               | 14,000           | Accounts Payable (old)              |               | 75,000           |
| <b>Liabilities Not Liquidated</b>  |               |                  | <b>Liabilities Incurred</b>         |               |                  |
| Accounts Payable (old)             |               | 32,000           | Accounts Payable (new)              |               | <u>26,000</u>    |
| Accounts Payable (new)             |               | 12,000           | <b>Total</b>                        |               |                  |
| Net Gain                           |               | <u>2,400</u>     |                                     |               |                  |
| Total                              |               | <u>\$347,500</u> | Total                               |               | <u>\$347,500</u> |

\$12,400, rather than the \$2,400 in Illustration 10-7. The items that would be different in Illustration 10-7 are:

|   |               |          |
|---|---------------|----------|
| <b>Assets Realized</b>                        |               |          |
| Property and Equipment                        |               | \$35,000 |
| <b>Assets Not Realized</b>                    |               |          |
| Property and Equipment (\$120,000 – \$25,000) | \$95,000      |          |
| Less: Accumulated Depreciation                | <u>51,700</u> | 43,300   |
| Net Gain                                      |               | 12,400   |

The basic weakness in this approach is that the components of the “net gain” or “net loss” are not disclosed.

An alternative is to report the sale of the land as assets realized at book value, \$25,000, a decrease in assets not realized of \$25,000, and a supplementary credit “Gain on sale of land” of \$10,000. Although the net gain needed to balance the account is still \$12,400, the reader of the report is able to identify the components of the net gain. The items that would be different in Illustration 10-7 under this approach are:

|   |               |          |
|---|---------------|----------|
| <b>Assets Realized</b>                        |               |          |
| Property and Equipment                        |               | \$25,000 |
| <b>Assets Not Realized</b>                    |               |          |
| Property and Equipment (\$120,000 – \$25,000) | \$95,000      |          |
| Less: Accumulated Depreciation                | <u>51,700</u> | 43,300   |
| <b>Supplementary Credits</b>                  |               |          |
| Gain on Sale of Land                          |               | 10,000   |
| Net Gain                                      |               | 12,400   |



Similar alternative treatments could be afforded the favorable or unfavorable liquidation of liabilities.

Other items on the realization and liquidation account deserve comment:

1. Note that we have elected to show sales of merchandise as supplementary credits and purchases of merchandise as supplementary charges. As an alternative, the trustee might report sales of merchandise as *assets realized* and purchases of merchandise as *assets acquired*. We believe our treatment is more informative because it separates operating effects from nonoperating effects, although the latter treatment is more common in practice.
2. Expenses representing cost allocations (such as depreciation) and estimated bad debts expense are not reported separately. These expenses are reflected in the report, however, as increases in accumulated depreciation and allowance for uncollectibles in the *assets not realized* part of the report. Thus, because the net gain (loss) for the period is a balancing figure, these expenses are factors in the determination of that net gain (loss).

## Bankruptcy Prediction Models

### RELATED CONCEPTS

One assumption underlying the financial statements is that the firm will continue as a going concern.

Perhaps, one of the most critical tasks of an audit team lies in assessing a client's likelihood of continuing as a going concern. When the auditors deem the likelihood to be low, the opinion issued in conjunction with the audited financial statements must reflect this assessment. Because clients are resistant to such an opinion, guidance for the decision is clearly needed. Furthermore, researches have found frequent errors in both directions; that is, going concern audit reports issued for firms that do not later fail, and client failures where no going concern report was issued by the auditor. SAS No. 59, "*Auditor's Consideration of an Entity's Ability to Continue as a Going Concern*," provides guidance to the auditor in conducting an audit of financial statements in evaluating whether there is substantial doubt about the entity's ability to continue as a going concern. The auditor has a responsibility to evaluate whether there is substantial doubt about the entity's ability to continue as a going concern. The auditor's evaluation is based on his knowledge of relevant conditions and events that exist at, or have occurred prior to the completion of fieldwork. Information about such conditions or events is obtained from the application of auditing procedures planned and performed to achieve audit objectives that are related to management's assertions embodied in the financial statements being audited, as described in SAS No. 31, *Evidential Matter* (AICPA, *Professional Standards*, vol 1, AU Section 326).

The auditor should evaluate whether there is substantial doubt about the entity's ability to continue as a going concern for a reasonable period of time in the following manner:

- a. The auditor considers whether the results of his procedures performed in planning, gathering evidential matter relative to the various audit objectives, and completing the audit identify conditions and events that, when considered in the aggregate, indicate there could be substantial doubt about the entity's ability to continue as a going concern for a reasonable period of time. It may be necessary to obtain additional information about such conditions and events, as well as the appropriate evidential matter to support information that mitigates the auditor's doubt.
- b. If the auditor believes there is substantial doubt about the entity's ability to continue as a going concern for a reasonable period of time, he should (1) obtain information about management's plans that are intended to mitigate the effect of such conditions or events, and (2) assess the likelihood that such plans can be effectively implemented.
- c. After the auditor has evaluated management's plans, he concludes whether he has substantial doubt about the entity's ability to continue as a going concern for a reasonable period of time. If the auditor concludes there is substantial doubt, he should (1) consider the adequacy of disclosure about the entity's possible inability to continue as a going concern for a reasonable period of time, and (2) include an explanatory

paragraph (following the opinion paragraph) in his audit report to reflect his conclusion. If the auditor concludes that substantial doubt does not exist, he should consider the need for disclosure.

The auditor is not responsible for predicting future conditions or events. The fact that the entity may cease to exist as a going concern subsequent to receiving a report from the auditor that does not refer to substantial doubt, even within one year following the date of the financial statements, does not in itself indicate inadequate performance by the auditor. Accordingly, the absence of reference to substantial doubt in an auditor's report should not be viewed as providing assurance as to an entity's ability to continue as a going concern.

## Altman's Z-Score Bankruptcy Model

In 1968, Altman developed the most widely used model for bankruptcy prediction, the Altman Z-score model. In estimating this model, Altman started with 22 common ratios from five categories covering liquidity, leverage, profitability, activity, and solvency. Using multiple discriminate analysis, he estimated the best model that distinguished bankrupt firms from nonbankrupt firms. His model was originally estimated for manufacturing firms but is generally applied to all types of firms. His model is:

$$Z = 1.2x_1 + 1.4x_2 + 3.3x_3 + 0.6x_4 + 0.999x_5$$

where:

- $x_1$  = (current assets less current liabilities)/total assets
- $x_2$  = retained earnings/total assets
- $x_3$  = earnings before interest and taxes/total assets
- $x_4$  = market value of equity/total liabilities
- $x_5$  = sales/total assets

If the calculated z-score is below 1.8, the firm is classified as a distressed firm. Firms with z-scores between 1.1 and 2.675 are considered in the "gray zone," and z-scores above 2.99 are considered safe.

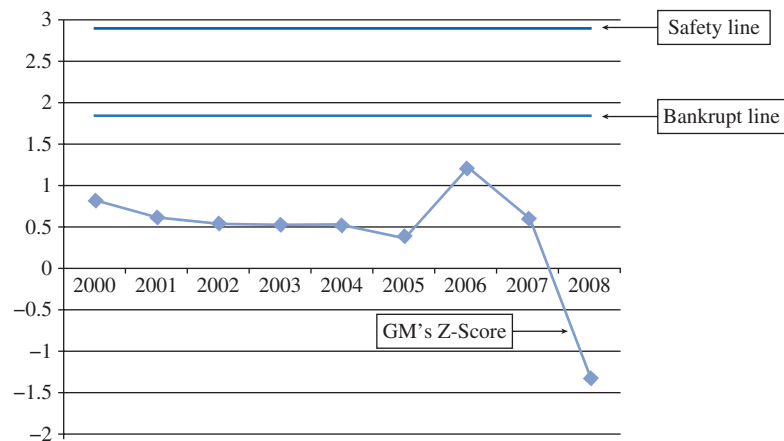
In Illustration 10-8, General Motors' z-score is computed for the years 2000 through 2008. The z-score has been decreasing over time (with the exception of 2006) and is in the "bankrupt" zone in virtually every year. GM's market cap in 2008 fell to around \$4 billion down from a high of \$52 billion in 2000. While there were some modest increases in revenues over this period, the firm earned a net loss every year after 2004.

**IFRS**

The auditor has a responsibility to evaluate whether there is substantial doubt about the entity's ability to continue as a going concern for a reasonable period of time. *Reasonable*

### ILLUSTRATION 10-8

#### General Motors Z-Score 2000–2008



*period of time* is defined as a period not to exceed one year beyond the date of the financial statements being audited. Currently, AU Section 341, *The Auditor's Consideration of an Entity's Ability to Continue as a Going Concern*, of the AICPA Codification of Statements on Auditing Standards contains the guidance about the going concern assessment. The Public Company Accounting Oversight Board (PCAOB) adopted AU Section 341 on an initial transitional basis.

Conditions and events that may raise a substantial doubt about an entity's ability to continue as a going concern include negative financial trends such as recurring operating losses, working capital deficiencies, negative cash flows from operations, and/or adverse key financial ratios. Other indications of possible financial difficulties might include such events as defaulting on loans, having not paid dividends, seeking new sources of financing, selling assets, or restructuring debt.

FASB issued a proposed accounting standards update on June 26, 2013 relating to the disclosure of uncertainties about an entities going concern presumption. The proposed update outlines management's responsibilities in evaluating the entity's going concern uncertainties. The entity would be required to evaluate going concern uncertainties at each annual and interim reporting period and provide footnote disclosures if either (1) it is more likely than not that the entity will not be able to meet its obligations within 12 months of the financial statement date (without taking actions outside the normal course of business) or (2) if it is known or probable that the entity will not be able to meet its obligations within 24 months after the financial statements are issued.

If either of these two thresholds is met, the firm is required to disclose the following five items:

- (1) the principal conditions and events that give rise to the entity's potential inability to meet its obligations,
- (2) the possible effects those conditions and events could have on the entity,
- (3) management's evaluation of the significance of those conditions and events,
- (4) mitigating conditions and events, and
- (5) management's plans that are intended to address the entity's potential inability to meet its obligations.

SEC filers have additional disclosure requirements if there is substantial doubt concerning the entity's ability to continue as a going concern. These include a statement indicating substantial doubt, the principal conditions and events that gave rise to the substantial doubt, management's assessment of the significance of these conditions and events, and management's plans.

International Accounting Standard (IAS) 1, *Presentation of Financial Statements*, requires that an entity considers "all available information about the future, which is at least, but is not limited to, 12 months from the end of the reporting period" when assessing whether the going concern assumption is appropriate. IFRS does not address guidance on the liquidation basis of accounting. Under IFRS, a single threshold is used for disclosures of going concern uncertainties. Disclosures start when management is aware of material uncertainties related to events or conditions that may cast significant doubt on an entity's ability to continue as a going concern. IFRS does not define the term *material uncertainty* or *significant doubt*.

## SUMMARY

- 1 *Distinguish between a Chapter 7 and a Chapter 11 bankruptcy.* In a Chapter 7 bankruptcy, the company ceases operations and the assets are generally sold by a trustee. In a Chapter 11 bankruptcy, the business is reorganized and the creditors agree on a plan for payment of their claims.
- 2 *Describe the five priority categories of unsecured claims and list the order in which they are settled.* The five categories listed in order of priority are: (a) administration expenses, fees, and charges incurred in administering the bankrupt's estate;

(b) unsecured claims for wages, salaries, or commissions earned by an employee within 90 days before the date of filing of the petition; (c) unsecured claims for contributions to employee benefit plans from services rendered within 180 days before the date of the filing of the petition; (d) unsecured claims of individuals arising from the deposit of money in connection with the purchase, lease, or rental of property or services that were not delivered or performed; and (e) unsecured claims of governmental units for unpaid taxes.

- 3** *Distinguish between a voluntary and involuntary bankruptcy petition.* A debtor may file a voluntary petition with a bankruptcy court for liquidation under Chapter 7 or for reorganization under Chapter 11. In an involuntary proceeding, creditors initiate the action by filing a petition for liquidation or reorganization with the bankruptcy court. Filing of a voluntary or involuntary petition constitutes an **order for relief**, which prohibits the start or continuation of legal action against the debtor by its creditors.
- 4** *Distinguish among fully secured, partially secured, and unsecured claims of creditors.* Fully secured claims are those with liens against assets whose realizable value is equal to or in excess of the claim. Partially secured claims are those with liens against assets whose realizable value is less than the amount of the claim. Unsecured creditors, including those having priority, are paid from whatever proceeds remain from the realization process.
- 5** *Describe contractual agreements that the debtor and its creditors may enter into outside of formal bankruptcy proceedings to resolve the debtor's insolvent position.* These agreements

generally include (a) an extension of payment periods; (b) composition agreements where the creditors agree to accept less than the full amount to their claims; (c) formation of a creditors' committee where the parties agree to the formation of a creditors' committee that is responsible for managing the debtor's business affairs for the period during which plans are developed to rehabilitate, reorganize, or liquidate the business; or (d) a voluntary assignment of assets where the debtor may elect to place its property under the control of a trustee for the benefit of its creditors.

- 6** *Describe the ways debt may be restructured in a reorganization.* In reorganization, debt might be restructured using one of the following: (a) the debtor may transfer assets in full settlement of the payable; (b) the debtor may give an equity interest in its firm in full settlement of the payable; or (c) the creditor may modify terms of the payable.

### TEST YOUR KNOWLEDGE SOLUTIONS

**10.1** 1. c. 2. False 3. True 4. False 5. True

**10.2** Ordinary gain on revaluation of land is \$1,000 and the restructuring gain is \$3,000.

### QUESTIONS

- LO 5** 1. List the primary types of contractual agreements between a debtor company and its creditors and briefly explain what is involved in each of them.
- LO 3** 2. Distinguish between a voluntary and involuntary bankruptcy petition.
- LO 4** 3. Distinguish among fully secured, partially secured, and unsecured claims of creditors.
- LO 2** 4. Five priority categories of unsecured claims must be paid before general unsecured creditors are paid. Briefly describe what makes up each category.
- LO 4** 5. What are "dividends" in a bankruptcy proceeding?
- LO 6** 6. For each of the following debt restructurings, indicate whether a gain is recognized and, if so, how the gain is measured and reported.
- (a) Transfer of assets by the debtor to the creditor.  
 (b) Grant of an equity interest by the debtor to the creditor.  
 (c) Modification of the terms of the payable.
- LO 1** 7. What is the purpose of a Statement of Affairs?
- LO 4** 8. One of the officers of a corporation that had just received a discharge in bankruptcy said, "Good, now we don't owe anyone." Is he correct?
- LO 1** 9. What are the duties of a trustee in a liquidation proceeding?

10. What is the purpose of a combining workpaper prepared by a trustee? **LO 1**

11. What is the purpose of a realization and liquidation account? **LO 1**

### Business Ethics

From an ethical perspective, some believe that it is never justifiable for an individual or business to declare bankruptcy. Others believe that some actions are appropriate only in extreme circumstances. Without question, as stated in the *Journal of Accountancy*, November 2005, page 51, "the ease with which debtors have been able to walk away from debt has frustrated creditors for years."

- Describe the differences between Chapter 7 (liquidations) and Chapter 11 (reorganizations) from an ethical standpoint. Who is most likely to be hurt by a Chapter 7 bankruptcy?
- Discuss the Bankruptcy Abuse Prevention and Consumer Protection Act of 2005. Do you believe the changes wrought by this act will serve to protect creditors?
- The Protection Act of 2005 requires individuals, but not businesses, to undergo a "means" test before they can seek Chapter 7 relief. Do you believe this change should be applied to businesses as well? Why or why not?
- Do you think that you would ever resort to filing for bankruptcy relief yourself? Why or why not?

## ANALYZING FINANCIAL STATEMENTS

### AFS10-1 Circuit City versus Best Buy

In the tables on the next two pages, eight years of data for Best Buy and Circuit City are presented. Evaluate the performance of the two companies over time (see Appendix 1A online at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter) for a structured approach). In addition, compute the z-score to determine the likelihood of bankruptcy. Comment on your analysis.

### AFS10-2 Blockbuster versus Netflix

A problem similar to AFS 10-1 is available online at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter) comparing Blockbuster versus Netflix.

## EXERCISES

### EXERCISE 10-1 Multiple Choice LO 1 LO 2 LO 3 LO 5

Select the best answer for each of the following:

- Johnson joined other creditors of Alpha Company in a composition agreement seeking to avoid the necessity of a bankruptcy proceeding against Alpha. Which statement describes the composition agreement?
  - It provides that the creditors will receive less than the full amount of their claims.
  - It provides a temporary delay, not to exceed six months, insofar as the debtor's obligation to repay the debts included in the composition is concerned.
  - It must be approved by all creditors.
  - It provides for the appointment of a receiver to take over and operate the debtor's business.
- Freeman Company ceased doing business and is in bankruptcy. Among the claimants are employees seeking unpaid wages. The following statements describe the possible status of such claims in a bankruptcy proceeding or legal limitations placed upon them. Which one is an *incorrect* statement?
  - The amounts of excess wages not entitled to a priority are mere unsecured claims.
  - Such claims include wages earned within 180 days before the filing of the bankruptcy petition, but not to exceed \$4,650 in amount.
  - Such claims are entitled to priority.
  - If a priority is afforded such claims, it cannot exceed \$4,650 per wage earner.
- Which of the entities listed is not subject to an involuntary bankruptcy petition?
  - A municipality.
  - A partnership.
  - A wholesaler company.
  - A retailing corporation.
- The highest priority for payment of unsecured claims in a bankruptcy proceeding is:
  - Wages up to \$4,650 earned within three months before the petition.
  - Unpaid federal income taxes.
  - Administrative expenses of the bankruptcy.
  - Wages owed to an insolvent employee.
- Which of the following situations that arise because of a debtor's financial difficulties and would not otherwise be acceptable to the creditor must be accounted for as a troubled debt restructuring?
  - As part of a negotiated settlement designed to maintain a relationship with a debtor, a creditor reduces the effective interest rate on debt outstanding to reflect the lower market interest rate currently applicable to debt of that risk class.
  - Because of a court order, a creditor reduces the stated interest rate for the remaining original life of the debt.
  - Because of a court order, a creditor accepts as full satisfaction of its receivable a building the fair value of which equals the creditor's recorded investment in the receivable.
  - As part of a negotiated settlement, a creditor accepts as full satisfaction of its receivable a building the fair value of which equals the debtor's carrying amount of the payable.

| <b>Best Buy (\$ millions)</b>          | <b>2000</b> | <b>2001</b> | <b>2002</b> | <b>2003</b> | <b>2004</b> | <b>2005</b> | <b>2006</b> | <b>2007</b> |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Balance Sheet</b>                   |             |             |             |             |             |             |             |             |
| Assets                                 | 4,839,587   | 7,375,000   | 7,663,000   | 8,652,000   | 10,294,000  | 11,864,000  | 13,570,000  | 12,758,000  |
| Total Liabilities                      | 3,017,659   | 4,854,000   | 4,933,000   | 5,230,000   | 5,845,000   | 6,607,000   | 7,334,000   | 8,234,000   |
| Stockholders' Equity                   | 1,821,928   | 2,521,000   | 2,730,000   | 3,422,000   | 4,449,000   | 5,257,000   | 6,236,000   | 4,524,000   |
| <b>Selected Balance Sheet items</b>    |             |             |             |             |             |             |             |             |
| Market Value of Equity                 | 8,525,333   | 14,339,485  | 9,359,552   | 17,287,506  | 17,737,035  | 26,127,378  | 22,340,844  | 17,658,960  |
| Current Assets                         | 2,928,663   | 4,611,000   | 4,867,000   | 5,724,000   | 6,903,000   | 7,985,000   | 9,081,000   | 7,342,000   |
| Current Liabilities                    | 2,714,698   | 3,730,000   | 3,793,000   | 4,501,000   | 4,959,000   | 6,056,000   | 6,301,000   | 6,769,000   |
| Accounts Receivables                   | 209,031     | 247,000     | 312,000     | 343,000     | 375,000     | 506,000     | 548,000     | 549,000     |
| Inventory                              | 1,766,934   | 2,258,000   | 2,046,000   | 2,607,000   | 2,851,000   | 3,338,000   | 4,028,000   | 4,708,000   |
| Long-term Debt                         | 295,949     | 820,000     | 829,000     | 850,000     | 600,000     | 596,000     | 650,000     | 816,000     |
| Retained Earnings                      | 1,224,296   | 1,788,000   | 1,920,000   | 2,554,000   | 3,464,000   | 4,565,000   | 5,723,000   | 4,435,000   |
| <b>Income Statement</b>                |             |             |             |             |             |             |             |             |
| Total Revenues                         | 15,326,552  | 19,597,000  | 20,946,000  | 24,547,000  | 27,433,000  | 30,848,000  | 35,934,000  | 40,023,000  |
| Cost of Goods Sold                     | 12,100,090  | 14,858,000  | 15,400,000  | 17,965,000  | 20,479,000  | 22,663,000  | 26,652,000  | 29,892,000  |
| Gross Margin                           | 3,226,462   | 4,739,000   | 5,546,000   | 6,582,000   | 6,954,000   | 8,185,000   | 9,282,000   | 10,131,000  |
| Income before Extraordinary items      | 395,839     | 570,000     | 622,000     | 800,000     | 934,000     | 1,140,000   | 1,377,000   | 1,407,000   |
| Net income                             | 395,839     | 570,000     | 99,000      | 705,000     | 984,000     | 1,140,000   | 1,377,000   | 1,407,000   |
| <b>Selected Income Statement items</b> |             |             |             |             |             |             |             |             |
| Interest Expense                       | 6,900       | 20,000      | 24,000      | 32,000      | 44,000      | 30,000      | 31,000      | 62,000      |
| Tax Expense                            | 245,640     | 366,000     | 392,000     | 496,000     | 509,000     | 581,000     | 752,000     | 815,000     |
| <b>Statement of Cash Flows</b>         |             |             |             |             |             |             |             |             |
| Cash from Operations (CFO)             | 861,000     | 1,543,000   | 746,000     | 1,387,000   | 1,981,000   | 1,695,000   | 1,762,000   | 2,025,000   |
| Cash interest paid                     | 7,000       | 25,000      | 24,000      | 22,000      | 35,000      | 16,000      | 14,000      | 49,000      |
| Cash taxes paid                        | 61,700      | 139,000     | 283,000     | 306,000     | 241,000     | 547,000     | 804,000     | 644,000     |

| <b>Circuit City (\$ millions)</b>      | <b>2000</b> | <b>2001</b> | <b>2002</b> | <b>2003</b> | <b>2004</b> | <b>2005</b> | <b>2006</b> | <b>2007</b> |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Balance Sheet</b>                   |             |             |             |             |             |             |             |             |
| Assets                                 | 3452.559    | 4133.197    | 3799.117    | 3633.000    | 3789.382    | 4069.044    | 4007.283    | 3745.930    |
| Total Liabilities                      | 1195.400    | 1572.852    | 1457.542    | 1409.039    | 1701.948    | 2114.411    | 2216.039    | 2242.755    |
| Stockholders' Equity                   | 2257.159    | 2560.345    | 2341.575    | 2223.961    | 2087.434    | 1954.633    | 1791.244    | 1503.175    |
| <b>Selected Balance Sheet items</b>    |             |             |             |             |             |             |             |             |
| Market Value of Equity                 | 3140.493    | 3733.755    | 928.001     | 2279.591    | 2940.785    | 4200.180    | 3243.091    | 746.357     |
| Current Assets                         | 2354.272    | 3075.008    | 3102.910    | 2919.061    | 2685.715    | 2833.341    | 2883.512    | 2439.720    |
| Current Liabilities                    | 1065.662    | 1417.935    | 1280.069    | 1176.703    | 1263.846    | 1622.330    | 1714.029    | 1605.687    |
| Accounts Receivables                   | 451.099     | 553.273     | 775.339     | 579.717     | 172.995     | 226.440     | 425.277     | 488.715     |
| Inventory                              | 1410.527    | 1234.243    | 1409.736    | 1517.256    | 1459.520    | 1698.026    | 1636.507    | 1573.560    |
| Long-term Debt                         | 57.530      | 37.926      | 12.664      | 23.806      | 12.410      | 81.236      | 147.549     | 104.932     |
| Retained Earnings                      | 1597.315    | 1801.554    | 1387.515    | 1199.411    | 1272.321    | 1409.027    | 1361.755    | 1099.172    |
| <b>Income Statement</b>                |             |             |             |             |             |             |             |             |
| Total Revenues                         | 10458.037   | 9589.803    | 10015.946   | 9778.138    | 10477.928   | 11597.686   | 12429.754   | 11743.691   |
| Cost of Goods Sold                     | 7809.851    | 7117.460    | 7445.736    | 7320.151    | 7748.853    | 8602.915    | 9319.965    | 9130.553    |
| Gross Margin                           | 2648.186    | 2472.343    | 2570.210    | 2457.987    | 2729.075    | 2994.771    | 3109.789    | 2613.138    |
| Income before Extraordinary items      | 149.247     | 190.799     | 41.565      | -0.787      | 59.911      | 151.112     | -10.182     | -321.353    |
| Net income                             | 149.247     | 190.799     | 106.084     | -89.269     | 61.658      | 139.746     | -8.281      | -319.897    |
| <b>Selected Income Statement items</b> |             |             |             |             |             |             |             |             |
| Interest Expense                       | 9.394       | 2.158       | 1.793       | 1.804       | 2.066       | 8.143       | 9.519       | 8.980       |
| Tax Expense                            | 70.637      | 78.446      | 25.475      | -0.453      | 35.878      | 87.970      | 30.510      | -32.226     |
| <b>Statement of Cash Flows</b>         |             |             |             |             |             |             |             |             |
| Cash from Operations (CFO)             | 167.120     | 837.208     | -164.059    | -131.676    | 389.347     | 364.942     | 316.341     | -45.626     |
| Cash interest paid                     | 25.336      | 8.929       | 1.824       | 2.999       | 4.900       | 6.800       | 1.500       | 1.200       |
| Cash taxes paid                        | 117.366     | -44.926     | 107.946     | 36.324      | 152.800     | 94.200      | 74.200      | 6.000       |

**EXERCISE 10-2 True or False LO 1 LO 3 LO 4**

Indicate whether each of the following is true or false. If an answer is false, explain why.

- \_\_\_\_\_ 1. Insolvency means that a debtor has more current liabilities than current assets.
- \_\_\_\_\_ 2. Voluntary bankruptcy petitions may be filed under either Chapter 7 or Chapter 11 of the Reform Act.
- \_\_\_\_\_ 3. If an insolvent debtor has more than 12 creditors, an involuntary petition must be signed by at least three of those creditors.
- \_\_\_\_\_ 4. Unsecured creditors with priority will receive full satisfaction before secured creditors are paid.
- \_\_\_\_\_ 5. Either a debtor or its creditors may file a petition for reorganization under Chapter 11 of the Reform Act.
- \_\_\_\_\_ 6. In a reorganization involving a transfer of assets, the debtor will recognize a gain on restructuring measured by the excess of the carrying value of the payable settled over the book value of the assets transferred.
- \_\_\_\_\_ 7. Restructuring gains that arise from troubled debt restructurings are reported by the debtor as extraordinary gains.
- \_\_\_\_\_ 8. The statement of affairs is a report designed to estimate the amount expected to be earned by a debtor company during the time period needed to complete a reorganization.

**EXERCISE 10-3 Transfer of Assets LO 1**

Bar Company, which is in financial difficulty and in the process of a voluntary reorganization, has agreed to transfer to a creditor a copyright it owns in full settlement of a \$150,000 note payable and \$15,000 in accrued interest. The copyright, which originally cost \$100,000, has an accumulated amortization balance of \$55,000 and a current fair value of \$95,000.

**Required:**

- A. Prepare the journal entries on Bar Company's books to record the transfer of the copyright.
- B. Explain the proper treatment of any gain or loss recognized in (A).
- C. Assuming the fair value of the copyright was \$30,000, repeat the requirement in (A).

**EXERCISE 10-4 Modification of Terms LO 1**

Lake Company, a major creditor of financially troubled Spain Company, has agreed to modify the terms of a debt owed to Lake Company. The debt consists of a \$900,000, 12% note that is due currently along with accrued interest of \$95,000. Lake Company agreed to extend the due date of the note and accrued interest for three years and to reduce the interest rate to 5% per annum (on both maturity value and accrued interest), with interest to be paid annually.

**Required:**

- A. Should a gain on restructuring be recognized by Spain Company? Explain.
- B. Prepare the entry that should be made on Spain Company's books on the date of restructure.

**EXERCISE 10-5 Modification of Terms LO 1**

Assume the same situation described in Exercise 10-4 except that the terms of modification of the debt are

- 1. Accrued interest of \$95,000 is to be canceled.
- 2. The face value of the note is reduced to \$600,000, payable at the end of three years. Interest on the new face value at 8% is to be paid annually.

**Required:**

- A. Should a gain on restructuring be recognized? Explain.
- B. Prepare entries on the books of Spain Company to record the restructuring.
- C. Prepare the entry on Spain Company's books to record the interest payment at the end of the first year after restructuring.



**EXERCISE 10-6 Settlement of Priority Claims LO 4**

The following data are taken from the statement of affairs of the Monroe Company. (Assume that the realizable values of assets are accurate.)

|   |           |
|---|-----------|
| Assets pledged with fully secured creditors<br>(realizable value, \$190,000)    | \$240,000 |
| Assets pledged with partially secured creditors<br>(realizable value, \$90,000) | 110,000   |
| Free assets (realizable value, \$102,000)                                       | 160,000   |
| Fully secured creditor claims   | 91,000    |
| Partially secured creditor claims   | 120,000   |
| Unsecured creditor claims with priority   | 30,000    |
| General unsecured creditor claims   | 350,000   |

**Required:**

Compute the amount that will be paid to each class of creditor.

**EXERCISE 10-7 Statement of Affairs LO 1**

Ball Company is facing bankruptcy proceedings. A balance sheet dated June 30, 2015, and other information are presented below:

**Ball Company Balance Sheet  
June 30, 2015**

|                              |                  |
|------------------------------|------------------|
| Cash                         | \$ 20,400        |
| Accounts Receivable (net)    | 170,000          |
| Inventory                    | 180,000          |
| Property and Equipment (net) | 430,000          |
| Total Assets                 | <u>\$800,400</u> |
| Accounts Payable             | \$350,000        |
| Accrued Wages                | 120,000          |
| Notes Payable                | 200,000          |
| Common Stock                 | 400,000          |
| Retained Earnings (deficit)  | (269,600)        |
| Total Equities               | <u>\$800,400</u> |

Estimated realizable values of the company's assets are:

|                        |           |
|------------------------|-----------|
| Accounts Receivable    | \$ 95,000 |
| Inventory              | 110,000   |
| Property and Equipment | 320,000   |

Accounts receivable and inventory are each pledged as security on individual notes payable in the amount of \$100,000 each.

**Required:**

Prepare a statement of affairs and determine the estimated settlement per dollar for general unsecured creditors. (Assume that all accrued wages are priority items.)

**EXERCISE 10-8 Reorganization Balance Sheet LO 1**

The following balance sheet was prepared for Crane Company on December 31, 2015:

**Crane Company Balance Sheet  
December 31, 2015**

|   |              |                  |
|---|--------------|------------------|
| Cash  |              | \$ 33,000        |
| Accounts Receivable                               | \$52,500     |                  |
| Less: Allowance for Uncollectibles                | <u>3,800</u> | 48,700           |
| Inventory   |              | 71,000           |
| Property and Equipment (net)                      |              | 142,000          |
| Goodwill  |              | 20,000           |
| Total Assets                                      |              | <u>\$314,700</u> |
| Accounts Payable                                  |              | \$ 66,000        |
| 10% Bonds Payable, due 6/30/18                    |              | 130,000          |
| Common Stock, \$20 par, 10,000 Shares Outstanding |              | 200,000          |
| Retained Earnings (deficit)                       |              | (81,300)         |
| Total Equities                                    |              | <u>\$314,700</u> |

Crane Company has had operating difficulties, accumulating a deficit over several years before 2015. During 2015, however, Crane reported a significantly lower operating loss, and prospects for the future are relatively bright. Although management and stockholders are optimistic about the future, it is almost certain that the company will lack the necessary working capital to handle existing obligations and expected future growth. In light of these facts, Crane has filed for reorganization under Chapter 11 of the Bankruptcy Reform Act of 1978. The reorganization plan, the provisions of which are set out below, has received the approval of stockholders, creditors, and the court. Provisions of the reorganization plan are as follows:

1. Accounts receivable are to be written down to \$40,000 to reflect their current expected realizable value.
2. Inventory is fairly valued, but goodwill is to be written off, and property and equipment is to be written down to its fair value of \$118,000.
3. The \$20 par value common stock is to be replaced with \$4 par value common stock on a share-for-share basis in order to create some reorganization capital, which will be used to eliminate the deficit.
4. The bondholders agree to exchange their bonds for new 8% bonds in the same maturity amount, but with a due date of June 30, 2022, and 6,000 shares of \$4 par value common stock. The stock will be divided ratably among the bondholders. The fair value of the common stock is equal to its par value.
5. Accounts payable are expected to be paid in full, although creditors have agreed to extend due dates by as much as six months.
6. Any accumulated deficit is to be eliminated.

**Required:**

- A. Prepare journal entries to record the effects of the reorganization plan.
- B. Prepare a balance sheet as it would appear immediately after the reorganization.

**EXERCISE 10-9**

**Trustee Accounting LO 1**

TRX Company has been forced into receivership, and you have been appointed trustee. You decide to open your own set of books in order to distinguish more clearly between transactions occurring before and after your appointment. The following account balances were reported on September 1, 2015:

|                              |                  |
|------------------------------|------------------|
| Cash                         | \$ 26,700        |
| Accounts Receivable          | 130,400          |
| Inventory                    | 191,900          |
| Property and Equipment       | 590,400          |
| Total                        | <u>\$939,400</u> |
| Allowance for Uncollectibles | \$ 16,000        |
| Accumulated Depreciation     | 211,500          |
| Accounts Payable             | 308,400          |
| Capital Stock                | 800,000          |
| Retained Earnings (deficit)  | <u>(396,500)</u> |
| Total                        | <u>\$939,400</u> |

In the four months immediately after your appointment, the following transaction occurred:

1. Sales were made in the amount of \$296,000, of which \$31,500 were cash sales.
2. Receivables were collected in the following amounts:

|                 |           |
|-----------------|-----------|
| Old receivables | \$ 76,800 |
| New receivables | 242,200   |

3. Additional inventory was purchased on account in the amount of \$127,500.
4. Cash payments were made as follows:

|                         |           |
|-------------------------|-----------|
| On old accounts payable | \$206,500 |
| On new accounts payable | 61,600    |
| For operating expenses  | 46,000    |
| For trustee fees        | 13,000    |

5. Journal entries were made to record:
  - (a) Bad debt expense of \$21,600, of which \$8,600 related to new accounts receivable.
  - (b) Depreciation expense of \$32,400.
  - (c) Write-off of old accounts receivable of \$21,000.

The inventory balance at the end of your first four months as trustee (the end of the fiscal year for TRX Company) was \$149,700.

**Required:**

Prepare journal entries to record the foregoing on your set of books. Include appropriate closing entries.

**EXERCISE 10-10 Combining Workpaper LO 1**

Use the data provided in Exercise 10-9.

**Required:**

Prepare a combining workpaper for TRX Company as of the end of the first four months of receivership (December 31, 2015).

**ASC Exercises:**

For all ASC exercises indicate as part of your answer: the Codification topic, subtopic, section, and paragraph upon which your answer is based (unless otherwise specified). All ASC questions require access to the FASB Codification.

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|                 |   |
|-----------------|---|
| <b>ASC10-1</b>  | <b>Presentation</b> A sometimes-confusing aspect of the definition of <i>current assets</i> is the inclusion of prepaid items. Prepaid expenses are not usually converted into cash in the current period. How do GAAP rationalize this classification issue? |
| <b>ASC10-2</b>  | <b>Disclosure</b> Must a firm separately disclose the cash flow pertaining to extraordinary items or discontinued items in operating activities?  |
| <b>ASC10-3</b>  | <b>Scope</b> Must a defined pension plan that presents financial information in accordance with the provisions of topic 960 provide a statement of cash flows?  |
| <b>ASC 10-4</b> | <b>General</b> List all the topics found in topic 400—Liabilities. ( <i>Hint:</i> There are nine topics.) ASC 405-10 provides the overall guidance for liabilities. What is the overall objective of this section?  |
| <b>ASC 10-5</b> | <b>Glossary</b> What is a <i>troubled debt restructuring</i> ?  |
| <b>ASC 10-6</b> | <b>Presentation</b> Describe fresh start accounting and the conditions under which it is acceptable under current GAAP.   |

**PROBLEMS****PROBLEM 10-1 Journal Entries for Reorganization LO 1**

On February 1, 2015, Clover Company filed a petition for reorganization under the bankruptcy statutes. The court approved the plan on September 1, 2015, including the following provisions:

1. Unsecured creditors of open accounts amounting to \$71,600 are paid 42 cents on the dollar in full settlement.
2. Clover Company is to exchange accounts receivable in the face amount of \$92,000 and an allowance for uncollectible accounts of \$19,450 for the full settlement of \$132,400 owed on open account to one of its major unsecured creditors. The estimated fair value of the receivables is \$69,000.
3. Accrued expenses of \$14,620, representing priority items, are to be paid in full.
4. Clover Company's only other major unsecured creditor agreed to a five-year extension of the \$300,000 principal owed him on a 10% note payable. Accrued interest on the note on September 1, 2015, amounts to \$27,000, one-third of which is to be paid in cash and the remainder canceled. In addition, no interest is to be charged during the remaining five years to maturity of the note.

**Required:**

Prepare journal entries on the books of Clover Company to give effect to the foregoing provisions.

**PROBLEM 10-2 Reorganization Entries and Balance Sheet LO 1**

On September 30, 2014, SRP Company filed a petition for reorganization with a bankruptcy court. The plan was approved by the court and all parties of interest on January 2, 2015, when SRP Company's balance sheet was as follows:

**SRP Company Balance Sheet  
January 2, 2015**

|  |                |                  |
|--|----------------|------------------|
| Cash   |                | \$ 32,200        |
| Accounts Receivable                                      | \$ 71,450      |                  |
| Less: Allowance for Uncollectibles                       | <u>16,750</u>  | 54,700           |
| Inventories  |                | 126,600          |
| Plant and Equipment                                      | 322,000        |                  |
| Less: Accumulated Depreciation                           | <u>180,700</u> | 141,300          |
| Land   |                | 20,800           |
| Patents  |                | <u>92,000</u>    |
| Total Assets   |                | <u>\$467,600</u> |
| Current Liabilities                                      |                |                  |
| Accounts Payable—Unsecured                               |                | \$142,700        |
| 12% Notes Payable—Unsecured                              |                | 57,000           |
| Accrued Wages—with Priority                              |                | 11,900           |
| Accrued Interest Payable                                 |                | <u>38,400</u>    |
| Total Current Liabilities                                |                | 250,000          |
| 10% Note Payable—Unsecured                               |                | 54,400           |
| 9% Mortgage Note Payable—Secured by Equipment            |                | 80,000           |
| Stockholders' Equity                                     |                |                  |
| Common Stock, \$.50 par value, 2,500,000                 |                |                  |
| Shares Authorized, 480,000 shares issued and Outstanding |                | 240,000          |
| Retained Earnings (deficit)                              |                | <u>(156,800)</u> |
| Total Equities   |                | <u>\$467,600</u> |

The terms of the reorganization plan are as follows:

1. Creditors represented by \$69,000 of the unsecured accounts payable agree to accept the accounts receivable of SRP Company in full settlement of their claims. The fair value of the receivables is \$51,000.
2. Creditors represented by \$54,000 of the unsecured accounts payable agree to accept a patent with a book value of \$42,000 and a fair value of \$50,000 in full settlement of their claims.
3. Creditors of the remaining unsecured accounts payable agree to accept \$.60 on the dollar. Cash is paid to these creditors and to the creditors with priority.
4. The creditor holding the 12%, \$57,000 note (on which there is \$6,000 accrued interest) agreed to extend the due date for two years from January 3, 2015, and to reduce the interest rate to 6% on the current carrying value of the debt (\$63,000), payable annually.
5. The holder of the 10%, \$54,400 unsecured note (on which there is \$11,900 accrued interest) agreed to cancel the accrued interest and \$14,400 of the principal; interest on the new note at 10% is due annually, with the principal due on January 3, 2018.
6. The holder of the 9%, \$80,000 mortgage note (on which there is \$20,500 accrued interest) agreed to accept 100,000 shares of common stock in exchange for full satisfaction of the debt. The common stock has a fair value of \$.59 per share.
7. The par value of the common stock is reduced to \$.10 per share and any remaining accumulated deficit is eliminated.

**Required:**

- A. Prepare journal entries to give effect to the reorganization.
- B. Prepare a post-reorganization balance sheet dated January 2, 2015.
- C. Prepare journal entries to accrue interest on December 31, 2015, and to record the payment of interest on January 2, 2016.

**PROBLEM 10-3 Statement of Affairs and Deficiency Account LO 1**

Prost Company has filed a bankruptcy petition. Its account balances at December 31, 2015, are presented here:

|                                   |                  |
|-----------------------------------|------------------|
| Cash                              | \$ 2,500         |
| Notes Receivable                  | 60,000           |
| Accounts Receivable (net)         | 76,000           |
| Inventories                       |                  |
| Finished Goods                    | 43,000           |
| Work in Process                   | 60,000           |
| Raw Materials                     | 51,000           |
| Prepaid Expenses                  | 4,000            |
| Investment in Stock               | 12,000           |
| Land                              | 140,000          |
| Property and Equipment (net)      | 400,000          |
| Goodwill                          | 10,000           |
| Total                             | <u>\$858,500</u> |
| Accounts Payable                  | \$220,000        |
| Accrued Wages (all with priority) | 45,000           |
| Bank Notes Payable                | 225,000          |
| Mortgage Payable                  | 350,000          |
| Common Stock                      | 380,000          |
| Retained Earnings (deficit)       | (361,500)        |
| Total                             | <u>\$858,500</u> |

The following additional information is available:

- All notes receivable with the exception of one for \$2,500 are expected to be collected. The notes receivable are pledged as security on the bank notes payable.
- Of the total accounts receivable, \$55,000 is expected to be collected. The accounts receivable are also pledged as security on the bank notes payable.
- Finished goods can be sold at 30% above cost. Selling expenses will be approximately 15% of selling price. Work in process is to be completed at an additional cost of \$30,000, of which \$19,000 represents the cost of raw materials. The expected selling price of the work in process (after completion) is 10% above cost, with selling expenses of 15% of selling price. Unused raw materials can be sold for \$18,000.
- Prepaid expenses are fully recoverable.
- The investment in stock consists of 100 shares of MBI Company with a current market value of \$19,000.
- Land is appraised at \$200,000, and plant and equipment is appraised at \$205,000. The land and plant and equipment serve as collateral on the mortgage payable. Accrued but unrecorded interest on the mortgage payable amounts to \$3,000.

**Required**

- Prepare a statement of affairs, including a deficiency account.
- Compute the estimated dividend to be paid general unsecured creditors.

**PROBLEM 10-4 Realization and Liquidation Account LO 1**

A balance sheet for Bran Company on June 30, 2015, the date Jim Brown was appointed trustee, is presented here:

**Bran Company Balance Sheet**  
**June 30, 2015**

|                                    |           |                  |
|------------------------------------|-----------|------------------|
| Cash                               |           | \$ 15,000        |
| Accounts Receivable                | \$ 45,000 |                  |
| Less: Allowance for Uncollectibles | 6,000     | 39,000           |
| Inventory                          |           | 104,000          |
| Plant and Equipment                | 215,000   |                  |
| Less: Accumulated Depreciation     | 70,000    | 145,000          |
| Total Assets                       |           | <u>\$303,000</u> |
| Accounts Payable                   |           | \$145,000        |
| Common Stock                       |           | 225,000          |
| Retained Earnings (deficit)        |           | (67,000)         |
| Total Liabilities and Equities     |           | <u>\$303,000</u> |

The following information concerning the period from June 30, 2015, to December 31, 2015, is also available:

1. All Bran Company's assets were transferred to the trustee.
2. Sales for the period were \$130,000, of which \$30,000 were cash sales.
3. Receivables collected by the trustee in cash were:
 

|                 |          |
|-----------------|----------|
| Old receivables | \$38,000 |
| New receivables | 85,000   |
4. Merchandise inventory was purchased on account by the trustee in the amount of \$35,000.
5. Cash payments were made by the trustee for:
  - (a) Accounts payable (old), \$110,000
  - (b) Accounts payable (new), \$30,000
  - (c) Operating expenses, \$47,000
  - (d) Trustee expense, \$2,000
6. Adjusting entries recorded by the trustee on December 31, 2015, were:
  - (a) Estimated uncollectibles
 

|                           |          |
|---------------------------|----------|
| Accounts receivable (old) | \$ 1,000 |
| Accounts receivable (new) | 2,000    |
  - (b) Accounts receivable written off (old), \$7,000
  - (c) Depreciation expense, \$10,000
7. The merchandise inventory balance on December 31 was \$75,000.
8. The plant and equipment included a parcel of land and a piece of equipment, both of which were sold by the trustee for cash. The land cost \$14,000 and was sold for \$25,000. The equipment, which had a book value of \$25,000 (cost, \$50,000; accumulated depreciation, \$25,000), was sold for \$13,000.

**Required:**

Prepare a realization and liquidation account, including a copy of the cash account, for the period June 30, 2015, to December 31, 2015. Use the alternate approach for reporting the components of the net gain or loss on the sale of land and equipment.

**PROBLEM 10-5 Trustee Accounting and Combining Workpaper LO 1**

Plum Company has been in receivership for the past five months. At the beginning of this period, the following trial balance was taken from Plum Company's books.

|                              |                  |
|------------------------------|------------------|
| Cash                         | \$ 4,500         |
| Accounts Receivable          | 15,000           |
| Inventory                    | 142,650          |
| Property and Equipment       | 90,600           |
|                              | <u>\$252,750</u> |
| Allowance for Uncollectibles | \$ 3,750         |
| Accumulated Depreciation     | 36,825           |
| Accounts Payable             | 143,175          |
| Capital Stock                | 135,000          |
| Retained Earnings (deficit)  | (66,000)         |
|                              | <u>\$252,750</u> |

The trustee, P. Smith, who was appointed to manage the debtor's business during the period of liquidation, opened a new set of books and took title to Plum Company's assets on June 1, 2015. The activities of the trustee during the five-month period ended October 31, 2015, are as follows:

1. The trustee sold all Plum Company's inventory for \$153,000, of which \$75,000 represented credit sales.
2. Cash was collected on old receivables, \$11,250, and on new receivables, \$64,500.
3. Expenses paid during the period were
 

|                    |          |
|--------------------|----------|
| Operating expenses | \$11,850 |
| Trustee expenses   | 3,000    |
4. The trustee recorded depreciation expense of \$5,250.
5. The trustee paid off all the accounts payable.
6. Estimated uncollectibles on the new accounts receivable were \$2,250; the trustee wrote off all the remaining old accounts receivable.
7. The trustee sold all the property and equipment for \$43,500.

**Required:**

- A. Prepare journal entries to record the effects of these transactions on the books of both the trustee and Plum Company.
- B. Prepare a combining workpaper at the end of the five-month period, October 31, 2015.

**PROBLEM 10-6 Realization and Liquidation Account LO 1**

Use the data provided in Problem 10-5.

**Required:**

Prepare a realization and liquidation account for Plum Company to cover the five-month period of receivership (June 1, 2015, to October 31, 2015). Use the alternate approach to present the components of the net gain or net loss, and include a copy of the trustee's cash account for the period.

**PROBLEM 10-7 Statement of Affairs and Deficiency Account LO 1**

Miner Company is being forced into bankruptcy. The company's creditors and stockholders have requested an estimate of the results of a liquidation of the company. Miner's trial balance follows:

**Miner Company Trial Balance  
May 31, 2015**

|                                      | <u>Debit</u>     | <u>Credit</u>    |
|--------------------------------------|------------------|------------------|
| Cash                                 | \$ 6,000         |                  |
| Accounts Receivable                  | 63,000           |                  |
| Allowance for Bad Debts              |                  | \$ 2,000         |
| Notes Receivable                     | 50,000           |                  |
| Accrued Interest on Notes Receivable | 1,200            |                  |
| Inventory                            | 60,000           |                  |
| Buildings                            | 182,000          |                  |
| Accumulated Depreciation—Buildings   |                  | 63,000           |
| Equipment                            | 14,600           |                  |
| Accumulated Depreciation—Equipment   |                  | 1,400            |
| Prepaid Insurance                    | 1,100            |                  |
| Goodwill                             | 8,500            |                  |
| Accrued Wages—with Priority          |                  | 6,000            |
| Taxes Payable—with Priority          |                  | 2,400            |
| Accounts Payable                     |                  | 170,000          |
| Notes Payable                        |                  | 80,000           |
| Accrued Interest Payable             |                  | 1,600            |
| Common Stock                         |                  | 110,000          |
| Retained Earnings (deficit)          | 50,000           |                  |
|                                      | <u>\$436,400</u> | <u>\$436,400</u> |

The assets are expected to bring cash on conversion in the following amounts:

|   |          |
|---|----------|
| Accounts receivable                                 | \$50,000 |
| Notes receivable including \$1,000 accrued interest | 40,800   |
| Inventory   | 30,000   |
| Building  | 75,000   |
| Equipment   | 4,200    |
| Prepaid insurance                                   | 400      |

The notes receivable are pledged as security on a note payable of \$40,000. A note payable of \$20,000 is secured by a lien on the building, and the equipment is pledged as security on a note payable of \$10,000. One-half of the interest payable relates to the \$40,000 note payable; the other half of the interest payable relates to the \$20,000 note payable. There is no accrued interest on the other notes payable.

**Required:**

Prepare a statement of affairs as of May 31, 2015. Include a deficiency account, and determine the estimated dividend rate to the general unsecured creditors.

**PROBLEM 10-8 Statement of Affairs and Deficiency Account LO 1**

A receiver was appointed by the court to manage the affairs of Davis Manufacturing Company on March 31, 2015. On this date, the following balance sheet applied:

**Davis Manufacturing Company Balance Sheet  
March 31, 2015**

|   |                    |
|---|--------------------|
| Cash                                      | \$ 22,500          |
| Accounts Receivable                       | 115,500            |
| Notes Receivable                          | 60,000             |
| Accrued Interest on Notes Receivable      | 1,375              |
| Inventories                               |                    |
| Finished Goods                            | 140,000            |
| Work in Process                           | 97,500             |
| Raw Materials                             | 60,000             |
| Supplies                                  | 7,750              |
| Prepaid Expenses                          | 3,000              |
| Investment in Stock                       | 66,250             |
| Land                                      | 105,000            |
| Buildings (net)                           | 495,000            |
| Equipment (net)                           | 232,500            |
| Total                                     | <u>\$1,406,375</u> |
| Notes Payable                             | \$ 196,000         |
| Accounts Payable                          | 587,500            |
| Wages Payable (all with priority)         | 33,750             |
| Payroll Taxes Payable (all with priority) | 5,250              |
| Accrued Interest Payable                  |                    |
| On Notes Payable                          | 2,750              |
| On Mortgage Note Payable                  | 21,250             |
| Mortgage Note Payable                     | 440,000            |
| Common Stock                              | 469,000            |
| Retained Earnings (deficit)               | (349,125)          |
| Total                                     | <u>\$1,406,375</u> |

**Additional Information:**

- The cash account includes a \$500 travel advance that has been spent.
- Of the total accounts receivable, \$75,000 is believed to be collectible. The remaining accounts are doubtful, but it is believed that about one-third of these will be realized eventually. The accounts receivable are pledged as security on a \$10,000 note payable.
- Notes receivable of \$50,000 have been pledged as security on a note payable of \$45,000. This portion of the notes receivable has an estimated realizable value of \$35,000. The remaining notes receivable, including the accrued interest, are expected to be fully collected. The \$45,000 note payable has accrued interest due of \$1,000.
- The finished-goods inventory is expected to sell at 20% above its cost, with expenses involved in its disposition approximating 10% of selling price. The work in process inventory can be completed at an additional cost of \$55,000, of which \$40,000 represents materials used from the present raw materials inventory. The completed work in process should then sell for \$145,000; the remaining raw materials should sell for one-half their cost. Supplies are expected to realize \$1,300.
- The investment in stock consists of 2,000 shares of Monelli Vineyards. The stock has a current market value of \$50 per share and is pledged as security on a note payable of \$41,000. Interest accrued on the note payable amounts to \$1,750.
- The land and buildings have been appraised at \$165,000 and \$260,000, respectively. They are pledged as collateral on the mortgage note payable.
- The equipment is expected to realize \$100,000.
- Prepaid expenses are nonrealizable.

**Required:**

- Prepare a statement of affairs.
- Prepare a deficiency account detailing estimated gains and losses.
- Calculate the dividend rate per dollar of unsecured liabilities.



# Chapter 10

## APPENDIX 10A – BLOCKBUSTER AND NETFLIX FINANCIAL DATA (ONLINE)

| <i>Blockbuster (\$ millions)</i>       | 2001     | 2002      | 2003      | 2004      | 2005      | 2006      | 2007      | 2008      | 2009      |
|--|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| <b>Balance Sheet</b>                   |          |           |           |           |           |           |           |           |           |
| Assets                                 | 7752.400 | 6243.800  | 4854.900  | 3863.400  | 3179.600  | 3137.200  | 2733.600  | 2154.500  | 1538.300  |
| Total Liabilities                      | 2003.700 | 2076.800  | 1605.600  | 2800.500  | 2548.000  | 2394.800  | 2077.900  | 1940.200  | 1852.600  |
| Stockholders' Equity                   | 5748.700 | 4167.000  | 3249.300  | 1062.900  | 631.600   | 742.400   | 655.700   | 214.300   | -314.300  |
| <b>Selected Balance Sheet items</b>    |          |           |           |           |           |           |           |           |           |
| Market Value of Equity                 | 4455.360 | 2200.100  | 3247.155  | 1699.938  | 669.510   | 973.317   | 720.360   | 198.882   | 124.488   |
| Current Assets                         | 716.400  | 958.900   | 960.300   | 1217.700  | 1423.800  | 1565.600  | 1319.200  | 1258.600  | 1060.000  |
| Current Liabilities                    | 1268.800 | 1477.600  | 1327.800  | 1449.400  | 1317.900  | 1395.300  | 1288.500  | 1253.400  | 934.800   |
| Accounts Receivables                   | 150.000  | 184.800   | 183.700   | 177.800   | 127.800   | 133.800   | 113.100   | 117.100   | 79.400    |
| Inventory                              | 202.900  | 452.100   | 415.100   | 516.600   | 310.300   | 343.900   | 343.900   | 432.800   | 298.500   |
| Long-term Debt                         | 727.800  | 541.500   | 219.900   | 1145.200  | 1158.000  | 984.200   | 757.800   | 817.800   | 963.600   |
| Retained Earnings                      | -434.100 | -2055.600 | -2979.800 | -4275.600 | -4881.100 | -4780.800 | -4871.400 | -5316.000 | -5839.200 |
| <b>Income Statement</b>                |          |           |           |           |           |           |           |           |           |
| Total Revenues                         | 5156.700 | 5565.900  | 5911.700  | 6053.200  | 5864.400  | 5522.200  | 5517.400  | 5287.900  | 4062.400  |
| Cost of Goods Sold                     | 2083.100 | 2358.700  | 1435.000  | 1693.400  | 1775.300  | 1790.000  | 1937.300  | 1883.600  | 1364.400  |
| Gross Margin                           | 3073.600 | 3207.200  | 4476.700  | 4359.800  | 4089.100  | 3732.200  | 3580.100  | 3404.300  | 2698.000  |
| Income before Extraordinary items      | -240.300 | 189.400   | -979.500  | -1248.800 | -588.100  | 63.700    | -74.200   | -373.800  | -517.600  |
| Net income                             | -240.300 | -1627.600 | -983.900  | -1248.800 | -588.100  | 50.500    | -73.800   | -374.100  | -558.200  |
| <b>Selected Income Statement items</b> |          |           |           |           |           |           |           |           |           |
| Interest Expense                       | 78.200   | 49.500    | 33.100    | 38.100    | 98.700    | 101.600   | 88.700    | 73.000    | 111.600   |
| Tax Expense                            | -56.100  | 103.000   | 103.200   | -37.300   | 64.600    | -76.400   | 29.600    | 25.600    | 11.800    |
| <b>Statement of Cash Flows</b>         |          |           |           |           |           |           |           |           |           |
| Cash from Operations (CFO)             | 1395.100 | 1451.200  | 593.700   | 417.000   | -70.500   | 329.400   | -56.200   | 51.000    | 29.300    |
| Cash interest paid                     | 79.400   | 45.800    | 34.300    | 23.200    | 89.500    | 99.500    | 77.400    | 71.200    | 68.400    |
| Cash taxes paid                        | 0.000    | 0.000     | 98.100    | 44.400    | 11.200    | -2.200    | 29.900    | 26.600    | 21.500    |

| Netflix (\$ millions)                  | 2001    | 2002     | 2003     | 2004     | 2005     | 2006     | 2007     | 2008     | 2009     |
|--|---------|----------|----------|----------|----------|----------|----------|----------|----------|
| <b>Balance Sheet</b>                   |         |          |          |          |          |          |          |          |          |
| Assets                                 | 41.630  | 130.530  | 176.012  | 251.793  | 364.681  | 608.779  | 647.020  | 617.946  | 679.734  |
| Total Liabilities                      | 30.304  | 41.174   | 63.304   | 95.510   | 138.429  | 194.568  | 216.271  | 270.791  | 480.591  |
| Stockholders' Equity                   | 11.326  | 89.356   | 112.708  | 156.283  | 226.252  | 414.211  | 430.749  | 347.155  | 199.143  |
| <b>Selected Balance Sheet items</b>    |         |          |          |          |          |          |          |          |          |
| Market Value of Equity                 | 210.121 | 247.131  | 1390.493 | 650.186  | 1481.697 | 1774.306 | 1727.984 | 1759.385 | 2944.010 |
| Current Assets                         | 19.552  | 107.075  | 138.946  | 187.346  | 243.691  | 428.418  | 416.532  | 361.447  | 411.013  |
| Current Liabilities                    | 26.208  | 40.426   | 63.019   | 94.910   | 137.587  | 193.447  | 212.576  | 216.017  | 226.369  |
| Accounts Receivables                   | 0.000   | 0.000    | 0.000    | 0.000    | 0.000    | 0.000    | 0.000    | 0.000    | 0.000    |
| Inventory                              | 0.000   | 0.000    | 0.000    | 0.000    | 0.000    | 0.000    | 0.000    | 0.000    | 0.000    |
| Long-term Debt                         | 6.868   | 1.691    | 0.460    | 0.068    | 0.000    | 0.000    | 0.000    | 39.140   | 237.982  |
| Retained Earnings                      | -37.266 | -158.439 | -152.697 | -131.920 | -89.671  | -40.589  | 27.974   | 108.536  | 199.090  |
| <b>Income Statement</b>                |         |          |          |          |          |          |          |          |          |
| Total Revenues                         | 75.912  | 152.806  | 272.243  | 506.228  | 682.213  | 996.660  | 1205.340 | 1371.161 | 1670.269 |
| Cost of Goods Sold                     | 20.110  | 51.659   | 97.369   | 188.254  | 358.773  | 469.849  | 561.206  | 668.023  | 821.737  |
| Gross Margin                           | 55.802  | 101.147  | 174.874  | 317.974  | 323.440  | 526.811  | 644.134  | 703.138  | 848.532  |
| Income before Extraordinary items      | -38.618 | -21.947  | 6.512    | 21.595   | 42.027   | 49.082   | 66.952   | 83.026   | 115.860  |
| Net income                             | -38.618 | -21.947  | 6.512    | 21.595   | 42.027   | 49.082   | 66.952   | 83.026   | 115.860  |
| <b>Selected Income Statement items</b> |         |          |          |          |          |          |          |          |          |
| Interest Expense                       | 1.852   | 11.972   | 0.417    | 0.170    | 0.407    | 0.000    | 0.000    | 2.458    | 6.475    |
| Tax Expense                            | 0.000   | 0.000    | 0.000    | 0.181    | -33.692  | 31.236   | 44.549   | 48.474   | 76.332   |
| <b>Statement of Cash Flows</b>         |         |          |          |          |          |          |          |          |          |
| Cash from Operations (CFO)             | 4.847   | 40.114   | 89.792   | 147.571  | 157.507  | 247.862  | 277.424  | 284.037  | 325.063  |
| Cash interest paid                     | 860.000 | 592.000  | 312.000  | 109.000  | 170.000  | 1.210    | 1.188    | 2.458    | 3.878    |
| Cash taxes paid                        | 0.000   | 0.000    | 0.000    | 0.000    | 0.977    | 2.324    | 15.775   | 40.494   | 58.770   |

## Chapter 10 – Review Questions

The review questions accompanying this course are designed to assist you in achieving the course learning objectives. The review section is not graded; do not submit it in place of your qualified assessment. While completing the review questions, it may be helpful to study any unfamiliar terms in the glossary in addition to course content. After completing the review questions, proceed to the review question answers and rationales.

67. Which of the following statements is accurate?
- Insolvency means that a debtor has more current liabilities than current assets.
  - Deepening insolvency is when a company cannot pay its obligations when they become due.
  - Only a debtor may file a petition for reorganization under Chapter 11 of the Reform Act.
  - Either a debtor or its creditors may file a petition for reorganization under Chapter 7 of the Reform Act.
68. Which of the following is accurate regarding an extension of payment periods?
- When the only concession from a creditor is an extension of the payment term, no specific disclosure is required.
  - A change in the term will require a change to the carrying value of the debt.
  - No accounting entries are typically needed to extend the payment periods although the nature of the new agreement should be disclosed in the notes to the financial statements.
  - A change to the term will typically involve recognition of a gain or loss in the financial statements.
69. The highest priority for payments of unsecured claims in a bankruptcy proceeding is:
- Wages up to \$4,650 earned within three months before petition.
  - Unpaid federal income taxes.
  - Administrative expenses of the bankruptcy.
  - Wages owed to an insolvent employee.
70. Which of the following statements is accurate regarding Chapter 11 proceedings?
- The court will appoint a committee consisting of the 7 largest creditors.
  - The court will appoint a committee consisting of 5 creditors and 5 shareholders.
  - The court will appoint a committee of the seven largest shareholders.
  - The creditors will create a committee and appoint seven representatives to serve on the committee.

71. Assume that a debtor owes \$10,000 on a note payable with \$2,000 of accrued interest. Assume that land with a book value of \$8,000 and a fair value of \$9,000 is given in full payment of the amount owed. What is the gain/loss included in ordinary income and the amount of gain/loss from restructuring?
- a. (\$1,000, (\$3,000)).
  - b. (\$3,000), (\$1,000).
  - c. \$3,000, \$1,000.
  - d. \$1,000, \$3,000.
72. Which of the following statements is accurate regarding modification of debt terms?
- a. The debtor must adjust the carrying value of the payable whenever the terms are restructured.
  - b. A creditor in a modification situation will account for the change prospectively.
  - c. In a bankruptcy case, the debtor assumes a new effective interest rate equal to the rate that equates the present value of the future cash payments specified by the new terms with the current carrying value of the payable.
  - d. A non-bankruptcy modification of debt payment terms is treated the same as a bankruptcy modification for the debtor.

## Chapter 11 – International Financial Reporting Standards

### Learning Objectives

After completing this section of the course, you will be able to:

- Recognize differences between U.S. GAAP and IFRS, cite historical activity in the international accounting standards arena, and identify the reasons why the changing world environment is leading to an increased focus on international accounting standards.
- Recognize the milestones that must be achieved before the SEC will require adoption of IFRS.
- Identify components of the SEC’s work plan for incorporating IFRS into the financial reporting system for U.S. issuers and identify current areas of difference between the two.
- Identify the historical success of the convergence projects and identify the four remaining joint convergence topics between IFRS and FASB.
- Cite the steps that a non-U.S. company must follow to list its shares on a U.S stock exchange.
- Identify the purpose of Form 20-F filed with the SEC and the rules around its completion.
- Identify the role of American Depository Receipts (ADRs) in the issuing of securities of non-U.S. companies in the United States.

# INTERNATIONAL FINANCIAL REPORTING STANDARDS

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## CHAPTER CONTENTS

- 11.1 THE INCREASING IMPORTANCE OF INTERNATIONAL ACCOUNTING STANDARDS
- 11.2 HISTORICAL PERSPECTIVE: THE ROAD TO CONVERGENCE
- 11.3 SIMILARITIES AND DIFFERENCES BETWEEN U.S. GAAP AND IFRS
- 11.4 GAAP HIERARCHY—U.S. VERSUS IFRS
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IN  
THE  
NEWS

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“We’re not going to embrace any standard that isn’t as good as our own. We’re the best capital market in the world.”<sup>1</sup>

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## 11.1 THE INCREASING IMPORTANCE OF INTERNATIONAL ACCOUNTING STANDARDS

The International Accounting Standards Committee (IASC) was founded in 1973. Prior to 2001, it has been the driving force toward global harmonization of accounting practices. Its objective was to formulate and to publish standards to be followed in the preparation of financial statements, to promote worldwide acceptance of these standards, and to work

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<sup>1</sup> Arthur Levitt Jr., Chairman, SEC, Speech at New York University, 9/28/98.

generally for improvements in international accounting. Initially, the IASC made decisions on accounting issues and reported them in the form of **International Accounting Standards (IAS)**. The first international accounting standard was issued in January 1975; 41 standards were issued by January 2001.

In January 2001, the IASC announced formation of the International Accounting Standards Board (IASB). This board is comprised of members from various countries (including the United States) with a goal of developing high-quality internationally accepted accounting standards for users of financial statements. The Board includes 12 full-time members and 2 part-time members. This board is responsible for issuing standards known as **International Financial Reporting Standards (IFRS)**. In April 2001, the IASB approved a resolution stating that all IASC Standards and Standing Interpretation Committee (SIC) interpretations in effect as of April 1, 2001 (the date on which the IASB assumed its duties) would remain in effect until amended or withdrawn by the IASB. To date, thirteen IFRS have been issued.

## 11.2 HISTORICAL PERSPECTIVE: THE ROAD TO CONVERGENCE

**LO 1** Increased focus on international standards.

After a joint meeting in September 2002, the FASB and the IASB issued the Norwalk Agreement, including a “memorandum of understanding.” Each acknowledged its commitment to the development of high-quality, compatible accounting standards to be used for both domestic and cross-border financial reporting. At that meeting, the FASB and the IASB pledged their efforts to make their existing financial reporting standards fully compatible as soon as practicable and to coordinate their future work to ensure that once achieved, compatibility would be maintained.

At meetings in April and October 2005 and again in November 2009, the FASB and the IASB reaffirmed their commitment to the convergence of U.S. generally accepted accounting principles (U.S. GAAP) and International Financial Reporting Standards (IFRS). A common set of high-quality global standards has been stressed as the long-term strategic priority of both the FASB and the IASB. The Boards indicated nine major joint projects that over time should serve to improve and converge their respective conceptual frameworks.

On November 14, 2008, the SEC released a roadmap for the adoption of IFRS by U.S. issuers. Then on February 24, 2010, the SEC issued a release, *Commission Statement in Support of Convergence and Global Accounting Standards*. In the release, the SEC stated its continued belief that a single set of high-quality globally accepted accounting standards would benefit U.S. investors and its continued encouragement for the convergence of U.S. GAAP and IFRS.

On May 26, 2011, the SEC released a staff paper discussing possible work plans for incorporating IFRS into the financial reporting system. As capital markets have become increasingly global, U.S. investors have increased opportunities for international investment. The basis for considering the use of IFRS by U.S. issuers includes the following milestones:

1. Improvements in accounting standards
2. Accountability and funding of the IASC Foundation
3. Improvement in the ability to use interactive data for IFRS reporting
4. Education and training relating to IFRS

These four milestones relate to issues that need to be addressed before adoption of IFRS by U.S. entities can occur.

The work plan for incorporating IFRS into the financial reporting system includes:

1. Full adoption of IFRS on a specified date, without any endorsement mechanism.
2. Full adoption of IFRS following staged transition over several years, similar to the approach described in the roadmap.
3. An option for U.S. issuers to apply IFRS.

4. Retaining U.S. generally accepted accounting principles (“GAAP”) with continued convergence efforts, with or without a specific mechanism in place to promote alignment with IFRS.
5. Retaining a U.S. standard-setter. (The standard-setter would facilitate the transition process by incorporating IFRS into U.S. GAAP over some defined period of time. At the end of this period, the objective would be that a U.S. issuer would be compliant with both U.S. GAAP and IFRS. This alternative has been labeled *condorsement* and is discussed later in the chapter.)

The first four approaches for incorporation were discussed prior to the work plan and the SEC’s staff paper focused on the fifth alternative (condorsement).

The SEC expressed its belief that the framework illustrates that:

1. The decision faced by the Commission in an effort to achieve a single set of high-quality, globally accepted accounting standards is not necessarily a binary decision (i.e., either to require the use of IFRS by all U.S. issuers immediately or not);
2. Incorporation of IFRS is not inconsistent with the SEC maintaining its ultimate authority over U.S. accounting standard setting; and
3. There are several potential ways to accomplish the broad objective of pursuing a single set of high-quality, globally accepted accounting standards while minimizing cost, effort, and other transition obstacles.

In its Strategic Plan for 2010–2015, the SEC was clear on its intent to support a single set of global accounting standards. The SEC said that because of the increased global nature of the capital markets, the agency will promote higher quality financial reporting worldwide by supporting a single set of high-quality global accounting standards. In addition, the Plan called for the ongoing convergence between the FASB and the International Accounting Standards Board. It was believed that the United States would adopt IFRS by 2014. However, in its draft of the Strategic Plan for 2014–2018, the wording supporting a single set of financial statements has been attenuated. The SEC now states that because of the increasingly global nature of the capital markets, the agency will work to promote higher quality financial reporting worldwide and will consider whether a single set of high-quality global accounting standards is achievable. The SEC continues by stating that it intends to continue to support the FASB’s independence and focus on the needs of investors. There is no specific mention of the IFRS.

One important roadblock as stated by the SEC is funding for the IASB. The SEC stated that 25% of 2012 collections to operate the IASB came from the world’s leading accounting firms (the same individuals that would end up following the standards set by IFRS). This was similar to how the FASB operated prior to Sarbanes-Oxley which now required registrant fees. In recent years, funding of the IASB from U.S. companies has been declining and the SEC convinced the Financial Accounting Foundation (the overseer of the FASB) to contribute \$3 million to the IASB. This has been viewed as a questionable contribution by many organizations such as the National Association of State Boards of Accountancy and the Financial Executives International.

Later in this chapter, we provide a discussion of the remaining major convergence projects between the FASB and the IASB. It should be noted that in three of the four projects, convergence to a single set of standards is highly unlikely.

## The Accountability and Funding of the IASC Foundation

Based in London, the IASB is an accounting standard-setting body established to develop global standards for financial reporting. The Board is overseen by the IASC Foundation, a stand-alone, not-for profit organization, also based in London but incorporated in Delaware. The Foundation is responsible for the activities of the IASB and other work that centers on IFRS, such as initiatives related to translation of IFRS from the English language, education about IFRS, and the development of interactive data taxonomies for IFRS. The IASC Foundation is governed by 22 trustees (“IASC Foundation Trustees”)



whose backgrounds are geographically diverse. Initially, the IASB operations were financed through voluntary contributions by approximately 200 organizations. Because of the concern of a possible lack of objectivity, the IASB sought to establish national financing regimes, proportionate to a country's relative GDP. The Trustees have stated that a majority of the finances are based on such regimes. However, the Trustees have also stated that further progress on financing is essential to safeguard the IFRS Foundation's position as the world's independent accounting standard-setter.

One concern expressed by the SEC is the degree to which the IASC Foundation has a secure, stable funding mechanism in place that permits it to function independently and that enhances the IASB's standard-setting process. National accounting standard-setters traditionally have been accountable to a national securities regulator or other government authority. In the United States, the Financial Accounting Foundation ("FAF"), the sponsor of the FASB, is overseen by the SEC. The IASC Foundation has not historically had a similar link to any national securities regulators. Recognizing that such a relationship would enhance the public accountability of the IASC Foundation, its Trustees have proposed amendments to its constitution to establish a link between the IASC Foundation and a monitoring group composed of securities authorities charged with standard-setting duties in their respective jurisdictions. The securities authorities, including the SEC, envision that the monitoring group will participate in and approve nominations for IASC Foundation Trustees, review the funding arrangements of the IASC Foundation for adequacy and appropriateness, and address matters that the IASC Foundation Trustees are responsible for, such as oversight of the IASB.

## Improvement in the Ability to Use Interactive Data for IFRS Reporting

**Lo 3** SEC milestones to be achieved for adoption of IFRS.

In 2009, the SEC issued the rule "Interactive Data to Improve Financial Reporting." This Rule requires domestic and foreign companies using US GAAP (and eventually to those using IFRS) to provide their financial statements in the XBRL (eXtensible Business Reporting Language) format. This formal provides an exhibit to the current reports and registration statements and provides "detail tagging" of the footnotes and schedules. Currently, the filers must also include "block tagging" for each significant accounting policy and each table within each footnote. Additionally, within each footnote, each amount (i.e., monetary value, percentage, and number) must be separately tagged. This last requirement is commonly referred to as "detail tagging."

On April 8, 2011, the SEC sent a letter to the Center for Audit Quality (CAQ) to acknowledge that it would be impossible for foreign private issuers using IFRS and filing with the SEC to file in XBRL, because the SEC has not approved the IFRS XBRL taxonomy. Since March 2011, the SEC has yet to approve the IFRS Foundation's taxonomy that would allow IFRS issuers to file in XBRL. There is hope that the SEC might approve the 2014 edition.

To realize the anticipated improvements in the usefulness and comparability of financial data, U.S. issuers would need to be capable of providing IFRS financial statements to the SEC in interactive data format. Thus, an acceptable IFRS list of tags for interactive data reporting is likely to enter into the SEC's determination of whether to require the use of IFRS for all U.S. issuers.

## Possible Adoption Approaches

**Full Adoption of IFRS** Under this approach, countries recognize IFRS as issued by the IASB as GAAP. IFRS are authoritative once issued by the IASB, without approval by any local body. Although this approach seems to have the least potential to create deviations from IFRS as issued by the IASB, it also has the potential to result in a much greater variability as to how a specific national regulator (or other body) exercises its authority and fulfills its responsibility for investor protection. Very few jurisdictions follow this approach.

**Adopt IFRS after Some Incorporation Process** This approach would allow each country to address country-specific issues. However, this lessens the perception that countries use a single set of high-quality globally accepted accounting standards. Countries in this category can be divided into (1) countries that **converge** their standards with IFRS (without a firm commitment to incorporate fully IFRS as issued by the IASB) and (2) countries that undertake some form of local **endorsement**.

**Convergence approach:** Under the convergence approach, jurisdictions maintain their local standards but work to converge those standards with IFRS over time (an example is the People’s Republic of China).

**Endorsement approach:** Under this approach, jurisdictions incorporate individual IFRS into local standards. Deviations from IFRS vary under this approach. This approach is very popular; Australia serves as an example of a country following this approach.

**LO 4** SEC work plan for incorporating IFRS.

**“Condorsement” of IFRS** This is the focus of the SEC’s last work plan. The condorsement framework is predicated on several principles. First, U.S. GAAP would be retained, but the Financial Accounting Standards Board would incorporate IFRS into U.S. GAAP over a defined period, with a focus on minimizing transition costs. The FASB would incorporate newly issued IFRS into U.S. GAAP pursuant to some established endorsement protocol. This would require a change to how the FASB currently operates. Similar to other jurisdictions, the endorsement protocol would provide the Commission and the FASB with the ability to modify or supplement IFRS when in the public interest and necessary for the protection of investors. Thus a “U.S. version” of IFRS could result. In addition, there may be a need for U.S. interpretations of IFRS on issues that are significant in the United States but not in the remainder of the world. The most likely example of a modification to IFRS is the possible continuation of some existing U.S. GAAP requirements that have no specific IFRS counterparts.

**The Role of the SEC and the FASB** As is the case today, the SEC would retain the ultimate authority to establish financial reporting requirements in those instances in which interpretative guidance is required or appropriate for U.S. constituents, although addressing such needs through standard setting would still be the preferred approach. The SEC could issue guidance following similar processes to those employed currently such as issuing Staff Accounting Bulletins. The SEC would monitor international standard-setting developments. Currently IFRS do not have any requirements for oil and gas companies and the SEC could decide to retain reporting requirements upon incorporation of IFRS.

Gietzmann and Isidro (2013) investigate institutional investor’s share holdings following the receipt of a SEC comment letter questioning the application of U.S. GAAP or IFRS (firms filing a form 20F). While the number of firms filing form 20F represents only 3.4% of firms filing with the SEC (in the sample), the percentage of firms filing form 20F have a statistically higher probability of receiving a comment letter from the SEC (23% versus 19% for 10K filers). This difference is economically significant because institutional investors react more negatively to comment letters questioning the application of IFRS as compared to U.S. GAAP. The authors find that institutional investors adjust their portfolios consistent with the belief that SEC’s comment letters provide insight into the quality of financial statements.<sup>2</sup>

The AICPA Board of Examiners announced that IFRS would be eligible for testing on the Uniform CPA Exam starting in 2011.

<sup>2</sup> Gietzmann M. and H. Isidro, Analysis of Institutional Investors’ Reaction to the Issuance of SEC’s Comment Letters to European IFRS Registrants versus US GAAP Registrants, Journal of Business Finance and Accounting 2013.

## 11.3 SIMILARITIES AND DIFFERENCES BETWEEN U.S. GAAP AND IFRS

In general, U.S. GAAP are considered to be more rules-based, while IFRS are considered to be more principles-based, although this dichotomy is an oversimplification as most U.S. rules are rooted in principles, and the IASB is embracing more interpretative details of its principles over time. For instance, the IASB's proposed change to IAS 12 on income taxes has many provisions that are rule-based. Still the fact remains that U.S. GAAP includes far more details at present than IFRS. For example, in the criteria for capital leases, in the U.S., if a lease is for more than 75% of the asset's useful life, it is a capital lease. Under IASB rules, a lease is capital<sup>3</sup> if it covers a "substantial portion" of the asset's economic life.

## 11.4 GAAP HIERARCHY—U.S. VERSUS IFRS

### RELATED CONCEPTS

In discussions between the FASB and IASB on developing a joint conceptual framework, the first issue debated was whether the objective should be to provide information to a wide range of users or only to existing shareholders. They agreed that information should be provided to all users making risky investments.

*GAAP hierarchy* refers to how an entity identifies the sources of accounting principles and the framework for selecting the principles used in preparing financial statements. The objective of the GAAP hierarchy is to provide a consistent framework for selecting accounting principles to be used in preparing financial statements that are presented in conformity with U.S. generally accepted accounting principles. Generally, the hierarchy contains multiple levels with the highest level given the most weight. Most standard-setters have a stated hierarchy to guide preparers of the financial statements.

In the last statement issued by the FASB, *SFAS No. 168, The FASB Accounting Standards Codification and the Hierarchy of Generally Accepted Accounting Principles—A Replacement of FASB Statement No. 162*, was issued on June 30, 2009. On the effective date of this pronouncement (annual and interim periods ending after September 15, 2009), the *FASB Accounting Standards Codification (ASC)* will become the source of authoritative accounting and reporting standards for nongovernmental entities in the U.S. In essence, this statement reduced the GAAP hierarchy to two levels: one that is authoritative (included in the FASB ASC) and one that is non-authoritative (not included in the FASB ASC). The exception would be all rules and interpretations issued by the SEC that are also sources of authoritative GAAP for SEC registrants. *FASB Statement No. 168* is the final statement issued by the FASB in that form, and there will no longer be Emerging Issue Task Force (EITF) abstracts, staff bulletins, or AICPA Accounting Statements of Position. Instead, FASB will issue Accounting Standards Updates. For example, *FASB Statement No. 168* is referred to as Accounting Standards Update No. 2009-02.

The Codification includes approximately 90 topics and includes all accounting standards from the previous hierarchy, as well as some relevant portions of selected SEC staff interpretations and guidance. Keep in mind that the FASB ASC is not the authoritative source of SEC guidance. Thus the new Codification should reduce the extent of time and effort needed to solve accounting reporting issues, provide accurate and timely updates as new standards are released, and clearly distinguish between what is and what is not authoritative.

### U.S. GAAP Hierarchy—Effective September 2009

**Authoritative:** Included in the FASB Accounting Standards Codification.

**Non-Authoritative:** Not included in the FASB Accounting Standards Codification.

**Exceptions:** SEC registrants must also follow SEC rules and regulations issued under the authority of federal securities laws.

<sup>3</sup> International standards typically refer to capital leases as financing leases.

In *IAS 8* (revised in 2003), the IASB determined the hierarchy to be followed in choosing accounting procedures to be used in preparing financial statements under IFRS. This hierarchy is:

### IFRS Hierarchy (Issued by the IASB)

1. IFRS/IAS statements (8 IFRS and 41 IAS standards) and IFRIC/SIC Interpretations (14 IFRIC and 32 SIC). *SIC* stands for the Standards Interpretations Committee.
2. Apply a method that is relevant, reliable, and represents faithfully the financial position, the performance, and cash flows of the firm; reflect the economic substance of the firm.
3. Look to recent pronouncements of other standard-setters that use a similar conceptual framework (i.e., U.S. GAAP).
4. The conceptual framework.

At present, there are differences between the U.S. and IFRS hierarchies in the status of the conceptual frameworks within the GAAP hierarchy. For an entity preparing financial statements under International Financial Reporting Standards (IFRS), the IASB's *Framework* provides guidance when there is no standard or interpretation that specifically applies to a transaction or other event or condition, or that deals with a similar and related issue. In those situations, the entity's management is required to consider the definitions, recognition criteria, and measurement concepts for assets, liabilities, income, and expenses in the *Framework*. Under U.S. GAAP, the FASB's Concepts Statements have historically had a lower status—they were ranked in the lowest category under "other literature". However, the FASB intends to incorporate the new conceptual framework (resulting from the joint project of the FASB and IASB) into the codification of authoritative standards by its completion, thus raising its status.

Note the third item under the IFRS hierarchy. One concern about U.S. firms adopting IFRS is that there are fewer industry standards in IFRS than in U.S. GAAP. However, if the U.S. firm adopts IFRS and has been following a standard according to a specific U.S. rule, this firm might still be required to follow the U.S. rule because of item (3) of the IFRS hierarchy, which refers to pronouncements of other standard-setters.

## Similarities and Differences between FASB and IASB

### LO 2 Differences between IFRS and U.S. GAAP.

In Illustrations 11-1, 11-2, and 11-3, a listing of similarities and differences between IFRS and U.S. GAAP is provided.<sup>4</sup> Be aware, however, that the principles and rules are constantly changing under both IFRS and U.S. GAAP, making it important to check continually for recent updates or modifications. In Illustration 11-1, various financial statement presentation issues are addressed. IFRS financial statements include a balance sheet, an income statement, a cash flow statement, and either a statement of changes in equity (SOCE) or a statement of recognized income or expense (SORIE). Two years of reports are required for all financial statements. In the U.S., SEC registrants are required to provide three years of financial statements except for the balance sheet, where two years of statements are required.

IFRS do not prescribe a format for presenting balance sheet items, but generally require a current/non-current format with items being listed in order of *increasing* liquidity. In the U.S., items are listed on the balance sheet in order of *decreasing* liquidity.

There are several differences affecting the income statement. In the U.S., expense items are usually listed on the income statement by function, such as selling expense, administration expense, and cost of goods sold. Under IFRS, expenditures can be listed by nature or by function. Examples of expenses listed by nature would be raw materials used, salary expense, depreciation expense, and so on. If the firm reports expenses by

<sup>4</sup> Additional comparisons of IFRS and U.S. GAAP are provided in Illustration 2-6 and also in Chapter 4.

## ILLUSTRATION 11-1

**Comparison of Financial Statement Presentation under U.S. GAAP and IFRS, Select Items**

| <i>Topic</i>                     | <i>U.S. GAAP</i>  | <i>IFRS</i>   |
|----------------------------------|---|---|
| 1. Financial periods presented   | Generally, comparative financial statements are presented. Public companies are required to present two years for the balance sheet and three years for all other financial statements.   | Comparative information must be presented for all amounts reported in the financial statements.   |
| 2. Balance sheet presentation    | Entities may present either a classified or a non-classified balance sheet. Items on the balance sheet are listed in order of decreasing liquidity. Public companies must follow Reg S-X. | IFRS does not prescribe a format, but generally requires a current/noncurrent format be used and listed in order of increasing liquidity unless a liquidity format is more relevant and reliable.                               |
| 3. Income statement presentation | Presented either as a single-step or multiple step format. Expenditures are usually listed by function.   | IFRS does not prescribe a format, but expenditures are listed either by function or nature.   |
| 4. Extraordinary items           | These are unusual and infrequent. These items are reported separately, but occur rarely.  | Prohibited.   |
| 5. Unusual items                 | Individually significant items are reported on the face of the income statement and disclosed in the notes.   | Separate disclosure is required, but may be reported on the income statement.   |
| 6. Deferred taxes classified     | Deferred taxes are presented as current or noncurrent based on the nature of the related asset or liability.  | Deferred taxes are presented as noncurrent (convergence to US GAAP is expected).  |
| 7. Statement of cash flows       | Standard headings but more guidance on items in each category (cash interest paid is included in operations). Direct or indirect formats allowed for cash from operations.                | Standard headings but limited guidance on contents (i.e., cash interest paid may be reported in operating or financing). Direct or indirect format allowed. Allows reconciliation of profit before tax to cash from operations. |

function, they are required (under IAS 1) to disclose the expenses by nature in the footnotes. In the U.S., firms are allowed to report expenses by nature, but seldom do. In addition, under IFRS, extraordinary items are prohibited, but if the item is unusual and/or infrequent and the amount is significant, firms using IFRS must disclose the information in the footnotes. Reporting such items on the face of the income statement is allowed but not required. Under U.S. GAAP, such material items must be reported on the face of the income statement.

Illustration 11-2 provides similarities and differences for certain balance sheet items and some disclosures. One of the largest differences between U.S. GAAP and IFRS is that the use of LIFO inventory is prohibited by IFRS. The primary reason given is that the cost flow and the physical flow do not match. Related to inventory issues are recoveries of previously written down inventory. Under IFRS, firms are allowed to recover costs up to the original amount written off if the conditions that gave rise to the write-off no longer exist. Under U.S. GAAP, the reduced value of the inventory becomes the new cost basis for the inventory and no recovery is allowed.

**Lo 2** Differences between IFRS and U.S. GAAP.

## ILLUSTRATION 11-2

## Comparison of Statement of Financial Position (Balance Sheets) and Disclosures under U.S. GAAP and IFRS

| <i>Topic</i>  | <i>U.S. GAAP</i>   | <i>IFRS</i>  |
|---|--|--|
| 1. Inventory  | Carried at the lower of cost or market, where market is current replacement cost (if not greater than selling price less costs to complete or if not less than net realizable value less a normal profit). LIFO permitted. | Carried at lower of cost or realizable value. Realizable value is the best estimate of the amount expected to be realized considering the business purpose (may not always be fair value). LIFO is prohibited.   |
| 2. Reversal of inventory write-downs                  | Write-downs of inventory to lower of cost or market create a new cost basis. Reversals of previously written down amounts are prohibited.  | Previously written down amounts can be reversed up to the original impairment loss if the reason for impairment no longer exists.  |
| 3. Development costs                                  | Both research and development costs are expenses as incurred unless addressed by a separate standard. (In the case of computer software, development costs are capitalized once technological feasibility is established.) | Development costs are capitalized when technical and economic feasibility can be demonstrated with specific criteria.  |
| 4. Property, Plant, and Equipment                     | Historical cost is used. Revaluations are not allowed.   | Historical cost or revalued amounts are used. Regular revaluation of assets is required once the revaluation option is chosen.   |
| 5. Reviews for impairment of long-lived assets        | Performed whenever events or changes in circumstances indicate that the carrying amount of the asset may not be recoverable.   | Performed at each reporting date.  |
| 6. Method for determining long-lived asset impairment | A two-step approach is used. If the recoverability test is not met, then the impairment test is performed (the amount that the carrying value exceeds its fair value).   | A one-step approach is used, measured as the amount by which the carrying value exceeds its recoverable amount. The recoverable amount is the higher of the fair value less costs to sell or the present value of future cash flows less costs to dispose. |
| 7. Provisions for liabilities                         | Recorded if probable and can be reasonably estimated. <i>Probable</i> is interpreted as “likely.”  | A present obligation (with uncertain timing or uncertain amount) that is recorded if probable (“more likely than not”) and can be reasonably estimated.  |
| 8. Contingent liability                               | If probable and can be estimated, the liability <i>is recognized</i> in the financial statements. Otherwise, the obligation is footnoted (unless remote).  | A possible obligation that will be confirmed by uncertain future events. <i>Not recognized</i> in the financial statements. Disclosed if not remote.   |
| 9. Reduced disclosure of contingent liabilities       | No reduced disclosure permitted.   | Reduced disclosure permitted if it would severely prejudice the entity’s position with another party to the obligation.  |
| 10. Measurement of provision—range of outcomes        | Most likely outcome should be accrued. When no outcome is more likely, accrue the minimum range of outcomes.   | Best estimate of obligation (typically the expected value) should be used. If any outcome is as likely, use the midpoint of the estimates.   |



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Although a single economic phenomenon can be faithfully represented in multiple ways, permitting alternative accounting methods for the same economic phenomenon diminishes comparability and, therefore, may be undesirable.<sup>5</sup>

<sup>5</sup> IASB Exposure Draft, “An Improved Conceptual Framework for Financial Reporting,” and FASB Exposure Draft, “Conceptual Framework for Financial Reporting,” September 29, 2008.

**ILLUSTRATION 11-3****Comparison of Various Topics and Disclosures Under U.S. GAAP and IFRS**

| <i>Topic</i>   | <i>U.S. GAAP</i>   | <i>IFRS</i>   |
|--|--|---|
| 1. Stock dividends declared after balance sheet date | SEC requires that the financial statements be adjusted for stock dividends declared after the balance sheet date.  | Financial statements are not adjusted for stock dividends occurring after the balance sheet date.   |
| 2. Related party                                     | Similar to IFRS.   | The nature of the relationship (seven categories), amount of the transactions, outstanding balances, terms and types of the transactions are disclosed. |
| 3. Compensation of key employees                     | Not required to be disclosed within the financial statements.  | Required within the financial statements.   |
| 4. Capitalization of interest                        | Requires interest be capitalized as part of the cost of a qualifying asset.  | Interest is capitalized as part of the cost of a qualifying asset.  |
| 5. Depreciation                                      | Component depreciation is allowed, but seldom used.  | Component depreciation is required.   |
| 6. Earnings per share (EPS)                          | Basic and diluted earnings per share for both continuing operations and net income are presented on the face of the income statement. Entities with an extraordinary item also must present EPS data for those line items. | Basic and diluted earnings per share for both continuing operations and net income are presented on the face of the income statement.                   |
| 7. Accompanied financial information                 | A financial and operational review not required. SEC registrants must include a management discussion and analysis section.  | A financial and operational review is encouraged, but not required.   |
| 8. Changes in estimates                              | Handled prospectively.   | Handled prospectively.  |
| 9. Changes in methods                                | Accounting policy changes are accounted for retrospectively by adjusting opening equity and comparatives, unless impracticable.  | Accounting policy changes are accounted for retrospectively by adjusting opening equity and comparatives, unless impracticable.                         |
| 10. Error corrections                                | Error corrections are accounted for retrospectively by adjusting opening equity and comparatives, without regard to practicability.  | Error corrections are accounted for retrospectively by adjusting opening equity and comparatives, unless impracticable.                                 |
| 11. Long-term liabilities expected to be refinanced  | Classification may consider events after the reporting date (based on the entity's ability and intent).  | Liabilities are classified according to their circumstances at the reporting date.  |

Research and development costs are handled differently in IFRS and U.S. GAAP. In the U.S., all R&D expenditures are expensed as incurred (with the exception of software development costs). Under IFRS, development costs are capitalized once the product becomes technically and economically feasible. This means that in addition to technological feasibility, the firms must demonstrate a clear intention to complete, a clear intention and ability to use or sell the product, an ability to generate future benefits and to measure reliably the expenditure, and adequate resources to complete the development.

One potentially large difference concerns valuations of property, plant and equipment (PPE). In the U.S., PPE is accounted for on a historical cost basis. Revaluations are not allowed, unless the asset has become impaired. Under IFRS, the firm can elect to revalue each class of PPE. Common examples of asset classes are land, machinery, furniture and fixtures, and buildings. However, this revaluation cannot be a one-time event. Once a firm has chosen to revalue the assets, the assets must be revalued regularly so that the carrying amount is not materially different from the fair value of the asset. If the firm revalues PPE, any *increase* in fair value is not reported in operating income, but is instead recognized in equity in the “revaluation reserve” account (which is also reflected in comprehensive income). For instance, if an asset with an original cost of \$40,000 and a book value of \$30,000 (i.e., 75% remaining life using straight-line depreciation and no salvage value) was appraised as having a gross replacement cost of \$50,000, the following journal entry would be recorded using the revaluation model:

|   |        |       |
|---|--------|-------|
| Asset (\$50,000 – \$40,000)               | 10,000 |       |
| Accumulated depreciation (25% × \$10,000) |        | 2,500 |
| Revaluation reserve (equity account)      |        | 7,500 |

The revaluation reserve account is reported on the balance sheet and the \$7,500 amount is also included in comprehensive income. This approach is sometimes referred to as the *sound value* or *depreciated replacement cost* approach.

Also, if PPE is revalued, any decrease in fair value is also reported in the revaluation reserve account as long as it maintains a credit balance. Once the account reaches a zero balance, any additional decrease is recognized in operating income.

Impairment tests for long-lived assets must be performed at each reporting date under IFRS, whereas in the U.S. impairment testing is performed only if events cause a change in circumstance that indicates that the carrying value of the asset may not be recovered. Under IFRS, a one-step approach is used to determine the impairment loss. The impairment loss is the excess of the carrying amount over the asset’s recoverable amount. The recoverable amount is the higher of the fair value less any costs to sell the asset or the present value of the future cash flows generated by the asset less disposal costs. Currently, IFRS use a different definition of fair value than U.S. GAAP.

Depreciation of long-lived assets under IFRS must be based on component depreciation. Consider the following example from paragraph 44 of IAS 16. Suppose that an entity purchases an aircraft for \$12 million, comprising the airframe (\$6 million), the engine (\$4 million), and remaining components (\$2 million). Suppose that straight-line depreciation is used, the salvage value is zero, and that the useful lives of the components are:

|                      |          |
|----------------------|----------|
| Aircraft frame       | 20 years |
| The engine component | 16 years |
| Other components     | 8 years  |

The useful life of the entire aircraft is 20 years. Under U.S. GAAP and IFRS, the following entries would be made to record the purchase:

**U.S. GAAP:**

|       |            |            |
|-------|------------|------------|
| Asset | 12,000,000 |            |
| Cash  |            | 12,000,000 |

**IFRS:**

|                   |           |            |
|-------------------|-----------|------------|
| Aircraft—Airframe | 6,000,000 |            |
| Aircraft—Engine   | 4,000,000 |            |
| Aircraft—Other    | 2,000,000 |            |
| Bank/Liability    |           | 12,000,000 |

The entry to record depreciation expense would be:

**U.S. GAAP:**

|  |         |         |
|--|---------|---------|
| Depreciation Expense (\$12 million/20) | 600,000 |         |
| Accumulated Depreciation               |         | 600,000 |



**IFRS:**

|   |         |         |
|---|---------|---------|
| Depreciation Aircraft—Airframe (\$6 mil/20) | 300,000 |         |
| Depreciation Aircraft—Engine (\$4 mil/16)   | 250,000 |         |
| Depreciation Aircraft—Other (\$2 mil/8)     | 250,000 |         |
| Accumulated Depreciation—Airframe           |         | 800,000 |

The amount of deprecation expense can vary significantly between IFRS and the U.S. GAAP.

Contingent liabilities, under IFRS, are defined as “possible” obligations that will be confirmed by uncertain future events. Contingent liabilities are not recognized in the financial statements under IFRS. In the U.S., contingent liabilities are recognized in the financial statements if they are probable and can be reasonably estimated. U.S. GAAP defines *probable* as “likely,” and interprets this definition as implying a higher threshold than “more likely than not.” IFRS do require, however, that present obligations be recorded if probable and estimable, and *probable* is defined here to mean “more likely than not.” One of the most important distinctions between U.S. GAAP and IFRS is that IFRS allow reduced disclosure in certain situations. For instance, if the disclosure would severely prejudice the entity’s position with another party to the obligation, the firm is allowed to reduce its disclosure under IFRS.

Illustration 11-3 provides comparisons on various issues. Related-party disclosures, earnings per share, and capitalization of interest are similar between IFRS and U.S. GAAP. IFRS do require that the compensation of key employees be disclosed in the financial statements, while this is not required under U.S. GAAP.

Changes in accounting principles are handled retrospectively under both systems and changes in accounting estimates are performed prospectively. Under IFRS, error corrections are done retrospectively unless impractical, while under U.S. GAAP, the errors must be corrected regardless of practicality.

Finally, in the U.S., long-term obligations, due within the year and expected to be refinanced, can be excluded from current liabilities if the firm can demonstrate the ability and intent to refinance the obligation. Under IFRS, the liability is classified according to the obligation’s circumstance at the reporting date. In addition, if a loan covenant is in violation, the debt cannot be classified as current.

## IFRS Financial Statements Illustrated

In Illustrations 11-4, 11-5, and 11-6, examples of IFRS-based financial statements are provided. We do not provide an example of the statement of changes in equity. Notice on the balance sheet in Illustration 11-4 that the firm has chosen to classify assets and liabilities between current and non-current. In addition, the listing of the assets and liabilities is in order of liquidity (i.e., the least liquid asset and liability is listed first). Long-lived assets would be listed first on the balance sheet with the current asset section listed second. On the liability and equity side of the balance sheet, equity is generally listed first with long-term liabilities listed second, followed by current liabilities.

In Illustration 11-4, there is an account listed as a non-current asset called “investment in an associate.” In the U.S., this is an investment accounted for using the equity method of accounting. In addition, issued capital refers to common shares and share premium refers to additional paid-in capital. Provisions listed under current liabilities are the same as estimated liabilities in the U.S.

The income statement prepared under IFRS is presented in Illustration 11-5. IAS 1.88 requires expenses be listed by nature of the expense or by their function within the entity, whichever provides information that is reliable and more relevant. In the illustration, the expenses are listed by nature (i.e., raw materials used, depreciation expense, etc.). In many IFRS income statements, revenues may be referred to as “turnover.” This is simply a terminology difference and not a requirement of IFRS.

### RELATED CONCEPTS

In discussions between the FASB and IASB on developing a joint conceptual framework, they agreed that general purpose financial statements should not necessarily provide information useful to managers, since management is able to demand their own reports.

**ILLUSTRATION 11-4****Consolidated Balance Sheet (IFRS)  
at December 31, 2015  
(in 000 euros)**

|  | 2015           | 2014           |
|--|----------------|----------------|
| <b>Noncurrent assets</b>                                   |                |                |
| Property, Plant, and Equipment                             | 64,566         | 40,891         |
| Intangible Assets  | 7,496          | 2,978          |
| Investment in an Associate                                 | 924            | 824            |
| Available-for-Sale Investments                             | 7,294          | 4,224          |
| Deferred Tax Asset   | 463            | 442            |
|  | <u>80,743</u>  | <u>49,359</u>  |
| <b>Current assets</b>                                      |                |                |
| Inventories  | 30,099         | 30,842         |
| Trade and Other Receivables                                | 33,483         | 29,391         |
| Prepayments  | 336            | 200            |
| Cash and Short-term Deposits                               | 20,101         | 18,233         |
| Total Current Assets                                       | <u>84,019</u>  | <u>78,666</u>  |
| Total Assets   | <u>164,762</u> | <u>128,025</u> |
| <b>Equity attributable to equity holders of the parent</b> |                |                |
| Issued Capital   | 26,654         | 23,538         |
| Share Premium  | 7,687          | 163            |
| Treasury Shares  | (937)          | (937)          |
| Other Capital Reserves                                     | 1,254          | 231            |
| Retained Earnings  | <u>46,205</u>  | <u>37,389</u>  |
|  | 80,863         | 60,384         |
| Minority Interests   | <u>863</u>     | <u>895</u>     |
| Total Equity   | 81,726         | 61,279         |
| <b>Noncurrent liabilities</b>                              |                |                |
| Interest-bearing Loans and Borrowings                      | 18,244         | 23,666         |
| Convertible Preference Shares                              | 3,361          | 3,199          |
| Provisions   | 2,360          | 93             |
| Other Liabilities  | <u>5,693</u>   | <u>2,915</u>   |
| Deferred Tax Liability                                     | 5,584          | 2,239          |
|  | 35,242         | 32,112         |
| <b>Current liabilities</b>                                 |                |                |
| Trade and Other Payables                                   | 23,450         | 25,750         |
| Interest-bearing Loans and Borrowings                      | 18,255         | 3,358          |
| Other Financial Liabilities                                | 534            | 549            |
| Income Tax Payable   | 5,011          | 4,856          |
| Provisions   | 545            | 119            |
| Total Current Liabilities                                  | <u>47,795</u>  | <u>34,632</u>  |
| Total Liabilities  | <u>83,037</u>  | <u>66,744</u>  |
| Total Equity and Liabilities                               | <u>164,763</u> | <u>128,023</u> |

## ILLUSTRATION 11-5

**Consolidated Income Statement (IFRS)—Disclosed by Nature  
for the Year Ended December 31, 2015  
(in 000 euros)**

|   | 2015           | 2014           |
|---|----------------|----------------|
| <b>Continuing operations</b>  |                |                |
| Sale of goods   | 232,440        | 210,738        |
| Rendering of services   | 20,729         | 20,010         |
| Rental income   | 1,699          | 1,666          |
| <b>Revenue</b>  | <u>254,868</u> | <u>232,414</u> |
| Other income  | 1,918          | 3,083          |
| Changes in inventories of finished goods and work in progress   | (1,371)        | (4,587)        |
| Raw materials used  | (179,802)      | (159,024)      |
| Employee benefits expense   | (53,263)       | (53,062)       |
| Depreciation and amortization expense   | (4,619)        | (3,548)        |
| Other expenses  | (1,316)        | (1,218)        |
| Finance costs   | (1,969)        | (1,889)        |
| Finance revenue   | 950            | 876            |
| Share of profit of an associate   | 100            | 98             |
| <b>Profit before tax</b>  | 15,496         | 13,143         |
| Income tax expense  | (4,489)        | (3,911)        |
| <b>Profit for the year from continuing operations</b>   | <u>11,007</u>  | <u>9,232</u>   |
| <i>Discontinued operation:</i>  |                |                |
| Loss after tax for the year from a discontinued operation   | 266            | (227)          |
| <b>Profit for the year</b>  | <u>11,273</u>  | <u>9,005</u>   |
| <i>Attributable to:</i>   |                |                |
| Equity holders of the parent  | 11,106         | 8,716          |
| Minority interests  | 167            | 289            |
|   | <u>11,273</u>  | <u>9,005</u>   |
| <b>Earnings per share</b> attributable to ordinary equity holders of the parent                           |                |                |
| basic   | 0.52           | 0.46           |
| diluted   | 0.52           | 0.43           |
| <b>Earnings per share</b> for continuing operations attributable to ordinary equity holders of the parent |                |                |
| basic   | 0.52           | 0.47           |
| diluted   | 0.50           | 0.44           |

IFRS allow firms to choose either the direct or the indirect approach in computing cash from operations. In Illustration 11-6, the indirect approach is used. IFRS allow firms to start with either income before tax or after-tax income in the reconciliation to cash from operations (income before tax is used in the illustration). In the U.S., cash interest paid is classified as an operating cash flow, while under IFRS, the firm can choose to classify the cash outflow for interest as either operating or financing depending on which classification is more relevant to the entity.

**ILLUSTRATION 11-6****Consolidated Statement of Cash Flows (IFRS)  
for the Year Ended December 31, 2015**

|   | 2015           | 2014           |
|---|----------------|----------------|
| <i>Operating activities</i>                                 |                |                |
| Profit before tax from continuing operations                | 15,495         | 13,143         |
| Profit/(Loss) before tax from discontinued operations       | 258            | (234)          |
| Profit before tax   | 15,753         | 12,909         |
| Adjustment to reconcile profit before tax to net cash flows |                |                |
| <i>Non-cash:</i>  |                |                |
| Depreciation  | 4,594          | 4,093          |
| Amortization and impairment of intangible assets            | 151            | 211            |
| Gain on disposal of property, plant and equipment           | (644)          | (2,428)        |
| Other gains and losses                                      | 801            | 889            |
| Interest income   | (950)          | (876)          |
| Interest expense  | 1,969          | 1,889          |
| Share of net profit of associate                            | (100)          | (98)           |
| Movements in provisions                                     | (592)          | 128            |
| <i>Working capital adjustments:</i>                         |                |                |
| Increase in trade and other receivables                     | (10,586)       | (2,615)        |
| Decrease in inventories                                     | 3,168          | 2,644          |
| Increase in trade and other payables                        | 3,260          | 3,054          |
| Income tax paid   | (4,334)        | (4,006)        |
| <b>Net cash flows from operating activities</b>             | <b>12,490</b>  | <b>15,794</b>  |
| <i>Investing activities</i>                                 |                |                |
| Proceeds from sale of property, plant and equipment         | 2,408          | 2,806          |
| Purchase of property, plant and equipment                   | (9,263)        | (8,863)        |
| Purchase of investment properties                           | (1,471)        | (1,442)        |
| Purchase of available-for-sale investments                  | (687)          | (272)          |
| Other   | (770)          | (574)          |
| <b>Net cash flows used in investing activities</b>          | <b>(9,783)</b> | <b>(8,345)</b> |
| <i>Financing activities</i>                                 |                |                |
| Proceeds from borrowings                                    | 3,315          | 3,200          |
| Repayment of borrowings                                     | (180)          | (2,159)        |
| Interest paid   | (1,716)        | (1,889)        |
| Dividends paid to equity holders of the parent              | (2,386)        | (1,936)        |
| Dividends paid to minority interests                        | (36)           | (59)           |
| Other   | 111            | 150            |
| <b>Net cash flows used in financing activities</b>          | <b>(892)</b>   | <b>(2,693)</b> |
| Net increase in cash and cash equivalents                   | 1,815          | 4,756          |
| Net foreign exchange difference                             | 52             | 23             |
| Cash and cash equivalents at 1 January                      | 18,233         | 13,453         |
| <b>Cash and cash equivalents at 31 December</b>             | <b>20,100</b>  | <b>18,232</b>  |

**11.5 CONVERGENCE PROJECTS—FASB AND IASB**

**LO 5** Three major convergence topics between IFRS and FASB.

In an article in the *Journal of Accountancy*, February 2013, Paul Pacter discussed whether standards have been converged for 37 projects worked on jointly by the FASB and the IASB. More than 20 projects had major convergence issues while approximately 15 were significantly converged. Some projects, such as the financial statement presentation

project, were deferred indefinitely. As of the beginning of 2014, four major convergence projects remained:

1. Leases
2. Revenue recognition
3. Insurance contracts
4. Financial instruments (classification and measurement and impairment)

It appears that the boards will not achieve converged standards for leases, insurance contracts, and financial instruments. See the following discussion.

## Lease Accounting Convergence

Even though the rules for leases are expected to change for both U.S. GAAP and IFRS, the historical rules can be used to illustrate the difference between a principles-based and a rules-based approach to standard setting. The guidance for leases in the U.S. is FASB ASC topic 840—Leases, while under IFRS it is IAS 17. Before we consider the guidance, there is one important terminology difference. For lessees in the U.S., there are two types of leases: operating and capital. Under IAS 17, capital leases are referred to as financing leases. Therefore, in this chapter we will use the terms *capital* lease and *financing* lease as equivalent.

**A lease is a capital lease if any one of the following are met:**

| <i>U.S. GAAP (FASB ASC 840)</i>  | <i>IFRS (IAS 17)</i>   |
|--|--|
| <ol style="list-style-type: none"> <li>1. Transfers title by the end of the lease.</li> <li>2. Lease contains a bargain purchase option.</li> <li>3. Lease term is <b><i>greater than 75%</i></b> of the economic life of asset.</li> <li>4. The present value of the minimum lease payments is <b><i>greater than or equal to 90% of the fair value</i></b> of the leased asset at the inception of the lease.</li> </ol> | <ol style="list-style-type: none"> <li>1. Transfers title by the end of the lease.</li> <li>2. Lease contains a bargain purchase option.</li> <li>3. Lease term is for a <b><i>major part</i></b> of the economic life of asset.</li> <li>4. The present value of the minimum lease payments is <b><i>equal to substantially all of the fair value</i></b> of the leased asset at the inception of the lease.</li> <li>5. The leased asset is a specialized asset that only the lessee can use.</li> </ol> |

Under IASB, there are three additional conditions that if met might indicate that a lease is capital lease (losses from lease cancellation reimbursed by the lessee, renewal periods covered by bargain rentals, and rental rebates at the end of the lease based on changes in fair value of the asset). The differences between FASB and IFRS in the table above are noted in bold italics. These differences are often used to illustrate the difference between a rules-based approach and a principles-based approach. Notice that under U.S. GAAP, there are “bright-line rules,” such as if the lease term is greater than 75%. Under IFRS, the lease is a capital lease if the lease term is for a major part of the economic life of the asset. Thus under IFRS, different companies might classify leases differently with similar characteristics. But it places the burden on the managers to determine the substance of the lease. On the other hand, the bright-line rules often result in managers manipulating the conditions of the lease to achieve a certain reporting objective. They know that if the lease term is greater than 75%, the lease will be classified as a capital lease.

**Lessee Convergence Project Plan** The Boards have not agreed on accounting for leases. It appears that all leases will be recorded as liabilities, but there is little agreement on all the remaining elements (such as how to record the asset and the expenses).

Constituents generally believe that the proposed rules did not provide an adequate improvement in benefit to justify the costs of changing the standards. The primary dividing line seems to be how to measure and record the expense. It is interesting to note that the Boards do not seem concerned about the determination of the expense affects the classification of the cash flows on the statement of cash flows.

Preliminary indications suggest that most leases would result in asset and liability recognition for lessees. A lessee would recognize:

- a. An asset representing its right to use the leased asset for the lease term (measured initially at the present value of the lease payments) plus
- b. A liability to make lease payments (measured initially at the present value of the lease payments)

The *lease term* is defined to be the contracted noncancellable period plus any option periods for which there is a clear economic incentive for the lessee to exercise the option. When there are significant changes in the significant economic incentives, the lease term should be reassessed.

Both the lessee and the lessor are expected to have an option, on a lease-by-lease basis, not to recognize assets and liabilities from a short-term lease on the balance sheet. Required disclosures are being considered.

The Boards initially decided that there would be two types of leases for both lessees and lessors: financing leases and other-than-financing leases. Each type of lease would have its own pattern of profit and loss recognition. Now, in 2014, the FASB decided to retain the dual model approach while the IASB has tentatively decided to require most leases (except some short-term leases) to be treated as a financial purchase. For instance, in presenting the lease information on the balance sheet, the FASB believes that there are important differences between leases that convey the right to use versus an in-substance purchase. The IASB believes the asset should be classified according to the nature of the asset. This difference also involves income statement presentation. For instance, is the lease payment part interest expense and part amortization with an additional charge for depreciation of the leased asset? The FASB believes that if the lease represents a right to use, then income statement presentation might vary from that required if the asset is in-substance a purchase.

While it appears that all leases extending beyond a year will be capitalized, the financial statement presentation and the potential changes in lease assumptions are yet to be finalized.

## Revenue Recognition Convergence

The Boards issued their joint revenue recognition standard in early 2014 which is effective for annual periods beginning on or after January 1, 2017. This section summarizes the latest views. The model would apply to contracts with customers where a contract is an agreement between two or more parties that creates an obligation (does not need to be in writing). A customer is a party that has contracted with an entity to obtain an asset (such as a good or a service) that represents an output of the entity's ordinary activities. The Boards added a collectability threshold to the revenue recognition standard. Prior to recognizing revenue, collectability of the revenue must be probable (based on the ability and intent to pay the amounts as they become due). Note that the FASB defines probable as likely and the IASB defines probable to be more likely than not.

There are five steps in the revenue recognition model:

**Step 1: Identify the contract(s) with the customer.** The entity should combine, and account for as a single contract, multiple contracts that are entered into if the contracts are negotiated as a package with a single objective; if the amount of the consideration in one contract depends on the consideration in the second contract; and if the goods and services in the contract are interrelated in terms of design, technology, or function.

**Step 2: Identify the separate performance obligation.** A performance obligation is a promise to transfer an asset (such as goods or services) to the customer. An entity should

account for a bundle of promised goods and services as one performance obligation if the entity provides a service of integrating those goods or services. An entity should account for a promised good or service as a separate performance obligation if the good or service has a distinct function or if the pattern of transfer of the good is different from the transfer of the service.

**Step 3: Determine the transaction price.** The entity should recognize an allowance for any expected impairment loss from contracts with customers. The amount presented in the income statement should be reported as a contra-revenue. The Boards considered reducing the transaction price to reflect the customer's credit risk, but eliminated this option.

**Step 4: Allocate the transaction price to the separate performance obligation.** See the example that follows.

**Step 5: Recognize revenue.** An entity would recognize revenue when it satisfies a performance obligation by transferring the promised goods or service to the customer. Goods are considered transferred when the customer obtains control of the good (i.e., when the inventory is the customer's inventory). Recognizing revenue for services is a bit more complicated because the entity must determine if the performance obligation is satisfied continuously, and if so, how to measure the progress toward completion.

**Customer Consideration (Allocation) Model** Three new terms are introduced in the customer consideration model: *contract rights*, *performance obligations*, and *net contract asset/liability*. To recognize a contract, an entity measures its rights and its performance obligations in the contract. The measurement of the rights would be based on the amount of the transaction price (that is, the promised consideration the customer would pay). Initially, the performance obligations would also be measured at the transaction price. A performance obligation is a promise to transfer goods or services to the customer. If a contract comprises more than one performance obligation, an entity would allocate the transaction price to the performance obligations on the basis of the relative stand-alone selling prices of the goods and services underlying those performance obligations. Thus at the inception of the contract, the contract rights and the performance obligations would be equal and the net contract asset/liability would be zero.

Subsequent measurement of the performance obligations should measure the decrease in the entity's obligation to transfer goods and services to the customer. When a performance obligation is satisfied, the amount of revenue recognized is the amount of the transaction price that was allocated to the satisfied performance obligation at contract inception. Consequently, the total amount of revenue that an entity recognizes over the life of the contract is equal to the transaction price.

Under this model, revenue is recognized from "increases" in the net contract position. Specifically, revenue is recognized when there is an *increase* in the **contract asset** or a *decrease* in the **contract liability** from satisfying **performance obligations**. Revenue is recognized only when a performance obligation is satisfied by transferring goods or services.

Consider the following example of the sale of refrigerators. Suppose that Fridges-R-Us (FRU), a retailer, normally sells a refrigerator for \$4,050 and a two-year warranty for \$450. Suppose that the retailer, as part of a year-end promotion, contracts for delivery and includes the warranty for \$4,300. The cost of refrigerators is \$3,200. Warranty work is estimated to occur equally over time. Because the warranty can be sold separately and the objective of the warranty is to provide the customer with coverage for faults that arise after the product is transferred to the customer, the warranty gives rise to a performance obligation for warranty services as well as a performance obligation to transfer the refrigerator.

The initial allocation to the individual performance obligations (providing the refrigerator and the warranty) would be:

|                   | <i>Stand-Alone<br/>Sales Price</i> | <i>Percentage</i> | <i>Measurement<br/>of Performance<br/>Obligations</i> |
|-------------------|------------------------------------|-------------------|---|
| Refrigerator      | 4,050                              | 0.90              | 3,870   |
| Two-year warranty | 450                                | 0.10              | 430   |
| Total             | 4,500                              | 1.00              | 4,300   |

If stand-alone prices are not available, management estimates might be acceptable. Suppose that on January 1, 2015, FRU received \$4,300 from the customer. The following entry would be recorded.

|                                 |       |       |
|---------------------------------|-------|-------|
| Cash                            | 4,300 |       |
| Contract liability—refrigerator |       | 3,870 |
| Contract liability—warranty     |       | 430   |

On January 10, 2015, the refrigerator is delivered to the customer. FRU makes the following entry.

|                                 |       |       |
|---------------------------------|-------|-------|
| Contract liability—refrigerator | 3,870 |       |
| Revenue                         |       | 3,870 |
| Cost of goods sold              | 3,200 |       |
| Inventory                       |       | 3,200 |

If the objective of the warranty was simply to cover defects that might exist in the product on the date the product is sold, the warranty does not give rise to a performance obligation. In this case, the entity would accrue the warranty costs on the date of sale.

During 2015, FRU incurred \$200 of direct and indirect costs of servicing the refrigerator. Current practice recognizes these costs as expenses when incurred. The following entries would be made over this period.

|  |     |     |
|--|-----|-----|
| Contract liability—warranty (1/2 of \$430) | 215 |     |
| Revenue                                    |     | 215 |
| Warranty expense                           | 200 |     |
| Cash                                       |     | 200 |

In this example, warranty revenue is recognized on a straight-line basis, but if the retailer had more specific estimates concerning the servicing of contracts, they could also be used. Under existing practice, in order for revenue to be recognized, revenue must be realized or realizable and earned (the earnings process must be complete or substantially complete). In this example, the customer consideration model would be similar to existing practices.

## Insurance Contracts

The stumbling block in the convergence for insurance contracts is a cost-benefit argument. In the United States, the FASB already has a comprehensive standard on insurance contracts (ASC Topic 944) that has been applied for many years. Constituents argued that the cost of switching to a completely new model (as proposed by the IASB) would be costly and that perhaps simply making incremental changes to the current model would be more beneficial. Because the IASB currently has no current standards for insurance contracts, it favors developing a model from scratch.

The primary issue deals with how the profits from the contracts are recognized. Under the IASB's approach, the profit element is divided into two components: a risk element and a contract margin. The risk element would have to be remeasured every financial statement date with adjustments included in income. Currently in the United States, property contracts are recognized as insurance is provided and life insurance revenue is recognized as due. The proposed model using a present value approach with any excess of expected premiums over expected claims amortized into income over the period the insurance is provided. While the FASB is limiting the guidance to the insurance industry, the IASB's objectives are broader and the standard might include maintenance and service contracts provided by manufacturers and retailers. The Boards have decided to separately reexamine these issues. The FASB is expected to increase current disclosures and maintain the existing FASB model for insurance contracts.

## Financial Instruments

The financial instruments project has two components: (1) the classification and measurement project and (2) the impairment project. Neither project is likely to result in a converged standard since both Boards are pursuing different models. For classification and



measurement, the Boards initially were considering a cash flow characteristics test for determining the classification and measurement of financial instruments. Basically, the financial assets would qualify for amortized cost classification if the assets were held within a business model whose objectives were to hold the asset in order to collect contractual cash flows. If the financial instruments cash flows are not derived solely from payments of principal and interest (i.e., equity instruments), the asset would be measured at fair value with changes in fair value included in income. However, at the December 2013 meeting, the FASB, relying on constituent comments, decided to abandon this approach because constituents claimed that the model would be too complex. The FASB is now considering a bifurcation model which would require the entities to separately account for any embedded derivative (if any) and the financial instrument. It is unlikely that the Boards will converge on a common approach.

The impairment project is also unlikely to result in a converged standard. Initially, the Boards agreed that the current standard for determining expected credit losses suffered from lack of timeliness and transparency. The concern was that the current standard did not consider forward looking information in determining the need for an allowance for the credit loss. The FASB has proposed an expected credit loss model that examines the amount of credit losses over the full lifetime of a financial instrument. The IASB's approach is to use a 12-month period for estimating losses. A full lifetime approach would only be used if there is a significant deterioration in credit. Both Boards seem committed to their separate paths.

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## 11.6 INTERNATIONAL CONVERGENCE ISSUES

There are many obstacles that might have to be overcome before IFRS can become the standard for accounting in the United States. In the following section, we discuss some of the relevant issues.

### LIFO Inventories

There are usually fewer choices allowed in valuing inventory for companies under IFRS than in the United States. For instance, LIFO is not acceptable under international standards. The IASB issued *IAS 2* on inventories recommending specific cost. If specific cost is not determinable, the benchmark is FIFO or weighted average. Also, in the U.S., the LIFO conformity rule, established in 1939, requires that taxpayers using LIFO for tax purposes must also use it for financial reporting purposes. Thus one important issue that the SEC must face is the potential costs incurred by firms to switch from LIFO to another method.

*Accounting Trends and Techniques*, in its survey of 600 largest companies in the U.S., reported that 38% of the companies used LIFO for some portion of their inventory (FIFO was used by 64% of the firms). If IFRS were adopted and firms were required to switch to another method, such as FIFO, the LIFO reserve would become taxable. ExxonMobil's LIFO reserve at the end of 2008 was \$10 billion (it was \$25.4 billion in 2007), while GE's LIFO reserve at the end of 2008 was \$706 million dollars. Using a 35% marginal tax rate, this would increase Exxon's and GE's tax by \$3.5 billion and \$247 million respectively. It is unlikely that the SEC would allow such large costs to be incurred by firms to switch to international rules. Potential solutions might be for Congress to change the law either to eliminate the LIFO conformity rule or to modify it. Firms currently using LIFO could be significantly affected by a mandatory switch to IFRS.

**Political Process—Avoiding “National GAAP”** On February 15, 2006, the Ministry of Finance of the People's Republic of China announced the issuance of the Accounting Standards for Business Enterprises (“ASBEs”), which consist of a new Basic Standard and 38 Specific ASBEs. The ASBEs cover nearly all of the topics under the current International Financial Reporting Standards and became mandatory for listed Chinese enterprises



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The House Ways and Means Committee reported that a provision to

repeal LIFO for U.S. tax purposes would raise approximately \$106 billion over ten years.<sup>6</sup>

on January 1, 2007. These standards include *substantially* all the IFRS with certain exceptions that reflect China's unique circumstances and environment. The first exception is the disclosure requirements for related parties. For instance, under Chinese rules, state enterprises are not by definition considered related parties simply because they are state-controlled. These enterprises are not exempted related-party disclosure provisions. One reason for this is the dominance of government enterprises, which would make disclosures cumbersome. The IASB is considering changing the related-party disclosure requirements to conform more closely to China's experience. A second difference is that China allows only the cost method for measuring fixed assets and intangibles. *IAS 16* allows revaluations and recoveries of impairment losses. Chinese officials felt that revaluations allowed firms to manipulate the numbers and therefore did not adopt the revaluation provisions. One other difference is that Chinese rules allow only the equity method of accounting for jointly controlled entities, while *IAS 31* also allows proportionate consolidation. Thus significant differences still exist between IFRS and Chinese GAAP.

The issue that the IASB would like to overcome is finding a way to get individual countries to adopt all the provisions of IFRS and not allow them to carve out sections. If each country tweaks the rules, there may not be "one" global set of accounting standards, but a bunch of "national IFRS-like" rules. The SEC, in removing the reconciliation to U.S. GAAP requirement on Form 20-F, requires foreign registrants to adopt IFRS *as promulgated by the IASB* in order to avoid reconciling. If the firms do not adopt IFRS as promulgated by the IASB, they will still be required to reconcile to U.S. GAAP.

**Political Process—Avoiding “National Pressure”** One of the most damaging events that might make the SEC reconsider adopting IFRS occurred during October 2008. On this date, the European Commission met with leaders from Germany, France, Italy, and Britain to discuss the economic crisis. They were concerned that European banks might be at a disadvantage to U.S. banks. This concern arose because of the assumed ability of U.S. firms to reclassify assets expected to be traded (carried at fair value) into “held to maturity” (carried at amortized cost) and avoid fair value measurements (permitted in only rare cases in the U.S.). IFRS rules did not allow such transfers. The European Commission threatened the IASB to change the rules or the EC would introduce legal changes to override the international rules. The IASB had four days to decide, and ultimately changed the rules and abandoned its own due process. Typically, such changes would require months of work, if not years, by the IASB. This change in the international rules allowed firms to “backdate” the accounting to the beginning of July 2008. Thus the IASB was significantly influenced by the European Commission into changing the rules based on political pressure. Surely, this event did not go unnoticed by the SEC. Ultimately, the SEC must question how independent and credible the IASB is in setting accounting policy. In the U.S., the SEC can help shield the FASB from political pressures. The IASB has no such protector. This event may play an important role in the SEC's determination of whether to adopt IFRS (as well as other countries expected to adopt IFRS over the next several years). It may also lead to further changes in the IASB to prevent future issues similar to this one from happening again.

## Private-, Small-, and Medium-Sized Entities

In July 2009, the IASB released IFRS for Small- and Medium-sized Entities (SME). This comprehensive set of standards was designed for entities that did not have public accountability (in an attempt to provide standards that would be more meaningful and cost effective for smaller and private companies). Public accountability would include such cases where the entity has debt or equity that is traded. Some differences between full IFRS and IFRS for SME include transaction costs and contingent consideration in a business

<sup>6</sup> House Ways and Means Committee, “H.R. 3970, Tax Reduction and Reform Act of 2007,” October 29, 2007.

combination. Under full IFRS transactions costs are expensed while under IFRS for SME, transaction costs are considered part of the consideration paid. Also, contingent consideration under full IFRS is recognized at fair value regardless of the probability of being paid. Under IFRS for SME, contingent consideration is only recognized if it is probable that the amount will be paid (IFRS defines probable as more likely than not while U.S. GAAP defines probably as likely).

Possibly in response to the IFRS for SME, the Financial Accounting Foundation (FAF) issued a proposal: *Plan to Establish the Private Company Standards Improvement Council* in October 2011. Under that proposal, the council would develop, jointly with the FASB, criteria for determining circumstances within U.S. GAAP for private companies. In May 2012, the FAF Board of Trustees issued a Final Report, *Establishment of the Private Company Council (PCC)*. The PCC was created to improve the standard-setting process for private companies. On December 23, 2013, the Board and the Private Company Council issued the Private Company Decision-Making Framework: A Guide for Evaluating Financial Accounting and Reporting for Private Companies (the Guide). The primary purpose of this Guide is to assist FASB and the PCC in determining when to provide alternative recognition, measurement, disclosure, display, effective date, and transition guidance for private companies reporting under U.S. GAAP.

## SEC Registration and U.S. Listing for Non-U.S. Companies

In this section, we consider how international firms might be able to issue securities in the United States. A registration with the SEC under the 1934 Securities Exchange Act is mandatory for non-U.S. companies that intend to list on a U.S. stock market. Such a registration can be achieved for firms that intend to do only a listing by filing a form *20-F* with the SEC. However, if non-U.S. companies issue securities in the United States along with the U.S. listing, then the sale of these securities must be registered under the 1933 Securities Act, typically through the filing of an *F-1* statement. This registration must be declared effective subsequent to the actual listing or the offering of securities for sale in the event of an equity capital acquisition program. The informational requirements of a *20-F* and an *F-1* are reasonably similar. Foreign companies are required to comply with the SEC continuous reporting requirements in a manner very similar to that of U.S.-listed companies. Annual reporting requirements for U.S. companies involve filing a form *10-K*, and in the case of non-U.S. companies, involve filing a form *20-F* with the SEC. Under the Securities Exchange Act of 1934, a non-U.S. company that registered with the SEC and listed its shares on a U.S. exchange would have to file *annual* reports on form *20-F* and *interim* reports on form *6-K* in order to keep the registration “current.”

**LO 6** Listing by non-U.S. firms on U.S. exchanges

**20-F Statement** The *20-F* filing is similar to the *10-K* filing required of any publicly held domestic U.S. company, but the *20-F* allows the non-U.S. company to use IFRS as promulgated by the IASB or to retain its local GAAP reporting. If a company chooses to use its local GAAP (not IFRS), it can do so, as long as it meets one of two alternative conditions for explaining any differences between the reported numbers and numbers derived under U.S. GAAP. The firm may either (1) reconcile net income and the shareholders’ equity, thus showing earnings based on U.S. GAAP; or (2) fully disclose all financial information required of U.S. firms, including such detailed information as segmental disclosures.

The *20-F* is comprised of various subsections, each of which provides detailed information on the company and its securities issued within the United States. The key information provided in the *20-F* includes:

- A description of the firm’s business model, its legal structure, regulatory framework, its management, shareholders, management discussion and analysis (MD&A) statement, and information on the structure of the company’s outstanding securities and the markets on which those securities are traded.
- A detailed description of the securities that are being registered for U.S. public trading, including definitions of the rights of the shareholders.

- A description of the company's financial structure and the issuer's financial statements (audited, two-year comparative balance sheets and three-year comparative income statements and statements of cash flow).
- If the firm adopts IFRS as promulgated by the IASB, the firm is not required to reconcile to U.S. GAAP; otherwise the firm must provide a reconciliation to U.S. GAAP.

**Lo 7** The role of form 20-F.

**F-1 Statement** A first-time offer of securities by any non-U.S. company that comes under the definition of a “foreign private issuer” requires filing an *F-1* statement as the principal registration statement. To qualify as a “foreign private issuer,” a non-U.S. company must meet certain conditions of ownership, location of assets, and location of executive officers. The *F-1* forms are typically used only in a first-time offer by non-U.S. issuers; on subsequent issuance, as long as the company has met certain periodic reporting requirements, a shorter *F-2* or *F-3* form may be used. Though the content and the structure of the registration statement of a non-U.S. issuer can vary from case to case depending on the nature of the offering, there are a few basic characteristics that are common across all types of statements.

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A study of the reconciliation differences between U.S. GAAP and national GAAP, examined over the period 2002 to 2007, found that the sign of income changed in over 5% of the 724 reconciliations examined (positive using one GAAP and negative using the alternative GAAP). The study found that income was higher using U.S. GAAP in 64% of the cases examined, while equity was higher 61% of the time under U.S. GAAP.<sup>7</sup> It should be noted that recent convergence efforts between the FASB and IASB will eliminate a lot of the differences. For instance, both Boards now treat in-process R&D in a similar manner.

The most important component of a registration statement is the offer prospectus. The prospectus contains all information deemed necessary by the SEC for investors to make an informed investing decision. In addition to the financial statements, the prospectus also contains detailed nonfinancial information about the company, such as a description of the business, regulatory structure, management structure, capital structure, shareholding patterns, and shareholder rights. The financial statements must either be presented in accordance with U.S. GAAP, IFRS as promulgated by the IASB, or include an audited reconciliation of the home country GAAP numbers to U.S. GAAP. In addition to the prospectus, the *F-1* statement has information about the articles of association of the company, the registrant's bylaws, and significant legal and contractual obligations of the company. Such information is available on request by any related party.

## 11.7 AMERICAN DEPOSITORY RECEIPTS: AN OVERVIEW

**Lo 8** The role of American Depositary Receipts.

With the globalization of equity markets, both investors and issuers are going beyond their geographical boundaries to look for investments and sources of capital. The complexities in the mechanics of the resulting cross-border investing and capital raising may serve to explain, at least in part, the popularity of the *Depositary Receipt (DR)*. A DR is a derivative instrument that usually represents a certain fixed number of publicly traded shares of a non-U.S. corporation. A DR that is traded in the United States is called an *American Depositary Receipt (ADR)*, while one that is traded globally (outside the United States) is called a *Global Depositary Receipt (GDR)*. An ADR is identical to a GDR in terms of its structure, operation, and legal perspective. ADRs may trade freely, subject to some conditions, like any U.S. security on one of the major exchanges like the *New York Stock Exchange (NYSE)* or *NASDAQ*, or trade *over-the-counter (OTC)* in the “pink sheet” market.

<sup>7</sup> “The Market Reaction to the Reconciliation Requirement Elimination,” by P. Chaney, D. Jeter, and R. Willis, working paper, Vanderbilt University, 2009.

The ADR is treated similarly to a domestic security for the purposes of clearance, settlement, transfer, and ownership.

An intermediary known as the Depository Bank (DR bank) creates ADRs, usually with the consent of the issuing company. The major DR banks are the Bank of New York, J. P. Morgan, and Citibank, which together account for the clear majority of the existing ADR programs. The DR bank is central to the creation and maintenance of the ADR market, providing the interface between the non-U.S. company and the U.S. investors who purchase ADRs. The creation of an ADR involves the purchase of shares of a non-U.S. company from its home markets by the brokers of the DR bank and placement with its custodians. Afterwards, the bank issues ADRs (denominated in U.S. dollars) in the United States equivalent to the shares that were deposited with the home market custodians. This results not only in the transfer of the trading location of the shares from a home country to the United States, but also in the creation of a dollar-denominated U.S. security that represents the shares of a non-U.S. company. In addition to this type of transfer, during the event of a new public offering, U.S. issuers can create ADRs that represent the newly issued shares, which then can be sold directly to the U.S. investors as a part of the offering.

## Types of ADR Programs

ADRs may be classified as follows based on their characteristics:

*Un-sponsored ADRs:* As discussed in the previous section, the DR banks, with consent from the issuer, create most of the ADR programs. However, it is possible for a DR bank to create a DR program without a formal agreement with the issuing non-U.S. company. Such ADR programs, called unsponsored ADRs, usually arise due to existence of a great demand for the company's securities in the U.S. market. However, unsponsored programs are becoming obsolete.

*Sponsored ADRs:* Sponsored programs account for over 98% of existing ADR programs in the United States. A sponsored program requires an exclusive agreement between the issuing company and its depository bank prior to the creation of the DR program. The bank agrees to issue ADRs to U.S. investors and to undertake ongoing tasks in providing information, as well as disbursements of various payouts (dividends, rights, etc.) that the company may make from time to time.

Sponsored ADRs may be of four types, depending on whether the company registers the ADRs with the SEC and/or whether there is a capital campaign concomitant with the creation of the ADR program. It must be understood here that registration with the SEC is mandatory for a company that wants to list its ADRs on a U.S. stock exchange like the NYSE, NASDAQ, or AMEX. If a company chooses not to register with the SEC, it could still raise capital from private equity markets comprised of large institutional investors, and could thus trade the ADRs on the OTC markets. The following table is useful in understanding the various types of ADRs that exist in the markets today.

**Types of Sponsored ADR Programs**

|                     | <i>No SEC Registration</i> | <i>SEC Registration</i> |
|---------------------|----------------------------|-------------------------|
| Not Issuing Capital | Level I                    | Level II                |
| Issuing Capital     | Rule 144 A                 | Level III               |

**Level I** This method is the simplest way for non-U.S. companies to access the U.S. markets. Under this method, depository banks create an ADR program based on the underlying shares that already trade on the home markets. There is *no* capital raised, and the ADRs are *not* listed on the U.S. markets. Companies must file an *F-6* with the SEC, which requires them to disclose some preliminary information about their operations and their finances. There is no need for a U.S. GAAP reconciliation, and Level I issuers

are exempt from continuous reporting with the SEC (as required by publicly traded U.S. companies). Level I programs are often used by non- U.S. companies as a method to familiarize themselves with U.S. equity markets and also to evaluate potential interest in their stock. As of year-end 1998, there were over 800 outstanding Level I programs. These issues are not traded publicly on U.S. exchanges. Level I issues are traded in the over-the-counter (OTC) market.

**Level II** These types of ADRs are similar to Level I since they do not involve raising new capital, but in contrast to Level I, Level II issues are registered with the U.S. SEC and listed on a major U.S. stock exchange. A U.S. SEC registration and an exchange listing require the company to file with the SEC an *F-6* registration of its ADRs and a *20-F* registration statement listing certain financial disclosures. Level II ADRs have greater visibility because of their public listing.



The following information concerning GlaxoSmithKline’s Level II ADR was reported by the firm’s depository bank, the Bank of New York.

|                   |                            |            |           |
|-------------------|----------------------------|------------|-----------|
| Symbol:           | GSK                        |            |           |
| Exchange:         | NYSE                       |            |           |
| Ratio:            | 1 ADR / 2 Ordinary Shares  |            |           |
| Country:          | United Kingdom             |            |           |
| Industry:         | Pharmaceuticals-Healthcare |            |           |
| Depository:       | Bank of New York           |            |           |
| Level of Program: | Level II                   |            |           |
| Last Price        | Opening Price              | High Price | Low Price |
| \$52.51           | \$52.82                    | \$52.75    | \$52.28   |

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**Level III** Firms that want to raise capital from the public equity markets in the United States and also to list on a major U.S. stock exchange use the Level III ADRs. These programs comply with various rules and regulations of the SEC and with the requirements of the stock exchange on which they are traded. Level III ADRs are a part of a capital program and are accompanied by a full SEC registration. At the time of the equity offering, a non-U.S. company files a form *F-1* in order to register the shares underlying the Level III ADRs. Investors are informed of all material aspects of the firm and its business. Financial statements are prepared and firms agree to meet annual reporting requirements by filing form *20-F* and other annual financial disclosures.

**Rule 144A** Public offerings in the United States by non-U.S. issuers require a registration of their securities under the Securities Exchange Act of 1934. However, there are exemptions from such registration requirements for private placements. Rule 144A ADRs are those ADRs that are placed privately among large institutional buyers with over \$100 million under management (known as QIB firms) with restrictions on the subsequent trading of these securities. Rule 144A ADRs are neither publicly traded nor listed on any U.S. stock exchanges and can be exchanged only among QIBs. Firms, especially those from emerging markets, have favored the use of this 144A market for raising capital from the private placement market since they can do so without reporting the detailed disclosures that are required for an SEC registration.


**SUMMARY**

- 1 *Describe how the changing world environment is leading to an increased focus on international accounting standards (IFRS).* A dramatic rise in cross-border financial activity and the resulting internationalization of equity markets since the late 1980s have transformed the investor profiles of many companies. The movement has been away from a primarily debt-financed business world, in which a relatively informal flow of information between companies and creditors sufficed, to a primarily equity-financed environment in which more financial communication is demanded.
- 2 *Explain some of the major differences between IFRS and U.S. GAAP.* Some of the areas in which important differences arise include the fact the LIFO inventory is not permitted under IFRS, expenses on the income statement can be listed either by nature or function under IFRS, balance sheet items are generally listed in order of increasing liquidity, extraordinary items are not allowed under IFRS, property, plant and equipment can be revalued on a regular basis under IFRS, reversal of previously written down assets are allowed under IFRS, and development costs are capitalized under IFRS.
- 3 *List some of the milestones that must be achieved before the SEC will require adoption of IFRS.* The four milestones discussed in the chapter are: (1) improvements in accounting standards; (2) the accountability and funding of the IASC Foundation; (3) the improvement in the ability to use interactive data for IFRS reporting; and (4) education and training relating to IFRS.
- 4 *Describe the SEC's work plan for incorporating IFRS into the financial reporting system for U.S. issuers.* The work plan focuses on the condorsement approach. Under this approach, a U.S. standard-setter would be retained. The standard-setter would facilitate the transition process by incorporating IFRS into U.S. GAAP over some defined period. At the end of this period, the objective would be that a U.S. issuer would be compliant with both U.S. GAAP and IFRS. This alternative has been labeled "condorsement."
- 5 *Describe four remaining joint convergence topics between the IFRS and FASB.* Three of the major convergence topics include accounting for leases, insurance contracts, financial instruments, and revenue recognition.
- 6 *List the steps that a non-U.S. company must follow to list its shares on a U.S. stock market.* A registration with the SEC under the 1934 Securities Exchange Act is mandatory for non-U.S. companies that intend to list on a U.S. stock market. Such a registration can be achieved for firms that intend to do only a listing by filing a form 20-F with the SEC. However, if non-U.S. companies issue securities in the United States along with the U.S. listing, then the sale of these securities must be registered under the 1933 Securities Act, typically through the filing of an F-1 statement. This registration must be declared effective subsequent to the actual listing or the offering of securities for sale in the event of an equity capital acquisition program.
- 7 *Explain the role of form 20-F filed with the Securities and Exchange Commission.* The 20-F allows the non-U.S. company to retain its local GAAP reporting and still be able to list on a U.S. stock exchange, so long as it meets one of two alternative conditions for explaining any differences between the reported numbers and numbers derived under U.S. GAAP. The firm may either (1) reconcile net income and the shareholders' equity, thus showing earnings based on U.S. GAAP; or (2) fully disclose all financial information required of U.S. firms, including such detailed information as segmental disclosures.
- 8 *Indicate the role of American Depository Receipts in the issuing of securities of non-U.S. companies in the United States.* A depository receipt (DR) is a derivative instrument usually representing a certain fixed number of publicly traded shares of a non-U.S. corporation. A DR that is traded in the United States is called an American Depository Receipt (ADR). ADRs may trade freely, subject to some conditions, like any U.S. security on one of the major exchanges like the New York Stock Exchange (NYSE), NASDAQ, or the American Stock Exchange (AMEX), or trade over the-counter (OTC) in the "pink sheet" market. The ADR is treated similarly to a domestic security for the purposes of clearance, settlement, transfer, and ownership.

Appendix 11A, "List of Current International Financial Reporting Standards issued by IASC and IASB," is available online at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter).

**QUESTIONS**

- |             |  |   |             |
|-------------|--|---|-------------|
| <b>LO 1</b> | 1. As mentioned in Chapter 1, the project on business combinations was the first of several joint projects undertaken with the FASB and the IASB in their move to converge standards globally. Nonetheless, complete convergence has not yet occurred, and there are those who believe it to be a poor idea. Discuss the reasons for and against global convergence. | individual effort by one of the two boards. List and discuss some of the joint projects that fall into this category.   | <b>LO 1</b> |
| <b>LO 4</b> | 2. In recent months, virtually every topic that has come to the attention of the standard-setters has been undertaken as a joint effort of the FASB and the IASB rather than as an   | 3. What is the rationale for the harmonization of international accounting standards?   | <b>LO 6</b> |
|             |  | 4. Why is the SEC, once so reluctant to accept IAS, now very willing to allow firms using IFRS to issue securities in the U.S. stock market without reconciling to U.S. GAAP? | <b>LO 7</b> |
|             |  | 5. Discuss the types of ADRs that non-U.S. companies might use to access the U.S. markets.  |             |

- LO 1** 6. Describe the attitude of the FASB toward the IASB (International Accounting Standards Board).
- LO 3** 7. How does the FASB view its role in the development of an international accounting system? Currently, two members of the IASB were previously affiliated with the FASB. Comment on what effect this might have on the likelihood that the U.S. standard-setters will accept the new IASB statements, if any.
- LO 2** 8. List some of the major differences in accounting between IFRS and U.S. GAAP.

### Business Ethics

A vice president of marketing for your company has been charged with embezzling nearly \$100,000 from the company. The vice president allegedly submitted fraudulent vendor invoices in order to receive payments. As the vice president of marketing for the company, the vice president is authorized to approve the payment of invoices submitted by third-party vendors who did work for the company. After the activities were uncovered, the company responded by stating: "All employees are accountable to our ethics guidelines and procedures. We do not tolerate violations of our ethics policy and will consistently enforce these policies and procedures."

1. How would you evaluate the internal controls of the company?
2. Do you think there are companies that develop comprehensive ethics and compliance programs for mid- and lower-level employees and ignore upper-level executives and managers?
3. Is it an ethical issue if companies are not forthcoming concerning fraudulent activities of top executives in an effort to minimize negative publicity?

## ANALYZING FINANCIAL STATEMENTS

### AFS11-1 Challenger Limited (Unconsolidated Subsidiary of Bronco Drilling Company Inc.) **LO 2**

In its 10-K amended filing on April 30, 2010, Bronco Drilling reported the financial statements of Challenger Limited (an unconsolidated subsidiary) for its year ending December 31, 2009. The balance sheet and the income statement are reported as follows:

**CHALLENGER LIMITED**  
**(unconsolidated subsidiary of Bronco Drilling)**  
**Statements of Income**  
**for the year ended 31 December**  
**(all amounts in U.S. Dollars)**

|   | 2008                | 2007                |
|---|---------------------|---------------------|
| Drilling revenue                        | 73,071,917          | 46,043,831          |
| Drilling costs                          | <u>(52,933,369)</u> | <u>(34,309,267)</u> |
| Gross profit                            | 20,138,548          | 11,734,564          |
| General and administrative expenses     | (9,775,827)         | (8,021,383)         |
| Other income                            | 2,446,433           | 19,005              |
| Other expense                           | <u>(1,870,000)</u>  |                     |
| Operating (loss)/profit from operations | 10,939,154          | <u>3,732,186</u>    |
| Finance income                          | 46,015              | 751,224             |
| Finance cost                            | <u>(673,397)</u>    | <u>(559,662)</u>    |
| (Loss)/profit before income tax         | 10,311,772          | 3,923,748           |
| Income tax                              | <u>(3,389,127)</u>  | <u>(2,307,594)</u>  |
| (Loss)/profit for the year              | <u>6,922,645</u>    | <u>1,616,154</u>    |



**CHALLENGER LIMITED**  
**Balance Sheets**  
**at 31 December**  
**(all amounts in U.S. Dollars)**

|                                      | 2008               | 2007              |
|--------------------------------------|--------------------|-------------------|
| <b>Assets</b>                        |                    |                   |
| <b>Non-current Assets</b>            |                    |                   |
| Property, plant and equipment        | 152,425,129        | 49,410,844        |
| <b>Total Non-current Assets</b>      | <u>152,425,129</u> | <u>49,410,844</u> |
| <b>Current Assets</b>                |                    |                   |
| Spare parts inventory                | 6,956,849          | 12,874,676        |
| Receivables and prepayments          | 40,518,272         | 18,887,780        |
| Due from related parties             | 519,044            | 140,136           |
| Cash and cash equivalents            | 2,842,879          | 2,753,003         |
| <b>Total Current Assets</b>          | <u>50,837,044</u>  | <u>34,655,595</u> |
| <b>Total Assets</b>                  | <u>203,262,173</u> | <u>84,066,439</u> |
| <b>Equity and Liabilities</b>        |                    |                   |
| <b>Equity</b>                        |                    |                   |
| Capital                              | 64,957,265         | 50,000,000        |
| Additional paid-in capital           | 70,795,653         | 15,000,000        |
| Revaluation reserve                  | 16,782,544         | 1,403,983         |
| Other                                | (1,368,122)        |                   |
| Retained earnings                    | 9,240,432          | 2,314,787         |
| <b>Total Equity</b>                  | <u>160,407,772</u> | <u>68,721,770</u> |
| <b>Liabilities</b>                   |                    |                   |
| <b>Non-current Liabilities</b>       |                    |                   |
| Borrowings                           | 4,545,190          | 738,499           |
| <b>Total Non-current Liabilities</b> | <u>4,545,190</u>   | <u>738,499</u>    |
| <b>Current Liabilities</b>           |                    |                   |
| Borrowings                           | 13,554,645         | 2,676,000         |
| Trade and other payables             | 14,060,820         | 7,016,164         |
| Current tax liabilities              | 4,062,411          | 2,869,643         |
| Provisions                           | 491,280            |                   |
| Dividends and redemption payable     | 3,078,302          | 2,044,363         |
| Due to related parties               | 3,061,753          |                   |
| <b>Total Current Liabilities</b>     | <u>38,309,211</u>  | <u>14,606,170</u> |
| <b>Total Liabilities</b>             | <u>42,854,401</u>  | <u>15,344,669</u> |
| <b>Total Equity and Liabilities</b>  | <u>203,262,173</u> | <u>84,066,439</u> |

Footnote 2 from the amended 10-K includes the following:

**Basis of Preparation**

The financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS). The financial statements have been prepared under the historical cost convention as modified by the revaluation of the rigs. Rigs include drilling equipment, well control equipment, electrical equipment, power plant, and so on.

**Required:**

- A. Since the financial statements are prepared in U.S. dollars, does this imply that the financial statements are prepared in accordance with U.S. GAAP? Why or why not?
- B. List three major differences between this balance sheet in comparison to balance sheets prepared under U.S. GAAP.
- C. Evaluate the performance of the company using the income statement. What appears to be the cause of the major change in performance?

**AFS11-2 Challenger Limited (Unconsolidated Subsidiary of Bronco Drilling Company Inc.) LO 2**

See the information from AFS11-1. The statement of comprehensive income is stated as:

**Statement of Comprehensive Income  
for the year ended 31 December**

| (Amounts in U.S. dollars)         | 2008              | 2007             |
|-----------------------------------|-------------------|------------------|
| (Loss)/profit for the year        | 6,922,645         | 1,616,154        |
| <b>Other comprehensive income</b> |                   |                  |
| Change in revaluation of rigs     | 15,378,561        | —                |
| <b>Total comprehensive income</b> | <u>22,301,206</u> | <u>1,616,154</u> |

One of the major differences between IFRS and U.S. GAAP is the revaluation of property, plant and equipment (primarily it includes the revaluation of rigs). Challenger revalued its assets in 2008 but not in 2007. The gross increase in fair value of the rigs in 2008 was an increase of \$20,481,823.

**Required:**

- A. How often must a company revalue property, plant and equipment if it uses the revaluation model?
- B. Explain the most likely reason for the difference between the \$15,378,561 change in the revaluation reserve and \$20,481,823 (gross increase in rigs). Prepare the journal entry to record the revaluation in 2008. Show where each account used in the journal entry should be reported in the financial statements.
- C. Which financial statements would be affected if, during 2009, the fair value of the PPE dropped by \$25,000,000? Show the dollar amount and the direction of the change for each statement, assuming the reappraised assets to be, on average, 30% depreciated at the end of 2009.

**EXERCISES****EXERCISE 11-1 Component Depreciation LO 2**

SMC Company purchases a building for \$100,000. Included in this cost are \$12,000 for electrical systems and \$15,000 for the roof. The building is expected to have a 40-year useful life, but the electrical system will last for 20 years and the roof will last 15 years.

**Required:**

- A. Assuming that straight-line depreciation is used, compute depreciation expense assuming that U.S. GAAP is used.
- B. Assuming that straight-line depreciation is used, compute depreciation expense for year one assuming IFRS is used (assume component depreciation).

**EXERCISE 11-2 Current International Issues LO 2 LO 4**

The International Accounting Standards Board (IASB) web address is [www.iasb.org](http://www.iasb.org). On this web page, there is a section labeled “news.” List some of the recent issues concerning the IASB.

**EXERCISE 11-3 Opinions: International Federation LO 2 LO 4**

The International Federation of Accountants’ web address is [www.ifac.org](http://www.ifac.org). On this page is a section labeled “media center.” Next, choose “articles.” Choose one of the items on this page and write a brief description.

**EXERCISE 11-4A IFRS Balance Sheet LO 2**

Air France—KLM Group reports the following balance sheet for the year ended December 31, 2013.

**Required:**

- A. In what order are assets listed on the balance sheet?
- B. Comment on other differences (IFRS relative to U.S. GAAP) that you might notice on the balance sheet.
- C. What is the current ratio for the years ending December 31, 2012 and 2013?
- D. What is the ratio of long-term debt to equity for the years ending December 31, 2012 and 2013?
- E. Are there any typical balance sheet ratios that cannot be readily computed using the IFRS-based financial statement? If so, what are they?

**Air France-KLM Group**  
**CONSOLIDATED BALANCE SHEET**

| <i>Assets In € millions</i>                                    | <i>December 31, 2013</i> | <i>December 31, 2012</i> |
|--|--------------------------|--------------------------|
| Goodwill   | 237                      | 252                      |
| Intangible assets  | 896                      | 842                      |
| Flight equipment   | 9,391                    | 10,048                   |
| Other property, plant and equipment                            | 1,819                    | 1,932                    |
| Investments in equity associates                               | 177                      | 381                      |
| Pension assets   | 2,454                    | 2,477                    |
| Other financial assets(**)                                     | 1,963                    | 1,665                    |
| Deferred tax assets  | 436                      | 1,392                    |
| Other non-current assets                                       | 113                      | 152                      |
| <b>Total non-current assets</b>                                | <b><u>17,486</u></b>     | <b><u>19,141</u></b>     |
| Assets held for sale   | 91                       | 7                        |
| Other short-term financial assets(**)                          | 1,031                    | 933                      |
| Inventories  | 511                      | 521                      |
| Trade accounts receivables                                     | 1,775                    | 1,859                    |
| Income tax receivables   | 23                       | 11                       |
| Other current assets   | 822                      | 828                      |
| Cash and cash equivalents                                      | 3,684                    | 3,420                    |
| <b>Total current assets</b>                                    | <b><u>7,937</u></b>      | <b><u>7,579</u></b>      |
| <b>Total assets</b>  | <b><u>25,423</u></b>     | <b><u>26,720</u></b>     |
| <i>Liabilities and equity In € millions</i>                    | <i>December 31, 2013</i> | <i>December 31, 2012</i> |
| Issued capital   | 300                      | 300                      |
| Additional paid-in capital                                     | 2,971                    | 2,971                    |
| Treasury shares  | (85)                     | (85)                     |
| Reserves and retained earnings                                 | (944)                    | 403                      |
| <b>Equity attributable to equity holders of Air France-KLM</b> | <b><u>2,242</u></b>      | <b><u>3,589</u></b>      |
| Non-controlling interests                                      | 48                       | 48                       |
| <b>Total equity</b>  | <b><u>2,290</u></b>      | <b><u>3,637</u></b>      |
| Provisions and retirement benefits                             | 3,102                    | 3,158                    |
| Long-term debt   | 8,596                    | 9,565                    |
| Deferred tax liabilities                                       | 178                      | 149                      |
| Other non-current liabilities                                  | 397                      | 384                      |
| <b>Total non-current liabilities</b>                           | <b><u>12,273</u></b>     | <b><u>13,256</u></b>     |
| Liabilities relating to assets held for sale                   | 58                       | –                        |
| Provisions   | 670                      | 555                      |
| Current portion of long-term debt                              | 2,137                    | 1,434                    |
| Trade accounts payables  | 2,369                    | 2,219                    |
| Deferred revenue on ticket sales                               | 2,371                    | 2,115                    |
| Frequent flyer programs  | 755                      | 770                      |
| Current tax liabilities  | 2                        | 3                        |
| Other current liabilities                                      | 2,332                    | 2,474                    |
| Bank overdrafts  | 166                      | 257                      |
| <b>Total current liabilities</b>                               | <b><u>10,860</u></b>     | <b><u>9,827</u></b>      |
| <b>Total liabilities</b>                                       | <b><u>23,133</u></b>     | <b><u>23,083</u></b>     |
| <b>Total liabilities and equity</b>                            | <b><u>25,423</u></b>     | <b><u>26,720</u></b>     |

**ASC Exercises:** For all ASC exercises indicate as part of your answer: the Codification topic, subtopic, section, and paragraph upon which your answer is based (unless otherwise specified). All ASC questions require access to the FASB Codification.

**ASC 11-1** **Overview** Are International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB) considered authoritative by the Codification?

**ASC 11-2** **Presentation** How does the Codification define a *highly inflationary country*?

## PROBLEMS

**PROBLEM 11-1 LO2**

British Petroleum's income statement was prepared using IFRS is presented below (in \$ millions).

| <b>Group income statement</b>   |               |               |
|---|---------------|---------------|
| <b>For the year ended 31 December</b>                                       |               |               |
|   | <i>2013</i>   | <i>2012</i>   |
| Sales and other operating revenues  | 379,136       | 375,765       |
| Earnings from joint ventures—after interest and tax                         | 447           | 260           |
| Earnings from associates—after interest and tax                             | 2,742         | 3,675         |
| Interest and other income   | 777           | 1,677         |
| Gains on sale of businesses and fixed assets                                | 13,115        | 6,697         |
| Total revenues and other income   | 396,217       | 388,074       |
| Purchases   | 298,351       | 292,774       |
| Production and manufacturing expenses                                       | 27,527        | 33,926        |
| Production and similar taxes  | 7,047         | 8,158         |
| Depreciation, depletion and amortization                                    | 13,510        | 12,687        |
| Impairment and losses on sale of businesses and fixed assets                | 1,961         | 6,275         |
| Exploration expense   | 3,441         | 1,475         |
| Distribution and administration expenses                                    | 13,070        | 13,357        |
| Fair values gain on embedded derivatives                                    | (459)         | (347)         |
| Profit before interest and taxation   | 31,769        | 19,769        |
| Finance costs   | 1,068         | 1,072         |
| Net finance expense relating to pensions and other post-retirement benefits | 480           | 566           |
| Profit before taxation  | 30,221        | 18,131        |
| Taxation  | 6,463         | 6,880         |
| Profit for the year   | <u>23,758</u> | <u>11,251</u> |
| Attributable to   |               |               |
| BP shareholders   | 23,451        | 11,017        |
| Non-controlling interests   | 307           | 234           |
|   | <u>23,758</u> | <u>11,251</u> |
| Earnings per share—cents  |               |               |
| Profit for the year attributable to BP shareholders                         |               |               |
| Basic   | 123.87        | 57.89         |
| Diluted   | 123.12        | 57.50         |

ExxonMobil Corporation's income statement prepared using U.S. GAAP is presented below (in \$ millions).

| <b>CONSOLIDATED STATEMENT OF INCOME</b>                          |                              |                |
|--|------------------------------|----------------|
|  | 2013                         | 2012           |
|  | <i>(millions of dollars)</i> |                |
| Revenues and other income  | 420,836                      | 451,509        |
| Sales and other operating revenue ( <i>I</i> )                   |                              |                |
| Income from equity affiliates                                    | 13,927                       | 15,010         |
| Other income   | 3,492                        | 14,162         |
| Total revenues and other income                                  | <u>438,255</u>               | <u>480,681</u> |
| Costs and other deductions                                       |                              |                |
| Crude oil and product purchases                                  | 244,156                      | 263,535        |
| Production and manufacturing expenses                            | 40,525                       | 38,521         |
| Selling, general and administrative expenses                     | 12,877                       | 13,877         |
| Depreciation and depletion                                       | 17,182                       | 15,888         |
| Exploration expenses, including dry holes                        | 1,976                        | 1,840          |
| Interest expense   | 9                            | 327            |
| Sales-based taxes ( <i>I</i> )                                   | 30,589                       | 32,409         |
| Other taxes and duties   | 33,230                       | 35,558         |
| Total costs and other deductions                                 | <u>380,544</u>               | <u>401,955</u> |
| Income before income taxes                                       | 57,711                       | 78,726         |
| Income taxes   | 24,263                       | 31,045         |
| Net income including noncontrolling interests                    | 33,448                       | 47,681         |
| Net income attributable to noncontrolling interests              | 868                          | 2,801          |
| Net income attributable to ExxonMobil                            | <u>32,580</u>                | <u>44,880</u>  |
| Earnings per common share ( <i>dollars</i> )                     | 7.37                         | 9.70           |
| Earnings per common share - assuming dilution ( <i>dollars</i> ) | 7.37                         | 9.70           |

**Required:**

- Are expenditures reported on BP's income statement reported by function or by nature of the expense? Be specific. Do you think that this format is more or less useful for users of the financial statements?
- On the BP income statement, what is the "earnings from associates" usually called in the U.S.?
- On ExxonMobil's income statement, are the expenses listed by function or by nature?
- Compare the performance of BP relative to ExxonMobil. Is it easy to compare the numbers from companies using IFRS to companies using U.S. GAAP?
- Does it matter that BP is using FIFO and ExxonMobil is using LIFO for inventory? The LIFO reserve decreased by \$282 million in 2013.

**PROBLEM 11-2 IFRS Income Statement and Terminology Differences LO 2**

The first two lines of Unilever Group's 2013 consolidated income statement (using IFRS) report the following amounts (in millions of euros):

| <b>Income Statement</b>                    |              |              |
|--|--------------|--------------|
| <i>Continuing Operations</i>               | 2013         | 2012         |
| Turnover                                   | 49,797       | 51,324       |
| Operating profit                           | 7,517        | 6,977        |
| <i>Footnotes</i>                           |              |              |
| In footnote 3, the following is disclosed: |              |              |
| Turnover                                   | 49,797       | 51,324       |
| Cost of sales                              | 29,245       | 30,703       |
| Gross profit                               | 20,552       | 20,621       |
| Selling and administration expenses        | 13,035       | 13,644       |
| Operating profit                           | <u>7,517</u> | <u>6,977</u> |

**Required:**

- On the income statement, the first two lines in Unilever's income statement are turnover and operating profit. What does the term *turnover* mean? Which costs are typically reported between turnover and operating profit?
- How useful is Unilever's income statement presentation considering that this information about expenses is disclosed in footnote 3 rather than being reported on the face of the income statement?

**PROBLEM 11-3 IFRS Illustrated Financial Statements LO2**

Each of the Big 4 auditors along with Grant Thornton and BDO International provide discussions of the effects of U.S. adopting IFRS.

<http://www.pwc.com>  
<http://www.grantthornton.com>  
<http://www.kpmg.com>  
<http://www.bdointernational.com>  
<http://www.iasplus.com/fs/fs.htm>  
<http://www.ey.com/global>

**Required:**

Using one of the web pages, find information concerning financial statements prepared using IFRS.

- A. Conduct a web search and provide a summary of differences between the IFRS income statement and a typical income statement prepared using U.S. GAAP.
- B. Conduct a web search and provide a summary of differences between the IFRS balance sheet and a typical balance sheet prepared using U.S. GAAP.
- C. Conduct a web search and provide a summary of differences between the IFRS statement of cash flows and a cash flow statement prepared using U.S. GAAP.

**PROBLEM 11-4 Operating and Capital Leases LO4**

The following footnote was disclosed at the beginning of 2016 (January 1, 2016).

**At January 1, 2016**

| Year           | <i>Capital Lease<br/>Payment</i> | <i>Operating Lease<br/>Payment</i> |
|----------------|----------------------------------|------------------------------------|
| 2016           | \$ 5,000                         | \$ 6,000                           |
| 2017           | 5,000                            | 6,000                              |
| 2018           | 5,000                            | 6,000                              |
| 2019           | 5,000                            |                                    |
| 2020           | 5,000                            |                                    |
| Total payments | \$25,000                         | \$18,000                           |
| Interest (10%) | 6,046                            |                                    |
| Present value  | <u>\$18,954</u>                  |                                    |

The capital lease began on January 1, **2015** when the fair value of the capital lease was \$21,776 (with a six-year life). The operating lease began on January 1, **2016** when the fair value of the operating lease at the inception of the lease was \$14,921 (with a three-year lease term). Straight-line depreciation is used for all assets. Each lease requires equal annual payments to be made at year-end.

**Required:**

1. Under existing U.S. GAAP, what is the amount of lease liability recorded on the balance sheet at January 1, 2016?
2. If the proposed changes in accounting for leases become authoritative, what would be the amount of lease liability recorded on the balance sheet at January 1, 2016?
3. Which approach (part 1 or part 2) do you think provides more relevant information to the users of the financial statements? Why?

# Chapter 11

## APPENDIX 11 A – LIST OF CURRENT INTERNATIONAL FINANCIAL REPORTING STANDARDS ISSUED BY IASC AND IASB (ONLINE)

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|         |   |
|---------|---|
| IFRS 1  | First-time Adoption of International Financial Reporting Standards            |
| IFRS 2  | Share-based Payment   |
| IFRS 3  | Business Combinations   |
| IFRS 4  | Insurance Contracts   |
| IFRS 5  | Non-current Assets Held for Sale and Discontinued Operations                  |
| IFRS 6  | Exploration for and Evaluation of Mineral Assets                              |
| IFRS 7  | Financial Instruments: Disclosures  |
| IFRS 8  | Operating Segments  |
| IFRS 9  | Financial Instruments   |
| IFRS 10 | Consolidated Financial Statements   |
| IFRS 11 | Joint Arrangements  |
| IFRS 12 | Disclosure of Interests in Other Entities                                     |
| IFRS 13 | Fair Value Measurement  |
| IFRS 14 | Regulatory Deferral Accounts  |
| IAS 1   | Presentation of Financial Statements  |
| IAS 2   | Inventories   |
| IAS 7   | Cash Flow Statements  |
| IAS 8   | Accounting Policies, Changes in Accounting Estimates and Errors               |
| IAS 10  | Events after the Balance Sheet Date   |
| IAS 11  | Construction Contracts  |
| IAS 12  | Income Taxes  |
| IAS 16  | Property, Plant and Equipment   |
| IAS 17  | Leases  |
| IAS 18  | Revenue   |
| IAS 19  | Employee Benefits   |
| IAS 20  | Accounting for Government Grants and Disclosure of Government Assistance      |
| IAS 21  | The Effects of Changes in Foreign Exchange Rates                              |
| IAS 23  | Borrowing Costs   |
| IAS 24  | Related Party Disclosures   |
| IAS 26  | Accounting and Reporting by Retirement Benefit Plans                          |
| IAS 27  | Consolidated and Separate Financial Statements<br>(superseded effective 2013) |
| IAS 28  | Investments in Associates (superseded effective 2013)                         |
| IAS 29  | Financial Reporting in Hyperinflationary Economies                            |

|        |  |
|--------|--|
| IAS 32 | Financial Instruments: Disclosure and Presentation<br>(Disclosure superseded 2013) |
| IAS 33 | Earnings per Share   |
| IAS 34 | Interim Financial Reporting  |
| IAS 36 | Impairment of Assets   |
| IAS 37 | Provisions, Contingent Liabilities, and Contingent Assets                          |
| IAS 38 | Intangible Assets  |
| IAS 39 | Financial Instruments: Recognition and Measurement<br>(superseded 2013)            |
| IAS 40 | Investment Property  |
| IAS 41 | Agriculture  |



## Chapter 11 – Review Questions

The review questions accompanying this course are designed to assist you in achieving the course learning objectives. The review section is not graded; do not submit it in place of your qualified assessment. While completing the review questions, it may be helpful to study any unfamiliar terms in the glossary in addition to course content. After completing the review questions, proceed to the review question answers and rationales.

73. Which of the following statements is accurate regarding the history of the IFRS and the objective of convergence with U.S. GAAP?
- The Norwalk Agreement was the first communication from the SEC regarding their support of the convergence of IFRS and GAAP.
  - The FASB and the IASB signed their “memorandum of understanding” in 2008.
  - The *Commission Statement in Support of Convergence and Global Accounting Standards* lays out the milestones which must occur in order for the SEC to require IFRS in the U.S.
  - In 2009, the FASB and IASB recommitted to convergence and indicated nine major joint projects that would be the focus of convergence.
74. The SEC first got involved with international standards in \_\_\_\_\_ and then issued a staff paper discussing possible work plans in:
- 2002, 2011.
  - 2008, 2011.
  - 2005, 2014.
  - 2002, 2014.
75. “Condonement” is:
- The process of incorporating IFRS into the local standards pursuant to some established endorsement protocol.
  - The approach where individual jurisdictions maintain their local standards but work to converge those standards with IFRS over time.
  - The approach where jurisdictions incorporate IFRS into the local standards.
  - The approach modeled by Australia and the People’s Republic of China.

76. After the codification of the FASB's standards in 2009:
- The hierarchy of U.S. GAAP is defined as Accounting Standards Codification (ASC), SEC rules and interpretations, Emerging Issue Task Force abstracts, and AICPA Statements of Position.
  - There are only authoritative sources (ASC) and non-authoritative sources which include everything else with the exception of the SEC.
  - The hierarchy of U.S. GAAP is defined as ASC, SEC rules and interpretations, and IFRS.
  - Authoritative sources include IFRS.
77. One of the biggest differences between IFRS and GAAP is:
- The methodology and philosophy around provisions for liabilities.
  - Disclosure on contingent liabilities.
  - IFRS does allow the LIFO inventory method.
  - Related party disclosures.
78. On Form 20-F:
- The SEC requires firms who are not reporting under U.S. GAAP to reconcile their financial statements to U.S. GAAP.
  - If firms are using standards similar to IFRS, they simply disclose the differences between their financials and IFRS.
  - If firms are using standards similar to IFRS, they simply disclose the differences between their financials and U.S. GAAP.
  - The SEC will accept IFRS compliant financial statements but anything other than will still require reconciliation to U.S. GAAP.

## **Chapter 12 – Accounting for Foreign Currency Transactions and Hedging Foreign Exchange Risk**

### **Learning Objectives**

After completing this section of the course, you will be able to:

- Recognize differences between measured and denominated as it relates to foreign currency issues and identify other common terms within the foreign currency realm.
- Identify the more common foreign currency transactions as well as the three stages of concern for accountants when dealing with these transactions, citing the steps used to translate currencies at each stage.
- Identify the role and use of forward exchange contracts, noting common situations where they can be used as a hedge.
- Note the characteristics of a derivative instrument and their use as a hedge.
- Cite the reporting rules for exchange gains and losses related to fair value and cash flow hedges.

# ACCOUNTING FOR FOREIGN CURRENCY TRANSACTIONS AND HEDGING FOREIGN EXCHANGE RISK

## CHAPTER CONTENTS

- 12.1 EXCHANGE RATES—MEANS OF TRANSLATION
- 12.2 MEASURED VERSUS DENOMINATED
- 12.3 FOREIGN CURRENCY TRANSACTIONS
- 12.4 USING FORWARD CONTRACTS AS A HEDGE

### IN THE NEWS

The dollar moved higher against the euro after German

inflation data increased concerns over the inflation outlook for the euro, while the pound was trading close to multi-year peaks against the dollar.<sup>1</sup>

Many companies in the United States engage in international activities such as exporting or importing goods, establishing a foreign branch, or holding an equity investment in a foreign company. Recording and reporting problems are encountered when transactions with a foreign company or the financial statements of a foreign branch or investee are measured in a currency other than U.S. currency. Transactions to be settled in a foreign currency must be translated—that is, expressed in dollars—before they can be aggregated with the domestic transactions of the U.S. firm. When a foreign branch or investee maintains its accounts and prepares its financial statements in terms of the currency of the country in which it is domiciled, the accounts must be translated from the foreign currency into dollars before financial statements for the combined entity are prepared. Translation is necessary because useful financial reports cannot be prepared until all transactions and account balances are stated in a common unit of currency.

<sup>1</sup> [www.investing.com](http://www.investing.com), “Financial News,” 4/29/2014.

In addition, the receivables or payables denominated in foreign currencies are subject to gains and losses because of changes in exchange rates. Also, firms make commitments or have budgeted forecasted transactions denominated in foreign currencies that are also subject to gains and losses from changes in exchange rates. Many companies resort to hedging strategies using derivatives to minimize the impact of these exchange rate changes on their financial statements. Derivative instruments can be characterized by volatile market values, and the firm's exposure to risk is usually not adequately represented by the amount reported in the books (carrying value) because of the great potential for future losses (and gains). Thus the accounting for these instruments is an important but difficult task.

Because of the widespread involvement of U.S. companies in foreign activities, accountants must be familiar with the problems associated with accounting for these activities. The expansion of international business has been of particular concern to accountants because of developments in the worldwide monetary system. These developments, coupled with the existence of a number of acceptable methods of translating foreign financial statements and reporting gains or losses on foreign currency fluctuations, have drawn the attention of the FASB at various times.<sup>2</sup> This chapter includes a discussion of the nature and use of exchange rates in the translation process, as well as the accounting standards applied in the translation of transactions measured in a foreign currency. Also, an introduction to hedge accounting is provided. The translation of accounts maintained in a foreign currency is discussed in the next chapter.

## 12.1 EXCHANGE RATES—MEANS OF TRANSLATION

Transactions that are to be settled in a foreign currency and financial statements of an affiliate maintained in a foreign currency are translated (converted) into dollars by multiplying the number of units of the foreign currency by a direct exchange rate. Thus, **translation** is the process of expressing monetary amounts that are stated in terms in a foreign currency into the currency of the reporting entity by using an appropriate exchange rate. An **exchange rate** is the ratio between a unit of one currency and the amount of another currency for which that unit can be exchanged at a particular time.

### IN THE NEWS

The dollar's value refers to the purchasing power of the dollar versus other currencies, or the exchange rate between the two currencies. When the dollar is strong, foreign goods are relatively less expensive. This can benefit businesses that import raw materials or manufactured goods into the United States, such as Walmart. A weakening dollar benefits companies with foreign competitors, such as U.S. Steel because their competitors' goods become more expensive.

A weakening dollar might lead to rising interest rates because investors require higher rates to compensate for the added currency risk. A strong dollar means lower oil prices because the US purchases much of its oil abroad. As the dollar weakens, oil producers charge more to protect their margins.<sup>3</sup>

A **direct exchange quotation** is one in which the exchange rate is quoted in terms of how many units of the domestic currency can be converted into **one unit of foreign currency**. For example, a direct quotation of U.S. dollars for one British pound of 1.517 means that \$1.517 could be exchanged for one British pound. To translate pounds into dollars, the number of pounds is multiplied by the direct exchange rate expressed in dollars per pound. Exchange rates are also often stated in terms of converting **one unit of the domestic currency** into units of a foreign currency, which is called an **indirect quotation**. In the preceding example, one U.S. dollar could be converted into .6592 pound (1.00/1.517). To translate pounds into dollars, the number of pounds could also be divided by the indirect exchange rate (pounds per dollar).

<sup>2</sup> The discussion in this chapter is based primarily on the accounting prescribed in FASB ASC topics 830 and 815 [Foreign Currency Matters, Derivatives and Hedging].

<sup>3</sup> [www.wikininvest.com/currency/U.S.\\_Dollar\\_\(USD\)](http://www.wikininvest.com/currency/U.S._Dollar_(USD)).

Exchange rates may be quoted as either a spot rate or a forward rate. The *spot rate* is the rate at which currencies can be exchanged today, whereas the *forward* or *future rate* is the rate at which currencies can be exchanged at some future date. The forward rate is an exchange rate established at the time a forward exchange contract is negotiated. A *forward exchange contract* is a contract to exchange at a specified rate (the *forward rate*) currencies of different countries on a stipulated future date. Before the currencies are exchanged, the spot rate may move above or below the contracted forward exchange rate, but this has no effect on the forward rate established when the forward exchange contract was negotiated. In both the spot and forward markets, a foreign exchange trader provides a quotation for buying (the *bid rate*) and a quotation for selling (the *offer rate*) foreign currency. The trader's buying rate will be lower than the quoted selling rate, and the spread between the two rates is profit for the trader. Exchange rates are reported daily in terms of both direct and indirect quotations (see Illustration 12-1) in the financial section of many newspapers.

The relationship between major currencies is determined largely by supply and demand factors, called **floating rates**. Floating rates increase the risk to companies doing business with a foreign company<sup>4</sup> because after a rate change occurs, all transactions are conducted at the new rate until the next change occurs. Because the amount to be received

**ILLUSTRATION 12-1**

| <b>Currencies</b>                         |                | <b>April 25, 2014</b> |                             |
|---|----------------|-----------------------|-----------------------------|
| <b>U.S.-dollar foreign-exchange rates</b> |                |                       |                             |
| <i>Country/Currency</i>                   | <i>in US\$</i> | <i>per US\$</i>       | <i>US\$ vs. YTD chg (%)</i> |
| <b>Americas</b>                           |                |                       |                             |
| <b>Argentina</b> peso                     | 0.125          | 8.001                 | 22.7                        |
| <b>Brazil</b> real                        | 0.446          | 2.242                 | -5.1                        |
| <b>Canada</b> dollar                      | 0.906          | 1.104                 | 3.9                         |
| <b>Chile</b> peso                         | 0.002          | 560.200               | 6.5                         |
| <b>Colombia</b> peso                      | 0.001          | 1943.500              | 0.7                         |
| <b>Ecuador</b> US dollar                  | 1.000          | 1.000                 | unch                        |
| <b>Mexico</b> peso                        | 0.076          | 13.131                | 0.7                         |
| <b>Peru</b> new sol                       | 0.358          | 2.794                 | -0.3                        |
| <b>Uruguay</b> peso                       | 0.043          | 23.006                | 8.6                         |
| <b>Venezuela</b> b. fuerte                | 0.157          | 6.350                 | unch                        |
| <b>Asia-Pacific</b>                       |                |                       |                             |
| <b>Australian</b> dollar                  | 0.928          | 1.078                 | -3.9                        |
| 1-mos forward                             | 0.926          | 1.080                 | -4.1                        |
| 3-mos forward                             | 0.922          | 1.085                 | -4                          |
| 6-mos forward                             | 0.916          | 1.092                 | -4                          |
| <b>China</b> yuan                         | 0.160          | 6.254                 | 3.3                         |
| <b>Hong Kong</b> dollar                   | 0.129          | 7.753                 | unch                        |
| <b>India</b> rupee                        | 0.016          | 60.640                | -2                          |
| <b>Indonesia</b> rupiah                   | 0.000          | 11566.000             | -4.9                        |
| <b>Japan</b> yen                          | 0.010          | 102.200               | -3                          |
| 1-mos forward                             | 0.010          | 102.180               | -3                          |
| 3-mos forward                             | 0.010          | 102.140               | -3                          |
| 6-mos forward                             | 0.010          | 102.080               | -3                          |
| <b>Malaysia</b> ringgit                   | 0.306          | 3.269                 | -0.4                        |
| <b>New Zealand</b> dollar                 | 0.858          | 1.166                 | -4.2                        |
| <b>Pakistan</b> rupee                     | 0.010          | 98.145                | -6.9                        |
| <b>Phillippines</b> peso                  | 0.022          | 44.650                | 0.6                         |
| <b>Singapore</b> dollar                   | 0.796          | 1.257                 | -0.5                        |
| <b>South Korea</b> won                    | 0.001          | 1041.100              | -1.4                        |

(continued)

## ILLUSTRATION 12-1 (CONTINUED)

| Currencies                         |         | April 25, 2014 |                      |  |
|------------------------------------|---------|----------------|----------------------|--|
| U.S.-dollar foreign-exchange rates |         |                |                      |  |
| Country/Currency                   | in US\$ | per US\$       | US\$ vs. YTD chg (%) |  |
| Taiwan dollar                      | 0.033   | 30.290         | 1.2                  |  |
| Thailand baht                      | 0.031   | 32.252         | -1.4                 |  |
| Vietnam dong                       | 0.000   | 21122.000      | unch                 |  |
| <b>Europe</b>                      |         |                |                      |  |
| Czech Rep.koruna                   | 0.050   | 19.822         | -0.3                 |  |
| Denmark krone                      | 0.185   | 5.396          | -0.6                 |  |
| Euro area euro                     | 1.383   | 0.723          | -0.6                 |  |
| Hungary forint                     | 0.004   | 224.270        | 3.7                  |  |
| Norway krone                       | 0.166   | 6.018          | -0.9                 |  |
| Poland zloty                       | 0.329   | 3.045          | 0.7                  |  |
| Romania leu                        | 0.311   | 3.218          | -1.1                 |  |
| Russia ruble                       | 0.028   | 36.020         | 9.4                  |  |
| Sweden krona                       | 0.152   | 6.588          | 2.3                  |  |
| Switzerland franc                  | 1.134   | 0.882          | -1.3                 |  |
| 1-mos forward                      | 1.135   | 0.881          | -1.3                 |  |
| 3-mos forward                      | 1.135   | 0.881          | -1.3                 |  |
| 6-mos forward                      | 1.136   | 0.880          | -1.3                 |  |
| Turkey lira                        | 0.469   | 2.134          | -0.7                 |  |
| UK pound                           | 1.680   | 0.595          | -1.5                 |  |
| 1-mos forward                      | 1.680   | 0.595          | -1.5                 |  |
| 3-mos forward                      | 1.679   | 0.596          | -1.5                 |  |
| 6-mos forward                      | 1.678   | 0.596          | -1.5                 |  |
| <b>Middle East/Africa</b>          |         |                |                      |  |
| Bahrain dinar                      | 2.651   | 0.377          | 0.1                  |  |
| Egypt pound                        | 0.143   | 6.995          | 0.6                  |  |
| Israel shekel                      | 0.288   | 3.474          | 0.2                  |  |
| Jordan dinar                       | 1.412   | 0.708          | 0.1                  |  |
| Kenya shilling                     | 0.012   | 86.816         | 0.4                  |  |
| Kuwait dinar                       | 3.559   | 0.281          | -0.5                 |  |
| Lebanon pound                      | 0.001   | 1513.950       | 0.6                  |  |
| Saudi Arabia riyal                 | 0.267   | 3.751          | unch                 |  |
| South Africa rand                  | 0.094   | 10.669         | 1.7                  |  |
| UAE dirham                         | 0.272   | 3.673          | unch                 |  |

Source: Thomson Reuters, 4/25/2014.



IN  
THE  
NEWS

The dollar rose to recent highs against the yen on Monday after a report

showed that U.S. pending home sales rose for the first time in nine months in March, indicating that the housing market is picking up.<sup>5</sup>

or paid is affected by a change in exchange rates, there is a direct economic impact on a company's operations. For example, a payable to be settled in 100,000 yen has a dollar equivalent value of \$434 when the direct exchange rate is \$.00434. An increase in the value of the yen to \$.00625 would result in an increase in the payable to \$625.

The selection of an exchange rate to be used in the translation process is complicated by the fact that some countries maintain multiple exchange rates. The government of a country may maintain official rates that differ from the market-determined rate, depending on the nature of the transaction. For example, a government may establish a set exchange rate for "essential goods and services" and allow the exchange rate for nonessential goods and services to float.

<sup>4</sup> The concepts of economic exposure and accounting exposure are not identical. A company's economic exposure may be broadly defined as the uncertainty associated with the effect of exchange rate changes on the expected cash flows of the reporting entity. Accounting exposure, in contrast, is directly related to accounts that are translated at the current exchange rate.

<sup>5</sup> [www.investing.com](http://www.investing.com), "Financial News," 4/29/2014.

## 12.2 MEASURED VERSUS DENOMINATED

### Lo 1 Measured versus denominated.

Transactions are normally *measured* and recorded in terms of the currency in which the reporting entity prepares its financial statements. This currency is usually the domestic currency of the country in which the company is domiciled and is called the *reporting currency*. In subsequent illustrations, the U.S. dollar is assumed to be the reporting currency of U.S.-based firms. Assets and liabilities are *denominated* in a currency if their amounts are fixed in terms of that currency. Thus a transaction between two U.S. companies requiring payment of a fixed number of dollars is both measured and denominated in dollars. In a transaction between a U.S. firm and a foreign company, the two parties usually negotiate whether the settlement is to be made in dollars or in the domestic currency of the foreign company. If the transaction is to be settled by the payment of a fixed amount of foreign currency, the U.S. firm measures the receivable or payable in dollars, but the transaction is denominated in the specified foreign currency. To the foreign company, the transaction is both measured and denominated in its domestic currency.

## 12.3 FOREIGN CURRENCY TRANSACTIONS

### Lo 2 Foreign currency transaction.

A transaction that requires payment or receipt (settlement) in a foreign currency is called a *foreign currency transaction*. A transaction with a foreign company that is to be settled in dollars is not a foreign currency transaction to a U.S. firm because the number of dollars to be received or paid to settle the account is fixed and remains unaffected by subsequent changes in the exchange rate. Thus a transaction of a U.S. firm with a foreign entity to be settled in dollars is accounted for in the same manner as if the transaction had been with a U.S. company.

A foreign currency transaction will be settled in a foreign currency, and the U.S. firm exposed to the risk of unfavorable changes in the exchange rate that may occur between the date the transaction is entered into and the date the account is settled. For example, assume that a U.S. firm purchased goods from a French firm and the U.S. firm is to settle the liability by the payment of 20,000 euros. The French firm would measure and record the transaction as normal because the billing is in its reporting currency. Because the billing is in a foreign currency (denominated in euros), the U.S. firm must translate the amount of the foreign currency payable into dollars before the transaction is entered in its accounts. An increase (decrease) in the direct exchange rate will increase (decrease) the number of dollars required to buy the fixed number of euros needed to settle the foreign currency liability.

The *direct exchange rate* is often said to be increasing, or the foreign currency unit to be strengthening, if more dollars are needed to acquire the foreign currency units. If fewer dollars are needed, then the foreign currency is weakening or depreciating in relation to the dollar (the direct exchange rate is decreasing). Consider the following information.

|                   | <i>Direct Exchange Rates</i>          |                                       |
|-------------------|---------------------------------------|---------------------------------------|
|                   | <i>Yen Strengthens<br/>\$ Weakens</i> | <i>Yen Weakens<br/>\$ Strengthens</i> |
| Beginning of year | \$1 = 1 yen                           | \$1 = 1 yen                           |
| End of year       | \$2 = 1 yen                           | \$.5 = 1 yen                          |

Would a U.S. company holding a 10,000 *receivable* denominated in yen prefer the yen to strengthen or weaken? In this case, the company prefers a strengthened yen because the equivalent of more dollars would be received and an exchange gain would be incurred. If the transaction involved a *payable* denominated in yen, the firm would have incurred an exchange rate loss because more dollars would have to be paid. As will be shown later, because firms cannot perfectly predict changes in exchange rates, the U.S. firm may *hedge*, that is, protect itself against an unfavorable change in the exchange rate by using derivatives.

In this chapter, we discuss the accounting for importing or exporting goods. Then we provide an introduction to hedging the risk of foreign currency rate changes.





IN  
THE  
NEWS

Some currencies have undergone major changes in comparison to the U.S. dollar. Consider the changes in the following direct exchange rates between the U.S. dollar and the Brazilian real and the Australian dollar:

|                   | U.S. Dollars to Convert to Foreign Currency |          |           | % Change from<br>1/1/2000<br>to 10/12/2006 |
|-------------------|---|----------|-----------|--|
|                   | 1/1/2000                                    | 10/12/06 | 5/25/2014 |  |
| Australian dollar | \$0.6565                                    | \$0.7509 | \$0.9277  | 14.4%                                      |
| Brazilian real    | \$0.5435                                    | \$0.4647 | \$0.4660  | (14.5%)                                    |

From 2000 to 2006, the U.S. dollar strengthened relative to the Brazilian real but weakened against the Australian dollar. Since 2006, both currencies have continued this trend. In general, over the time period reported, the U.S. dollar has weakened relative to the Australian dollar and strengthened versus the real. One way to consider whether a currency has strengthened or weakened is to consider the direct exchange rate as the cost of the foreign currency. For instance, when the direct exchange rate increases, the currency is more valuable, so the currency has strengthened relative to the U.S. dollar.

## Importing or Exporting of Goods or Services

### LO 3 Common transactions.

Probably the most common form of foreign currency transaction is the exporting or importing of goods or services. In each unsettled foreign currency transaction, there are three stages of concern to the accountant. These stages and the appropriate exchange rate to use in translating accounts denominated in units of foreign currency (except for forward exchange contracts) are as follows:

### LO 4 Three stages of concern.

1. **At the date the transaction is first recognized in conformity with GAAP.** Each asset, liability, revenue, expense, gain, or loss arising from the transaction is measured and recorded in dollars by multiplying the units of foreign currency by the current direct exchange rate. (The **current exchange rate** is the spot rate in effect on a given date.)
2. **At each balance sheet date that occurs between the transaction date and the settlement date.** Recorded balances that are denominated in a foreign currency are adjusted using the spot rate in effect at the balance sheet date, and the transaction gain or loss is recognized currently in earnings.
3. **At the settlement date.** In the case of a foreign currency payable, a U.S. firm must convert U.S. dollars into foreign currency units to settle the account, whereas foreign currency units received to settle a foreign currency receivable will be converted into dollars. Although translation is not required, a transaction gain or loss is recognized if the number of dollars paid or received upon conversion does not equal the carrying value of the related payable or receivable.

Using the spot rate to translate foreign currency receivables and payables at each measurement date **provides an estimate of the number of dollars to be received or to be paid to settle the account**. Note that both gains and losses result in adjustments to the receivable or payable, approximating a form of current value accounting. The increase or decrease in the expected cash flow is generally reported as a foreign currency **transaction gain or loss**, sometimes referred to as an **exchange gain or loss**, in determining net income for the current period.<sup>6</sup>

<sup>6</sup> One exception to this treatment of transaction gains and losses would involve intercompany transactions that are of a long-term financing or capital nature between an investor and an investee that are consolidated, combined, or accounted for by the equity method. These are accounted for as a component of stockholders' equity.

**Importing Transaction** To illustrate an importing transaction, assume that on December 1, 2015, a U.S. firm purchased 100 units of inventory from a French firm for 500,000 euros to be paid on March 1, 2016. The firm's fiscal year-end is December 31. Assume further that the U.S. firm did not engage in any form of hedging activity. The spot rates for euros (\$/euro) at various times are as follow:

|                                      | <u>Spot Rate</u> |
|--------------------------------------|------------------|
| Transaction date—December 1, 2015    | \$1.25           |
| Balance sheet date—December 31, 2015 | 1.28             |
| Settlement date—March 1, 2016        | 1.27             |

The U.S. firm would prepare the following journal entry on December 1, 2015:

|        |  |         |         |
|--------|--|---------|---------|
| Dec. 1 | Purchases                                      | 625,000 |         |
|        | Accounts Payable (500,000 euros × \$1.25/euro) |         | 625,000 |

At the balance sheet date, the accounts payable denominated in foreign currency is adjusted using the exchange rate (spot rate) in effect at the balance sheet date. The entry is

|         |  |        |                  |
|---------|--|--------|------------------|
| Dec. 31 | Transaction Loss   | 15,000 |                  |
|         | Accounts Payable   |        | 15,000           |
|         | Accounts payable valued at 12/31 (500,000 euros × \$1.28/euro) |        | \$640,000        |
|         | Accounts payable valued at 12/1 (500,000 euros × \$1.25/euro)  |        | <u>625,000</u>   |
|         | Adjustment to accounts payable needed                          |        | <u>\$ 15,000</u> |
|         | or   |        |                  |
|         | [500,000 euros × (\$1.28 – \$1.05) = \$15,000]                 |        |                  |

If the exchange rate had declined below \$1.25,<sup>7</sup> for example to \$1.23, the U.S. firm would have recognized a gain of \$10,000 since it would have taken only \$615,000 (500,000 euros × \$1.23) to settle the \$625,000 recorded liability.

Before the settlement date, the U.S. firm must buy euros in order to satisfy the liability. With a change in the exchange rate to \$1.27, the firm must pay \$635,000 on March 1, 2016, to acquire the 500,000 euros. The journal entry to record the settlement is:

|        |                                    |         |         |
|--------|------------------------------------|---------|---------|
| Mar. 1 | Accounts Payable                   | 640,000 |         |
|        | Transaction Gain                   |         | 5,000   |
|        | Cash (500,000 euros × \$1.27/euro) |         | 635,000 |

Over the three-month period, the decision to delay making payment cost the firm \$10,000 (the \$635,000 cash paid less the original payable amount of \$625,000). This net amount was recognized as a loss of \$15,000 in 2015 and a gain of \$5,000 in 2016.

Note in the preceding example that at December 31, the balance sheet date, a transaction loss was recognized on the open account payable. Such a loss is considered unrealized because the account has not yet been settled or closed. When an account payable (or receivable) is settled or closed, a transaction gain or loss on the settlement is considered realized. The FASB reasoned that users of financial statements are best served by reporting the effects of exchange rate changes on a firm's financial position in the accounting period in which they occur, even though they are unrealized and may reverse or partially reverse in a subsequent period, as in the illustration above. This procedure is criticized, however, because under GAAP, gains are not ordinarily reported until realized and because the recognition of unrealized gains and losses results in increased earnings volatility.

**Exporting Transaction** Now assume that the U.S. firm sold 100 units of inventory for 500,000 euros to a French firm. All other facts are the same as those for the

<sup>7</sup> Throughout this chapter, we often state the exchange rate simply in dollars; thus, a rate of \$1.25 means \$1.25 per unit of foreign currency (euro in this case).

importing transaction. The journal entries to record this exporting transaction on the books of the U.S. company are:

| <b>December 1, 2015—Date of Transaction</b>              |                  |         |
|--|------------------|---------|
| Accounts Receivable (500,000 euros × \$1.25)             | 625,000          |         |
| Sales  |                  | 625,000 |
| <b>December 31, 2015—Balance Sheet Date</b>              |                  |         |
| Accounts Receivable (\$640,000 – \$625,000)              | 15,000           |         |
| Transaction Gain   |                  | 15,000  |
| The receivable valued at 12/31: 500,000 euros × \$1.28 = | \$640,000        |         |
| The receivable valued at 12/1: 500,000 euros × \$1.25 =  | \$625,000        |         |
| Change in the value of the receivable                    | <u>\$ 15,000</u> |         |
| <b>March 1, 2016—Settlement Date</b>                     |                  |         |
| Cash (500,000 euros × \$1.27)                            | 635,000          |         |
| Transaction Loss   | 5,000            |         |
| Accounts Receivable                                      |                  | 640,000 |

A comparison of the entries to record the exporting transaction with those prepared to record an importing transaction reveals that a movement in the exchange rate has an opposite effect on the company's reported income. That is, the increase in the exchange rate from \$1.25 to \$1.28 resulted in a transaction gain in the case of a foreign currency receivable, whereas a transaction loss was reported in the case of a foreign currency payable. When the exchange rate decreased from \$1.28 to \$1.27, a transaction loss was reported on the exposed receivable, whereas a transaction gain was reported on the exposed payable. Thus one tool available to management to hedge a potential loss on a foreign currency receivable is to enter into a transaction to establish a liability to be settled in the same foreign currency. Similarly, a liability to be settled in units of a foreign currency can be hedged by entering into a receivable transaction denominated in the same foreign currency. These relationships are summarized in the following chart.

|   | <i>Balance Sheet</i>   |                                   |                                |
|---|------------------------|-----------------------------------|--------------------------------|
|   | <i>Exposed Account</i> | <i>Effect on Balance Reported</i> | <i>Income Statement Effect</i> |
| <b>Increase in Direct Exchange Rate</b> |                        |                                   |                                |
| Importing Transaction                   | Payable                | Increase                          | Transaction loss               |
| Exporting Transaction                   | Receivable             | Increase                          | Transaction gain               |
| <b>Decrease in Direct Exchange Rate</b> |                        |                                   |                                |
| Importing Transaction                   | Payable                | Decrease                          | Transaction gain               |
| Exporting Transaction                   | Receivable             | Decrease                          | Transaction loss               |

How should a transaction gain or loss be reported? In the previous examples, the dollar amount recorded in the Sales account and the Purchases account was determined by the exchange rate prevailing at the transaction date. Adjustments to the foreign-currency-denominated receivable or payable were recorded directly to transaction gain or loss. Under this approach, referred to as the *two-transaction approach*, the sale or purchase is viewed as a transaction separate and distinct from the financing arrangement. Thus the transaction gain or loss does not result from an operating decision to buy or sell goods or services in a foreign market but from a financial decision to delay the payment or receipt of foreign currency and not to hedge the exposed receivable or payable against possible unfavorable currency rate changes.

An alternative view that was rejected by the FASB considers the initial transaction and settlement to be one transaction. Supporters of this method contend that the initial transaction is incomplete and the amounts recorded are estimates until such time as the total sacrifice from the purchase (units of domestic currency paid) or the total benefits from the sale (units of domestic currency received) are known. Under this view, transaction gains or losses should be accounted for as an adjustment to the cost of the asset purchased or to the revenue recorded in a sales transaction. There is an obvious implementation problem with this method when the sale or purchase is recorded in one fiscal period and the receipt or payment occurs in another period.

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The ruble's largest decline in recent weeks could get worse as a

surprise interest-rate increase curtails growth and the Ukraine crisis increases the likelihood for more sanctions Morgan Stanley said.

The Russian currency depreciated 0.7% to 36.0305 per dollar after a surprise interest rate increase failed to offset Standard & Poor's move to lower Russia's credit rating to one level above junk.<sup>8</sup>

<sup>8</sup> [www.bloomberg.com](http://www.bloomberg.com), Yen Heads for Weekly Gain As Ruble Weakens on Ukraine, Andrea Wong, 4/25/2014.

**TEST YOUR KNOWLEDGE** 12.1

**NOTE:** Solutions to *Test Your Knowledge* questions are found at the end of each chapter before the end-of-chapter questions.

**Multiple Choice**

On December 1, 2014, SMC entered into a transaction to import raw materials from a foreign country. The account is to be settled on March 1 with the payment of 50,000 euros. The spot rate for euros on December 1 was \$1.4/euro and on March 1 was \$1.44/euro.

- If SMC does not hedge the payable, raw materials will be recorded on the books on March 1, 2015 at what amount?
  - 50,000 euros
  - \$72,000
  - \$70,000
  - None of the above
- What is the total amount of the transaction gain or loss to be included in net income?
  - \$2,000 gain
  - \$2,000 loss
  - No gain or loss is recognized until the raw materials are sold
  - There is no gain or loss. The change in the value of the raw materials offsets the change in the payable.

**LO 8** Derivatives as a hedge.**RELATED CONCEPTS**

Many assets and liabilities do not have readily observable market values and measurement often relies on present values. The use of simplifying assumptions aims for present value measurements that are more relevant than undiscounted measurements.

**Hedging Foreign Exchange Rate Risk**

**Derivative Instruments** After the issuance of *SFAS No. 52* on foreign currency translation, the FASB became aware that firms were using creative instruments with increasing frequency to accomplish their desired hedging, many of which were not included in the scope of *SFAS No. 52*. Consequently, the FASB issued another standard, *SFAS No. 133*, which expanded the scope of accounting for hedges. Under these newer guidelines, certain designated hedges are accounted for using **hedge accounting**. This will be elaborated upon later.<sup>9</sup>

A **derivative instrument** may be defined as a financial instrument that, by its terms at inception or upon occurrence of a specified event, provides the holder (or writer) with the right (or obligation) to participate in some or all of the price changes of another **underlying** value of measure, but does not require the holder to own or deliver the underlying value of measure. Thus its value is **derived** from the underlying value of measure. The underlying value of measure may be one or more referenced financial instruments, commodities, or other assets, or other specific items to which a rate, an index of prices, or another market indicator is applied. In most cases, derivatives differ from traditional instruments (stocks and bonds, for example) in that the eventual dollar amount of the performance is dependent upon subsequent value changes, rather than upon a static measure, and the eventual outcome is necessarily favorable to one of the parties involved and unfavorable to the other. The cash payments involved are made at the end of the contract rather than at its inception for the most part, and the instruments have consequently been treated in the past in many cases as a type of off-balance sheet agreement.

The FASB identified the following as keystones for the accounting for derivative instruments:<sup>10</sup>

- Derivative instruments represent rights or obligations that meet the definitions of assets or liabilities and should be reported in financial statements.
- Fair value is the most relevant measure for financial instruments and the only relevant measure for derivative instruments.
- Only items that are assets or liabilities should be reported as such in the balance sheet.
- Special accounting for items designated as being hedged should be provided only for qualifying items, as demonstrated by an assessment of the expectation of effective offsetting changes in fair values or cash flows during the term of the hedge for the risk being hedged.

<sup>9</sup> See FASB ASC topic 815 [Derivatives and Hedging].

<sup>10</sup> FASB ASC paragraph 815-10-10-1.

IN  
THE  
NEWS

Sri Lanka, like many other emerging market inflation-targeting

countries, has a managed float exchange rate regime and intervenes relatively frequently. Frequent interventions and the absence of a transparent implementation framework can make it more difficult for the markets and public to assess the objectives of foreign exchange interventions.<sup>11</sup>

Although over a thousand different types of derivative instruments have been created, they are sometimes separated into the following two broad categories:

- Forward-based derivatives, such as forwards, futures, and swaps, in which either party can *potentially* have a favorable or an unfavorable outcome but not both simultaneously (e.g., both will not simultaneously have favorable outcomes).
- Option-based derivatives, such as interest rate caps, option contracts, and interest rate floors, in which only *one* specified party can potentially have a favorable outcome and it agrees to pay a premium at inception for this potentiality. The other party is paid the premium, and it can potentially have only an unfavorable outcome.

Derivatives are recognized in the balance sheet at their fair value. Determination of that value is based on the changes in the underlying value of measure (commodity, financial instrument, index, etc.) and on assessment of the expected future cash flows. The result is a payable position for one of the involved parties and a receivable position for the other.

## Forward Exchange Contracts

### Lo 5 Forward exchange contracts.

Although hedging can be accomplished with many different types of derivatives, in this chapter we focus mainly on hedging with the use of forward contracts. Later in this chapter, we illustrate the use of options as a hedging device.

A forward exchange contract (forward contract) is an agreement to exchange currencies of two different countries at a specified rate (the forward rate) on a stipulated future date. At the inception of the contract, the forward rate normally varies from the spot rate. ***The difference between the two rates is referred to as a discount (premium) if the forward rate is less than (greater than) the spot rate,*** as shown here.

|              | Exchange Rate |                 |
|--------------|---------------|-----------------|
| Forward rate | \$.175        | } .007 premium  |
| Spot rate    | .168          |                 |
| Forward rate | .162          | } .006 discount |

## Which Kind of Forward Contract to Choose?

### Lo 6 Hedging with forward contracts.

If the item being hedged is a foreign currency *account payable*, the firm should use a **forward contract to purchase the foreign currency** on the date the payable becomes due. This implies that the firm can lock in the cost of acquiring the foreign currency on the date the forward contract is acquired, and subsequent changes in the exchange rate will not affect the amount the firm has to pay. On the other hand, if the item being hedged is a foreign currency *accounts receivable*, the firm should use a **forward contract to sell the foreign currency** on the date the receivable is expected to be collected.

***The valuation of a forward contract (intrinsic versus time value):*** Forward contracts are valued on a net basis. For example, consider the following. Suppose on January 1, 2017, you obtain a one-year forward contract to sell 10,000 Canadian dollars using the December 31, 2017, forward rate of \$0.90. This forward rate is the best guess to estimate what the spot rate will be on December 31, 2017. Therefore on January 1, 2017, you believe that 10,000 Canadian dollars will be worth \$9,000 one year from now. The forward contract locks in the amount of cash you will receive, \$9,000. But since on January 1 this is also the expected cost to obtain Canadian dollars, the value of the forward contract is zero on this date, and it

<sup>11</sup> Business Times, Sunday, May 1, 2011.

will remain zero until the forward rate for December 31, 2017, settlement changes. Assume the following additional information:

| <i>Date</i> | <i>Spot Rate</i> | <i>Forward Rate<br/>for 12/31/17 Settlement</i> | <i>Premium</i> |
|-------------|------------------|---|----------------|
| 1/1/2017    | \$0.80           | \$0.90  | \$0.10         |
| 7/1/2017    | \$0.83           | \$0.88  | \$0.05         |
| 12/31/2017  | \$0.84           | \$0.84  | \$0.00         |

With this forward contract, the amount of dollars to be received is fixed at \$9,000, but the amount paid to acquire the foreign currency alters with changes in the exchange rate. What conditions will cause the contract to be beneficial to the firm? If the future spot rate falls below the forward rate on the forward contract, the firm will benefit. Looking at the data in retrospect, this is a valuable forward contract for the firm because the forward contract locks in the cash received at the \$0.90 rate, but the firm can purchase the currency on the settlement date at a spot rate of \$0.84. In other words, the firm pays \$0.84 to get \$0.90. But on the date the forward contract is acquired, there is no guarantee that the firm will benefit from the contract (i.e., the spot rate on the settlement date might increase above \$0.90).

As the settlement date for the forward contract approaches, the forward rate converges to the *settlement date* spot rate. Also, note that the premium changes over time but eventually will become zero on the settlement date. What is the *value of the forward* on July 1, 2017? The amount of cash received from the forward is fixed at \$9,000, but now the forward rate for December 31 settlement has changed to \$0.88. This implies that we could enter into a contract to purchase the 10,000 Canadian dollars for \$8,800. Thus the value of the forward has increased by \$200 (the change in the forward rate). Similarly, on the settlement date, the forward rate drops to \$0.84. Now the 10,000 Canadian dollars can be purchased for \$8,400, and the forward contract has increased in value by another \$400. The *total change in value of the forward contract* from the inception to the settlement date can be computed by taking the difference between the original forward rate of \$0.90 and the spot rate on the settlement date (\$0.84). In this example the forward contract increased in value by \$600 or  $[(\$0.90 - \$0.84) (10,000)]$ .

Notice that the initial premium is \$0.10 and that the spot rate increased over the year by \$0.04. The difference between these two equals the change in the value of the forward contract over the forward contract. (In this case the premium represents a gain, and the change in the spot rate is a loss.) Since the premium will eventually be zero on the settlement date, the change in the premium (or discount) is known as the *time element* of the change in value of the forward contract. The change in the spot rate is considered the change in the *intrinsic value* of the forward. Thus the total change in value is equal to the sum of the intrinsic value and the time value. (Keep in mind that each of these changes in value can be positive or negative.) This is summarized in the following chart.

| <i>Date</i>                                   | <i>Forward Rate for 12/31/17</i> |                   |                | <i>Change in Value(a)</i> |                        |                   |
|---|----------------------------------|-------------------|----------------|---------------------------|------------------------|-------------------|
|   | <i>Spot Rate</i>                 | <i>Settlement</i> | <i>Premium</i> | <i>Total Value</i>        | <i>Intrinsic Value</i> | <i>Time Value</i> |
| 1/1/2017                                      | \$0.80                           | \$0.90            | \$0.10         |                           |                        |                   |
| 7/1/2017                                      | \$0.83                           | \$0.88            | \$0.05         | \$0.02                    | (\$0.03)               | \$0.05            |
| 12/31/2017                                    | \$0.84                           | \$0.84            | \$0.00         | <u>\$0.04</u>             | <u>(\$0.01)</u>        | <u>\$0.05</u>     |
| Total change in rates and premium             |                                  |                   |                | \$0.06                    | (\$0.04)               | \$0.10            |
| Foreign currency (Canadian dollars)           |                                  |                   |                | <u>10,000</u>             | <u>10,000</u>          | <u>10,000</u>     |
| Total change in value in dollars <sup>a</sup> |                                  |                   |                | <u>\$600</u>              | <u>(\$400)</u>         | <u>\$1,000</u>    |

<sup>a</sup> *Definitions*

The total change in the value of the forward contract = the change in the forward rates multiplied by the foreign currency.

The change in the intrinsic value of the forward contract = the change in the spot rate multiplied by the foreign currency.

The change in the time value of the forward contract = the change in the premium multiplied by the foreign currency.

### Why Do Forward Rates Differ from Spot Rates?

Forward rates for the purchase or sale of foreign currency, on some future date, can be higher, lower, or equal to the current spot rate on that currency. For instance, if the current spot rate for the exchange of pesos and dollars is \$0.95, the forward rate to exchange pesos for dollars in one year might be higher or lower than \$0.95 (it is unlikely to be equal). Why do these rates differ? The answer to this question involves differences in interest rates between the two countries. Suppose that the one-year forward rate and the current spot rate are equal but that in the United States the cost of borrowing money for one year is 5% while in Mexico the cost of borrowing is 10%. A U.S. company could take \$9,500 and convert this amount into 10,000 pesos (at today's spot rate) and invest this amount in Mexico at 10% for one year. This would accumulate to 11,000 pesos. At the same time, the firm could buy a forward contract to sell 11,000 pesos at the forward rate of \$0.95 for \$10,450. Assuming investments in the United States and Mexico had equal risks and tax characteristics, this would amount to a risk-free 5% return (a 10% return in Mexico less 5% that could have been earned in the United States). Investors would commit large sums of money to this investment. In our example, this process would tend to drive up U.S. interest rates, drive down Mexican interest rates, and lower the forward rate. The equilibrium is known as *interest rate parity*. Therefore,

$$\text{Forward rate} = \frac{(1 + i^{US})}{(1 + i^{Mexico})} (\text{spot rate})$$

where  $i$  represents the interest rate and the superscript represents the country. Therefore, the forward rate that guarantees interest rate parity is \$0.9068, or

$$\text{Forward rate} = (1.05/1.10)(\$0.95) = \$0.9068.$$

Then in this example, the 11,000 pesos could only be converted into \$9,975, enabling the U.S. company to earn only 5% interest. Therefore, if the interest rate in the foreign country is *higher* than the rates in the United States, the forward rate will be *below* the current spot rate. If the interest rate in the foreign country is *lower* than the rates in the United States, the forward rate will be *above* the current spot rate.

There are a number of business situations in which a firm may desire to acquire a forward exchange contract. The uses of forward contracts include the following:

#### 1. Hedges

- a. Forward contracts used as a hedge of a *foreign currency transaction*. These include importing and exporting transactions denominated in foreign currency. These hedges do not qualify for hedge accounting because the foreign exchange gains and losses are already reported in earnings under FASB ASC paragraph 830-10-15-3, and the payables and receivables are reported at market value on the balance sheet.
- b. Forward contracts used as a hedge of an *unrecognized firm commitment (a fair value hedge)*. An example of an unrecognized firm commitment is when a firm enters into a contract to purchase an asset in two months for a fixed amount of foreign currency. Since the exchange rate may change over the next two months, the firm might use a forward contract to hedge the potential change in value of the purchased asset. Hedge accounting rules apply. Both the change in value of the hedge and the value of the hedged item are reported in earnings (before the contract is reported on the books). This is illustrated later.
- c. Forward contract used as a hedge of a *foreign-currency-denominated "forecasted" transaction* (a cash flow hedge). A forecasted transaction is a situation where the firm has planned sales receipts (expected to occur in the near future) and uses the forward contract as a means to hedge the cash flow risk. Initially, foreign exchange gains and losses are reported in comprehensive income, while no offsetting amount is reported for the hedged item. Eventually, the exchange gains and losses will be reported in earnings in the period the hedged item affects earnings (i.e., if the item being hedged is a forecasted purchase of inventory, the gains and losses on the hedge will be reclassified into earnings when the inventory is sold).
- d. Forward contracts as a hedge of a *net investment in foreign operations*.

## 2. Speculation

Forward contracts used to speculate changes in foreign currency.

These classifications are important because the accounting for a particular type of forward contract depends on the purpose for which it was obtained. The difference in accounting relates primarily to two questions.

1. How is a transaction gain or loss on the forward contract computed, and when should the gain or loss be reported?
2. What value should be reported for the forward contract in the financial statements over the life of the contract?

Hedges of forecasted foreign currency transactions may include some intercompany transactions. The hedging of foreign currency intercompany cash flows with foreign currency options is not uncommon. Because of its belief that the accounting for all derivative instruments should be the same, the FASB broadened the scope of hedges that are eligible for hedge accounting.<sup>12</sup> If an *intercompany* foreign currency derivative is created, it can only be a hedging instrument in the *consolidated* financial statements if the other member enters into an offsetting contract with an outside (unaffiliated) party to hedge its exposure. This restriction applies because the standards require that some component with foreign currency exposure must be a party to the hedging transaction. In the stand-alone statements of the subsidiary, however, the intercompany derivative could be designated as a hedge in the absence of third-party involvement. Therefore intercompany derivatives can be classified as either fair value or cash flow hedges if they meet the definition for that particular hedge and if the member of the consolidated group *not using the intercompany derivative* as a hedge enters into a hedge contract with an unrelated party to offset the original exposure from the intercompany hedge.

## 12.4 USING FORWARD CONTRACTS AS A HEDGE

### Hedge of a Foreign Currency Exposed Liability

Consider the following importing example.

*Importing transaction with a forward contract used as a hedge*

1. On December 1, 2015, a U.S. firm purchased inventory for 500,000 euros payable on March 1, 2016 (i.e., the transaction is denominated in euros).
2. The firm's fiscal year-end is December 31.
3. The spot rate for euros (\$/euro) and the forward rates for euros on March 1, 2016, at various times are as follows:

|                                      | <i>Spot<br/>Rate</i> | <i>Forward Rate<br/>(for 3/1/2016 euros)</i> |
|--------------------------------------|----------------------|--|
| Transaction date—December 1, 2015    | \$1.05               | 1.052  |
| Balance sheet date—December 31, 2015 | 1.055                | 1.059  |
| Settlement date—March 1, 2016        | 1.07                 |  |

4. On December 1, 2015, the U.S. firm entered into a forward contract to buy 500,000 euros on March 1, 2016, for \$1.052.

#### Lo 7 Forward contracts as a hedge.

On December 1, 2015, the firm entered a contract to purchase inventory for 500,000 euros (the spot rate was \$1.05 on that date). If the exchange rate did not change over the payment period, the firm would owe \$525,000 to settle the payable. However, if the exchange rate increased to \$1.07, the firm would have to pay \$535,000 to settle the debt ( $500,000 \times \$1.07$ ). On the other hand, if the exchange rate dropped to \$1.02, the firm would only need to pay \$510,000 (or  $500,000 \times \$1.02$ ). Because the firm cannot perfectly estimate the

<sup>12</sup> FASB ASC paragraph 815-20-25-4.



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The USD Index measures the performance of the US Dollar against a basket of currencies: EUR, JPY, GBP, CAD, CHF and SEK.

change in the exchange rate, the company might prefer to eliminate this risk by entering into a forward contract *to buy euros* on March 1, 2016. Since the forward rate on December 1, 2015, to purchase euros on March 1, 2016, is \$1.052, the company can buy 500,000 euros on March 1 for a guaranteed price of \$526,000. This fixed price means that the firm has determined in advance the maximum (and exact) amount of loss it will suffer—in this case \$1,000. Thus the firm is protected from future increases in the exchange rate above \$1.052. By locking into a set price, the firm gains if the spot rate on March 1, 2016, increases above \$1.052 and loses if the spot rate decreases below \$1.052. The important point to note about the hedge is that the firm knows with certainty on December 1, 2015, the amount of cash needed to purchase the asset.

The entries to record the purchase and forward exchange contract are as follows.

**December 1, 2015—Transaction Date**

|   |         |         |
|---|---------|---------|
| (1) Purchases   | 525,000 |         |
| Accounts Payable (500,000 euros × \$1.05)                                       |         | 525,000 |
| To record purchase of goods on account using the spot rate on December 1, 2015. |         |         |

The accounts payable for the inventory purchase is recorded using the spot rate on the transaction date (on December 1, 2015):

|   |         |         |
|---|---------|---------|
| (2) Foreign Currency (FC) Receivable from Exchange Dealer               | 526,000 |         |
| Dollars Payable to Exchange Dealer (500,000 euros × \$1.052)            |         | 526,000 |
| To record forward contract to buy 500,000 euros using the forward rate. |         |         |

At the date of the transaction, the U.S. firm records the forward contract by recognizing a payable and a receivable of \$526,000 for the number of dollars to be paid (units of foreign currency to be purchased multiplied by forward rate) to the exchange dealer when the forward contract matures.<sup>13</sup> The net value of the forward contract is zero since the payable and the receivable are exactly offset. The value of the receivable from the dealer and the accounts payable for the purchase of inventory are subject to changes in exchange rate, but the gains and losses generally offset each other since the terms and the amounts are equal.

On December 31, 2015, the spot rate increases from \$1.05 to \$1.055, resulting in an increase of \$2,500 to accounts payable. The spot rate is used for accounts payable since that is the amount needed to settle the liability.

**December 31, 2015—Balance Sheet Date**

|   |       |                  |
|---|-------|------------------|
| (3) Transaction Loss  | 2,500 |                  |
| Accounts Payable  |       | 2,500            |
| To record a loss on the liability denominated in foreign currency |       |                  |
| Current value of accounts payable (500,000 euros × \$1.055) =     |       | \$527,500        |
| Less: Recorded value of accounts payable =                        |       | <u>\$525,000</u> |
| Adjustment needed to accounts payable                             |       | <u>\$ 2,500</u>  |
| or [500,000 euros × (\$1.055 – \$1.05)] = \$2,500                 |       |                  |

On the other hand, the value of the forward contract is determined using the change in the forward rates. The forward rate increased to \$1.059 from \$1.052. This results in an increase of \$3,500 to the receivable from the exchange dealer. Recall that the payable to the foreign exchange dealer is fixed by the forward contract. Thus the forward contract has a positive \$3,500 value at this point (December 31).

<sup>13</sup> In practice, a journal entry may not be made to record a forward contract when the contract was negotiated because it represents an executory contract. Although arguments can be made either for or against recording such contracts, in this chapter forward contracts are recorded because it is easier to analyze the subsequent adjustments required to report the effects of a forward contract on the firm's reported income.

|   |       |       |
|---|-------|-------|
| (4) FC Receivable from Exchange Dealer  | 3,500 |       |
| Transaction Gain  |       | 3,500 |
| To record a gain on foreign currency to be received from exchange dealer [(500,000 euros × \$1.059 = \$529,500) – \$526,000]. |       |       |

If the financial statements are prepared on December 31, 2015, the value of the forward contract is as follows:

|  |                 |
|--|-----------------|
| FC Receivable from Exchange Dealer (500,000 × 1.059) | \$529,500       |
| Dollars Payable to Exchange Dealer (500,000 × 1.052) | <u>526,000</u>  |
| Net Receivable from Exchange Dealer                  | <u>\$ 3,500</u> |

This net value would be reported on the balance sheet. In addition, accounts payable would be recorded at the spot rate, or \$527,500. The income statement would report an exchange loss of \$2,500 and an exchange gain of \$3,500.

Note that even though the forward contract and the accounts payable cover similar terms (December 1 to March 1) and amounts (500,000 euros), the amount of the transaction loss on the payable does not equal the transaction gain on the FC receivable. They are not equal because accounts payable is valued using changes in the spot rate, while the value of the forward contract is determined using changes in the forward rates. On the settlement date, the forward rate and the spot rate become equal. Thus the total transaction gain or loss on the contract will eventually equal the guaranteed gain or loss determined on the date the forward contract is acquired.

On March 1, 2016, the spot rate increases to \$1.07 from \$1.055, resulting in an increase in accounts payable of \$7,500 [(1.07 – 1.055) × 500,000]. Since on the settlement date, the forward rate on this date and the spot rate are identical, the change in the March 1 forward rate on December 31 to the spot rate on March 1, 2015, is \$0.011, or (1.059 to 1.07). This results in an increase to the foreign currency (FC) receivable of \$5,500, or [(1.07 – 1.059) × 500,000]. The journal entries to record these events are as follows:

#### March 1, 2016—Settlement Date

|   |       |       |
|---|-------|-------|
| (5) Transaction Loss  | 7,500 |       |
| Accounts Payable  |       | 7,500 |
| To record a loss from 12/31/15 to 3/1/16 on liability denominated in foreign currency. The current value of the payable \$535,000 (500,000 euros × \$1.07) less the recorded value of the payable on December 31 of \$527,500 is \$7,500: [(500,000 euros × \$1.07, or \$535,000) – \$527,500]. |       |       |
| (6) FC Receivable from Exchange Dealer  | 5,500 |       |
| Transaction Gain  |       | 5,500 |
| To record a gain from 12/31/15 to 3/1/16 on foreign currency to be received from exchange dealer. The change in the 12/31 forward rate to the spot rate on March 1, 2016, times 500,000 euros, or [(500,000 euros × \$1.07, or \$535,000) – \$529,500].   |       |       |

The recorded balances in both accounts payable and the FC receivable are \$535,000, reflecting the spot rate on March 1, 2015. The dollars payable to the dealer remain fixed at \$526,000, the original contracted amount. Entry (7) records the cash payment of \$526,000 and the reduction of the FC payable. Also, the receivable is converted to the Investment in FC representing the 500,000 euros acquired in the forward contract. In entry (8), the euros are used to settle the accounts payable.

|   |         |         |
|---|---------|---------|
| (7) Dollars Payable to Exchange Dealer  | 526,000 |         |
| Investment in FC (500,000 euros)  | 535,000 |         |
| FC Receivable from Exchange Dealer  |         | 535,000 |
| Cash  |         | 526,000 |
| To record payment to exchange dealer and receipt of 500,000 euros (500,000 euros × \$1.07 = \$535,000). |         |         |
| (8) Accounts Payable  | 535,000 |         |
| Investment in FC  |         | 535,000 |
| To record payment of liability upon transfer of 500,000 euros.  |         |         |

By obtaining the forward contract, the firm was able to establish at the transaction date the amount of dollars (\$526,000) that it would take to acquire the 500,000 euros needed to settle the account with the foreign firm. Note, however, that the cost of the inventory of \$525,000 was established on December 1 [entry (1)]. If the forward contract had not been obtained, the firm would have had to pay \$535,000 to settle the account and would have reported a net loss of \$10,000 on the exposed liability position. The net gain from entering into the forward contract, however, largely canceled out the net loss on the exposed liability position.

These transactions can be summarized in the following table.

| <i>Hedged Item</i>      | <i>Balance</i> | <i>Transaction Gain/(Loss)</i> | <i>Hedge</i>         | <i>Balance</i> | <i>Transaction Gain/(Loss)</i> |
|-------------------------|----------------|--------------------------------|----------------------|----------------|--------------------------------|
| <b>Accounts Payable</b> |                |                                | <b>FC Receivable</b> |                |                                |
| 12/1/2015               | \$ 525,000     |                                | 12/1/2015            | \$ 526,000     |                                |
| 12/31/2015              | 527,500        | (2,500)                        | 12/31/2015           | 529,500        | 3,500                          |
| 3/1/2015                | 535,000        | (7,500)                        | 3/1/2015             | 535,000        | 5,500                          |
| Total gain/(loss)       |                | <u>(10,000)</u>                |                      |                | <u>9,000</u>                   |

Thus the net effect is a \$1,000 loss when the forward contract is used.

### Hedge of a Foreign Currency Exposed Asset

**LO 7** Forward contract as a hedge.

In the preceding example, the U.S. firm entered into a forward purchase contract to hedge an exposed liability position at a time when the forward rate was at a premium. Accounting for a forward contract entered into as a hedge of an exposed receivable position is based on similar analysis. However, because the U.S. firm will be receiving foreign currency in settlement of the exposed receivable balance, it will enter into a forward contract *to sell* foreign currency for U.S. dollars. In this case, the receivable from the dealer is denominated in a fixed number of dollars, the amount of which is based on the contracted forward rate, whereas the obligation to the dealer is denominated in a foreign currency, which is translated into dollars using the current spot rate.

**TEST YOUR KNOWLEDGE**  12.2

**NOTE:** Solutions to *Test Your Knowledge* questions are found at the end of each chapter before the end-of-chapter questions.

Multiple Choice

On December 1, 2014, SMC entered into a transaction to import raw materials from a foreign country. The account is to be settled on March 1 with the payment of 50,000 euros. The spot rates and the forward rates on various dates are as follows:

| <u>Date</u> | <u>Spot Rate<br/>\$ per Euro</u> | <u>Forward Rate<br/>(March 1 Settlement)</u> |
|-------------|----------------------------------|--|
| Dec. 1      | \$1.00                           | \$1.03                                       |
| March 1     | \$1.04                           | \$1.04                                       |

- To hedge the company's accounts payable position, SMC should:
  - Buy a forward contract to purchase 50,000 euros on March 1

- Buy a forward contract to sell 50,000 euros on March 1
  - None of the above
- If SMC uses a forward contract to hedge the payable, what is the overall transaction gain or loss on the company from using the hedge?
    - \$2,000 gain
    - \$1,500 loss
    - \$1,500 gain
    - \$2,000 loss
    - \$500 gain

### Fair Value Hedge—Hedging an Unrecognized Foreign Currency Commitment

In the preceding discussion of the importing and exporting of goods, the purchase or sale of an asset was recorded on the transaction date. This date is considered the point at which title to the goods is transferred, which is consistent with the recording of a transaction with

another domestic company. However, if the U.S. firm at a date earlier than the transaction date made a commitment to a foreign company to sell goods or buy goods, and the price was established in foreign currency at the commitment date, changes in the exchange rate between the commitment date and transaction date would be reflected in the cost or sales price of the asset. For example, assume that a U.S. firm made an agreement on June 1 to buy goods from a Swiss company for 500,000 Swiss francs. At this date, the spot rate was \$.20, but on the transaction date, when title to the goods transferred and a journal entry was recorded, the spot rate was \$.22. The entry to record the purchase is

|                                    |         |         |
|------------------------------------|---------|---------|
| Purchases (500,000 francs × \$.22) | 110,000 |         |
| Accounts Payable                   |         | 110,000 |

Thus the change in the exchange rate that occurred between the commitment and the transaction dates becomes part of the cost of inventory rather than being reported as a separate gain or loss item. The company, however, may still acquire a forward contract to hedge against the unfavorable change in the fair value of the asset that may occur after the commitment date.

**LO 9** Reporting gains and losses on fair value hedges.

Such a forward contract is referred to as a **fair value hedge**, a derivative designed to hedge exposure to either a recognized asset or liability or, in this case, an unrecognized foreign currency commitment. In the case of an unrecognized foreign currency commitment, a fair value hedge is applicable only if there is an identifiable foreign currency commitment that specifies all significant terms (such as quantity and price) and performance is probable. ***A gain or loss on this type of forward contract as well as the offsetting gain or loss on the hedged item are recognized currently in earnings.*** The gain or loss (the change in the fair value of the forward contract) is an adjustment of the carrying value of the forward contract. Similarly, the change in value of the firm commitment is recorded as such on the balance sheet (even though the commitment has not yet been recorded). The measurement of hedge effectiveness is beyond the scope of this chapter, but since the forward contracts are for similar terms and amounts, they are assumed to be highly effective.

***Fair Value Hedge Illustration*** To illustrate the accounting for a forward contract acquired to hedge an identifiable foreign currency commitment (a fair value hedge), the following facts are assumed:

#### *Fair Value Hedge Example*

1. On March 1, 2015, a U.S. firm contracts to sell equipment to a foreign customer located in Argentina for 200,000 pesos. The equipment is expected to cost \$60,000 to manufacture and is to be delivered, and the account is to be settled one year later on March 1, 2016. Thus the transaction date and the settlement date are both March 1, 2016.
2. On March 1, 2015, the U.S. firm enters into a forward contract to sell 200,000 pesos in 12 months at the forward rate of \$.39.
3. Spot rates and the forward rates for pesos on selected dates are

| <i>Date</i>       | <i>Spot Exchange Rate</i> | <i>3/1/2016 Forward Rate</i> |
|-------------------|---------------------------|------------------------------|
| March 1, 2015     | \$.40                     | \$.39                        |
| December 31, 2015 | .397                      | .382                         |
| March 1, 2016     | .38                       |                              |

The journal entry to record the forward contract on March 1, 2015, is:

#### **March 1, 2015**

|   |        |        |
|---|--------|--------|
| (1) Dollars Receivable from Exchange Dealer           |        |        |
| (200,000 pesos × \$.39)                               | 78,000 |        |
| FC Payable to Exchange Dealer                         |        | 78,000 |
| To record the forward contract to sell 200,000 pesos. |        |        |

Nine months later, on the balance sheet date (12/31/15), the FC payable needs to be adjusted to fair value using the *change in the forward rates*. Also, since this is a fair value

hedge, the change in the fair value of the hedged item must also be recorded. This is computed using the change in the forward rate. These entries are as follows:

**December 31, 2015**

|      |  |       |       |
|------|--|-------|-------|
| (2)  | FC Payable to Exchange Dealer  | 1,600 |       |
|      | Exchange Gain  |       | 1,600 |
|      | To record gain on foreign currency to be delivered to exchange dealer using the change in forward rates (200,000 pesos $\times$ (\$.39 - \$.382)). |       |       |
| <br> |  |       |       |
| (3)  | Exchange Loss  | 1,600 |       |
|      | Firm Commitment  |       | 1,600 |
|      | To record loss on firm commitment using the change in the forward rate (200,000 pesos $\times$ (\$.39 - \$.382)).                                  |       |       |

Note that the firm commitment has not been recorded on the books as of December 31, 2015. On the December 31, 2015, balance sheet, the value of the forward contract is as follows:

|  |                 |
|--|-----------------|
| Dollars Receivable from Exchange Dealer (fixed) (200,000 $\times$ .39) | \$78,000        |
| FC Payable to Exchange Dealer (200,000 $\times$ .382)                  | <u>76,400</u>   |
| Net Receivable   | <u>\$ 1,600</u> |

On the balance sheet, the firm commitment would be reported as a \$1,600 liability. On the income statement, the exchange gain of \$1,600 is reported, as well as an exchange loss of \$1,600.

On March 1, 2016 (the transaction date and the settlement date), the journal entries are:

**March 1, 2016**

|      |   |     |     |
|------|---|-----|-----|
| (4)  | FC Payable to Exchange Dealer   | 400 |     |
|      | Exchange Gain   |     | 400 |
|      | To record gain on forward contract from 12/31/15 to 3/1/16 [200,000 pesos $\times$ (\$.38 - \$.382)] = \$400. |     |     |
| <br> |   |     |     |
| (5)  | Exchange Loss   | 400 |     |
|      | Firm Commitment   |     | 400 |
|      | To record loss on forward contract from 12/31/15 to 3/1/16 [200,000 pesos $\times$ (\$.38 - \$.382)] = \$400. |     |     |

Entries (4) and (5) adjust the values of the FC payable and the change in the fair value of the firm commitment. Note that since the transaction date occurs on the settlement date, the change in value is computed as the change in the forward rate on 12/31/2015 to the spot rate on March 1, 2016 (i.e., .382 to .38).

|      |  |        |        |
|------|--|--------|--------|
| (6)  | Investment in FC (200,000 $\times$ .38)                | 76,000 |        |
|      | Firm Commitment  | 2,000  |        |
|      | Sales (200,000 pesos $\times$ \$.39)                   |        | 78,000 |
|      | To record sale of equipment to foreign customer.       |        |        |
| <br> |  |        |        |
| (7)  | Cost of Goods Sold                                     | 60,000 |        |
|      | Inventory  |        | 60,000 |
|      | To record cost of equipment sold.                      |        |        |
| <br> |  |        |        |
| (8)  | Cash (200,000 $\times$ \$.39)                          | 78,000 |        |
|      | FC Payable to Exchange Dealer (200,000 $\times$ \$.38) | 76,000 |        |
|      | Investment in FC                                       |        | 76,000 |
|      | Dollars Receivable from Exchange Dealer                |        | 78,000 |
|      | To record settlement of forward contract.              |        |        |

Because of the forward contract, the amount of sales recorded in entry (6) is equal to the forward rate on the forward contract multiplied by 200,000 pesos, or \$78,000 (i.e., 200,000  $\times$  \$.39). The firm commitment account is eliminated on this date. In entry (8), the firm sells 200,000 pesos for \$78,000.

The effect of these transactions on the firm's profitability is as follows:

|                            |                 |
|----------------------------|-----------------|
| Sales (\$76,000 + \$2,000) | \$78,000        |
| Cost of Goods Sold         | <u>60,000</u>   |
| Gross Profit               | <u>\$18,000</u> |

The number of dollars to be received was locked in by the forward contract at \$78,000, and the equipment was expected to cost \$60,000. Thus the forward contract permitted the U.S. firm to lock in an expected profit of \$18,000 on the sales contract. If the forward contract had not been obtained, the profit earned on the contract would have depended on the exchange rate in effect when payment was received from the Argentinean customer. Without the hedge, the amount of sales recorded would have been \$76,000 (200,000 pesos  $\times$  \$.38) and the gross profit would have been \$16,000. And if the exchange rate had dropped below \$.38, the amount of sales recorded would have been even lower. For example, at an exchange rate of \$.30, the amount of sales recorded would have equaled the amount of cost of goods sold, thus eliminating any gross profit on the contract.

### Discounting the Fair Value of the Forward Contract

As stated earlier, the change in the forward contract was computed using the change in the forward rate. These amounts should be discounted to a present value basis. For example, in entry (2), the exchange gain on the FC Payable was computed to be \$1,600 by taking the change in the forward rates and multiplying by the amount of foreign currency in the forward contract [200,000 pesos  $\times$  (\$.39 - \$.382)]. If this amount were discounted using an interest rate of 12% for two months (until the settlement date), the \$1,600 would be recorded on the books at \$1,600 less \$32, or \$1,568. Similarly, the firm commitment in entry (3) would be recorded on the books at its discounted amount of \$1,568. These entries are repeated as entries (2a) and (3a).

|   |                |       |
|---|----------------|-------|
| (2a) FC Payable to Exchange Dealer                            | 1,568          |       |
| Exchange Gain   |                | 1,568 |
| To record gain on forward contract from 12/31/15 to 3/1/16    |                |       |
| [200,000 pesos $\times$ (\$.39 - \$.382)] =                   | \$1,600        |       |
| Less: (\$1,600) (2/12) (12%) =                                | <u>32</u>      |       |
| Total Discounted Gain   | <u>\$1,568</u> |       |
| (3a) Exchange Loss  | 1,568          |       |
| Firm Commitment   |                | 1,568 |
| To record loss on forward contract from 12/31/15 to 3/1/16    |                |       |
| [200,000 pesos $\times$ (\$.39 - \$.382)] less \$32 = \$1,568 |                |       |

Then on March 1, 2016, the total gain over the life of the forward contract is \$2,000 [or 200,000  $\times$  (\$.39 - \$.38)]. But since \$1,568 was already recognized, entry (4) would be for \$432 rather than simply the change since December 31.

|  |     |     |
|--|-----|-----|
| (4a) FC Payable to Exchange Dealer                               | 432 |     |
| Exchange Gain  |     | 432 |
| To record gain on forward contract from 12/31/15 to 3/1/16       |     |     |
| plus the discount already recognized (\$32)                      |     |     |
| [200,000 pesos $\times$ (\$.382 - \$.38)] = \$400 + \$32 = \$432 |     |     |
| (5a) Exchange Loss   | 432 |     |
| Firm Commitment  |     | 432 |
| To record loss on forward contract from 12/31/15 to 3/1/16       |     |     |
| plus the discount already recognized (\$32)                      |     |     |
| [200,000 pesos $\times$ (\$.382 - \$.38)] = \$400 + 32 = \$432   |     |     |

In the remainder of this chapter, we ignore the complication of discounting to simplify the already complex accounting for derivatives. We note also that, in many cases, the impact of discounting is not material.

## Cash Flow Hedge—Hedge of a Forecasted Transaction

### LO 9 Fair value hedge vs. cash flow hedge.

Firms may also be concerned about hedging the cash flows for future transactions that have not yet occurred or for which there are no firm commitments. Forward contracts in such circumstances are known as **cash flow hedges**. For instance, on January 26, 2015, Lands' End reported carrying \$77 million of forward contracts and \$16 million of options on the balance sheet. Lands' End anticipated selling products to subsidiaries in the United Kingdom, Japan, and Germany over the next year and planned to purchase various inventory items from European suppliers. Even though they might not have a specific contract, Lands' End may decide, because of the high probability of occurrence of these transactions, to hedge this foreign currency exchange risk by using a cash flow hedge.

Unlike the treatment of fair value hedges, cash flow hedges may defer the Income statement recognition of the gains and losses on forecasted transactions if certain criteria are met. Like other gains and losses that are excluded from the income statement, they must be included as components of "other comprehensive income" and reported in the stockholders' equity section of the balance sheet. The criteria for this treatment include:

- The forecasted transaction is specifically identifiable at the time of the designation as a single transaction or a group of individual transactions.
- The forecasted transaction is probable, and it presents exposure to price changes that are expected to affect earnings and cause variability in cash flows.
- The forecasted transaction involves an exchange with an outside (unrelated) party. (An exception is allowed for intercompany foreign exchange transactions. See the previous discussion in this chapter.)
- The forecasted transaction does not involve a business combination.

Amounts in accumulated other comprehensive income are reclassified into earnings in the same period or periods during which the hedged forecasted transaction affects earnings. For example, if the forecasted hedged item is inventory, the reclassification from accumulated other comprehensive income into earnings occurs when the inventory is sold. If the forecasted hedged item is the purchase of a fixed asset, the reclassification occurs when the equipment is depreciated.

We next present an illustration of the accounting for a forecasted transaction meeting the criteria identified by the FASB for deferral of the gains or losses into comprehensive income.

**Cash Flow Hedge Illustration—Forward Contracts** To illustrate the hedge of a forecasted foreign currency transaction with the use of an option, assume the following:

1. On December 1, 2015, a U.S. firm estimates that at least 5,000 units of inventory will be purchased from a company in the United Kingdom during January of 2016 for 500,000 euros. The transaction is probable, and it is to be denominated in euros. Sales of the inventory are expected to occur in the six months following the purchase.
2. The company enters into a forward contract to purchase 500,000 euros on January 31, 2016, for \$1.01.
3. Spot rates and the forward rates at the January 31, 2016, settlement were as follows (dollars per euro):

|                               | <i>Spot Rate</i> | <i>Forward Rate for 1/31/16</i> |
|-------------------------------|------------------|---------------------------------|
| December 1, 2015              | \$1.03           | \$1.01                          |
| Balance Sheet Date (12/31/15) | \$1.00           | \$0.99                          |
| January 31, 2016              | \$0.98           |                                 |

By using the forward contract, the firm is assured of paying \$505,000 regardless of changes in the exchange rate. If the exchange rate were to drop below \$1.01 the firm would lose, but if the exchange rate were to exceed \$1.01, the firm would be better off using the forward contract.

The entry on December 1, 2015, to record the forward exchange contract to purchase 500,000 euros on January 31, 2016, for \$1.01 is:

**December 1, 2015**

|     |   |         |         |
|-----|---|---------|---------|
| (1) | FC Receivable from Exchange Dealer (500,000 euros × \$1.01) | 505,000 |         |
|     | Dollars Payable to Exchange Dealer                          |         | 505,000 |

One month later on the balance sheet date (December 31, 2015), the change in the value of the forward contract is \$10,000 [ $500,000 \times (\$1.01 - \$0.99)$ ]. Therefore, on December 31, 2015, the following entry is made:

**December 31, 2015—Balance Sheet Date**

|     |   |        |        |
|-----|---|--------|--------|
| (2) | Foreign Exchange Loss—Other Comprehensive Income (Balance Sheet)                          | 10,000 |        |
|     | FC Receivable from Exchange Dealer  |        | 10,000 |
|     | To record a loss on the change in forward contract [ $500,000 \times (\$1.01 - \$0.99)$ ] |        |        |

Notice that unlike the fair value hedge, there is no offsetting firm commitment entry since this is a forecasted transaction. The exchange gain or loss is reported in comprehensive income and will affect the income statement when the inventory is eventually sold. On the balance sheet, the forward contract is reported as a liability at its fair value of \$10,000, and the offsetting amount is reported in stockholders' equity in accumulated other comprehensive income (as a loss).

**January 31, 2016—Transaction and Settlement Date**

|     |   |       |       |
|-----|---|-------|-------|
| (3) | Foreign Exchange Loss—Other Comprehensive Income (Balance Sheet)  | 5,000 |       |
|     | FC Receivable from Exchange Dealer  |       | 5,000 |
|     | To adjust the forward contract to its market value of \$15,000. The change in value of the forward contract [ $(\$0.99 \text{ 12/31 forward rate less } \$0.98 \text{ January 31, 2016, spot rate}) \times 500,000 \text{ euros}$ ] is \$5,000. |       |       |

Note that the balance in the FC Receivable account is \$490,000 after entry (3). The entry to record the settlement of the forward contract is as follows:

|     |                                    |         |         |
|-----|------------------------------------|---------|---------|
| (4) | Investment in FC (500,000 euros)   | 490,000 |         |
|     | Dollars Payable to Exchange Dealer | 505,000 |         |
|     | FC Receivable from Exchange Dealer |         | 490,000 |
|     | Cash                               |         | 505,000 |
|     | To settle with the trader.         |         |         |

Now suppose that the forecasted transaction occurs and the 5,000 units of inventory are purchased on January 31, 2016, for 500,000 euros. The journal entry to record the purchase is:

|     |                                      |         |         |
|-----|--------------------------------------|---------|---------|
| (5) | Inventory (at the 1/31/16 spot rate) | 490,000 |         |
|     | Investment in FC (500,000 euros)     |         | 490,000 |

Suppose that in February, the inventory is sold for \$600,000. The entries to record the sale and to reclassify the amounts from Other Comprehensive Income (a \$15,000 loss, including \$10,000 loss at December 31, 2015, plus the \$5,000 additional loss at January 31, 2016) into earnings are as follows:

**February 2016—Inventory Sales Date**

|     |                    |         |         |
|-----|--------------------|---------|---------|
| (6) | Cash               | 600,000 |         |
|     | Cost of goods sold | 490,000 |         |
|     | Sales              |         | 600,000 |
|     | Inventory          |         | 490,000 |



|  |        |        |
|--|--------|--------|
| (7) Cost of goods sold (Income Statement)  | 15,000 |        |
| Foreign exchange loss—Other Comprehensive<br>Income (Balance Sheet)  |        | 15,000 |
| To reclassify the amounts from accumulated other comprehensive<br>income into earnings (cost of goods sold). |        |        |

In entry (7), the amounts recorded in accumulated other comprehensive income are reclassified into earnings. The FASB does not specify where on the income statement this amount should be reported. Many companies include this gain or loss as part of cost of goods sold, as shown above.

### TEST YOUR KNOWLEDGE 12.3

**NOTE:** Solutions to *Test Your Knowledge* questions are found at the end of each chapter before the end-of-chapter questions.

#### Multiple Choice

On October 1, 2013, Short Company ordered some equipment from a supplier for 200,000 euros. Delivery and payment is to occur on November 30, 2014. The spot rates on October 1, 2013 and November 30, 2014 are \$1.50 and \$1.30.

- If the company does not hedge the commitment, at what amount is the equipment recorded on the books on November 30, 2014?
  - \$300,000
  - \$260,000
  - \$200,000
  - None of the above
- If the company acquires a forward contract to hedge any unfavorable changes in fair value of the equipment, at what amount is the equipment recorded on the books on November 30, 2014? The forward rate for November 30 settlement is \$1.35.
  - \$300,000
  - \$260,000
  - \$270,000
  - None of the above
- If the forward contract is acquired, what is the overall exchange gain or loss?
  - \$0
  - \$10,000 gain
  - \$10,000 loss
  - \$30,000 gain

## Economic Hedge of a Net Investment in a Foreign Entity

A U.S. firm that maintains an equity investment in a foreign company may enter into a foreign currency transaction or a nonderivative financial instrument in an effort to minimize or offset the effects of currency fluctuations on the net investment. A foreign currency transaction is considered a hedge of a net investment in a foreign entity if the forward contract is designated as, and is effective as, a hedge of the net investment. The gain or loss on the hedging instrument is reported in the same manner as the translation adjustment, that is, reported in the cumulative translation adjustment section of other comprehensive income.<sup>14</sup>

For example, assume that a U.S. firm holds an investment in the net assets of a French company that conducts its business primarily in francs and accounts for the investment using the current rate method. As will be shown in Chapter 13, the investor company applying the equity method to a less than 50%-owned investee will record its share of the effect of a change in the exchange rate on the net assets of the foreign investee. To hedge against the exposure to exchange rate changes, the U.S. firm may enter into an agreement to borrow euros from a French bank. Assume further that the loan is designated as, and is effective as, a hedge of the net investment in the French company. On subsequent balance sheet dates, both the net assets of the foreign company and the loan denominated in euros are adjusted to reflect the current exchange rate. A gain (loss) from the adjustment of the liability will offset a loss (gain) from the adjustment of the net investment in the foreign company, and a hedge results. Both adjustments are reported as a component of stockholders' equity (accumulated other comprehensive income) rather than reported currently in income. However, if the net adjustment to the loan balance exceeds the adjustment of the

<sup>14</sup> FASB ASC paragraph 815-35-35-1.

balance of the investment, the excess is reported in the determination of net income as a transaction gain or loss. The gains or losses accumulated in a separate component of stockholders' equity remain there until part or all of the investment in the foreign company is sold.

## Forward Contracts Acquired to Speculate in the Movement of Foreign Currencies

### Lo 3 Common transactions.

A forward contract may be acquired for speculative purposes in anticipation of realizing a gain. For example, assume that on December 1, 2015, the spot rate for the British pound is \$1.85 and that the 90-day futures rate is \$1.86. Further assume that a company expecting the exchange rate to increase to, say, \$1.93, enters into a contract on December 1 to acquire £100,000 on March 1, 2016. (A forward contract to sell foreign currency would be negotiated if the firm expected the future spot rate to be lower than the forward rate.) The firm's fiscal year ends on December 31, and on that date the futures rate for pounds to be purchased on March 1, 2016, is \$1.87. The spot rate is \$1.92 on March 1, 2016. The journal entries to record the transactions are:

#### December 1, 2015

|     |   |         |         |
|-----|---|---------|---------|
| (1) | FC Receivable from Exchange Dealer                  | 186,000 |         |
|     | Dollars Payable to Exchange Dealer                  |         | 186,000 |
|     | To record the forward contract (£100,000 × \$1.86). |         |         |

This entry recognizes that the U.S. firm has contracted to buy £100,000 in 90 days when the payment of \$186,000 is made to the exchange dealer. Both the debit and credit related to a forward contract are measured by multiplying the £100,000 by the forward rate of \$1.86. The FASB reasoned that the forward rate should be used because a firm speculating in foreign currency changes is exposed to the risk of movements in the forward rate. Since both accounts are based on the forward rate, there is no separate accounting for any discount or premium on the forward contract.

#### December 31, 2015

|     |   |       |       |
|-----|---|-------|-------|
| (2) | FC Receivable from Exchange Dealer  | 1,000 |       |
|     | Transaction Gain  |       | 1,000 |
|     | To record gain on foreign currency to be received from exchange dealer [ $£100,000 \times \$1.87 = \$187,000 - \$186,000$ ] or [ $£100,000 \times (\$1.87 - \$1.86)$ ]. |       |       |

The foreign currency receivable is adjusted at the financial statement date since it is denominated in foreign currency units. The amount of the adjustment is computed by multiplying the units of foreign currency to be received by the difference between the forward rate available for the remaining life of the forward contract and the rate last used to value the contract. The transaction gain (or loss) is reported currently in income.

#### March 1, 2016

|     |  |         |         |
|-----|--|---------|---------|
| (3) | FC Receivable from Exchange Dealer   | 5,000   |         |
|     | Transaction Gain   |         | 5,000   |
|     | To record gain on foreign currency to be received from exchange dealer [ $(£100,000 \times \$1.92 = \$192,000 - \$187,000)$ ]. |         |         |
| (4) | Dollars Payable to Exchange Dealer   | 186,000 |         |
|     | Investment in FC   | 192,000 |         |
|     | Cash   |         | 186,000 |
|     | FC Receivable from Exchange Dealer   |         | 192,000 |
|     | To record payment to exchange dealer and receipt of foreign currency.  |         |         |
| (5) | Cash   | 192,000 |         |
|     | Investment in FC   |         | 192,000 |
|     | To record conversion of pounds into cash.  |         |         |

On March 1, the firm records any gain or loss as a result of changes in the exchange rate from the last valuation date to the date of the transaction. Upon payment of \$186,000 to the exchange dealer, the firm will receive £100,000, which can be converted into \$192,000. The total gain of \$6,000 recognized over the life of the contract is the difference between the value of the foreign currency received (\$192,000) when the forward contract was exercised and the amount paid (\$186,000) to the exchange dealer. If the firm had entered into a forward contract to sell foreign currency, the accounting would be similar to that above, except the debit in entry (1) is for a fixed amount of dollars to be received; the credit records the obligation to buy foreign currency units for delivery to the exchange dealer. The estimated cost of units to be delivered will vary as the exchange rate fluctuates.

## Disclosure Requirements of the Various Hedges

FSAB ASC Section 815-20-50 specifies certain minimal disclosures for derivative instruments and nonderivative instruments designated as qualifying hedging instruments. The disclosures include the objectives of the instruments, the strategies for achieving those objectives, the context needed for understanding them, and the risk management policy. In addition, a description of transactions or items that are hedged must be disclosed for each category.

The following specific disclosures are required:

- 1. Fair value hedges** (such as hedges of the foreign currency exposure of unrecognized firm commitments)
  - a.** A description of where the amount of the gain or loss is reported on the income statement.
  - b.** The amount of the gain or loss recognized in earnings when the hedged item no longer qualifies as a fair value hedge.
- 2. Cash flow hedges** (includes forecasted transactions)
  - a.** A description of where the amount of the gain or loss is reported on the income statement.
  - b.** A description of the transactions or other events that will result in the reclassification into earnings of gains and losses that are reported in accumulated other comprehensive income, and the estimation of the net amount of the existing gains or losses at the reporting date expected to be reclassified into earnings within the next 12 months.
  - c.** The maximum length of time over which the firm is hedging its exposure to the variability in future cash flows for forecasted transactions.
  - d.** The amount of the gain or loss reclassified into earnings as a result of the discontinuance of cash flow hedges because it is probable that the transaction will not occur.
- 3. Hedges of the net investment** in a foreign operation

The net amount of gains or losses is included in the cumulative translation adjustment during the reporting period. All derivative instruments not designated as hedges must be identified as to their purpose, and qualitative disclosures about the use of derivatives are encouraged.

Finally, the amount of net gains or losses from cash flow hedges on derivative instruments included in “other comprehensive income” must be shown as a separate classification. The disclosures should include beginning and ending accumulated gains or losses from derivative instruments, the net change during the period from hedging activities, and the net amount reclassified to earnings.

## Disclosure Requirements Fair Value Measurements [FASB ASC Paragraphs Topic 820-10-50-1 and 2]

Reporting entities should disclose information that helps users of the financial statements assess the fair value measurements used in the financial statements. Specifically, both of the following items should be disclosed:

- a. After initial recognition, the valuation techniques and inputs used to develop subsequent measurements of fair value for assets and liabilities measured on a recurring or nonrecurring basis in the statement of financial position
- b. For recurring fair value measurements using significant unobservable inputs (Level 3), the effect of the measurements on earnings (or changes in net assets) or other comprehensive income for the period

In addition, each of the following items should be disclosed for each interim and annual period for each class of assets and liabilities. The information should be presented to permit reconciliation of the fair value measurement disclosures to the specific line items in the statement of financial position.

- a. The fair value measurement at the reporting date
- b. The level within the fair value hierarchy in which the fair value measurement in its entirety falls, segregating the fair value measurement using any of the following:
  1. Quoted prices in active markets for identical assets or liabilities (Level 1)
  2. Significant other observable inputs (Level 2)
  3. Significant unobservable inputs (Level 3)
- c. The amounts of significant transfers between Level 1 and Level 2 of the fair value hierarchy and the reasons for the transfers
- d. For fair value measurements using significant unobservable inputs (Level 3), a reconciliation of the beginning and ending balances
- e. The amount of the total gains or losses for the period included in earnings (or changes in net assets) that are attributable to the change in unrealized gains or losses relating to those assets and liabilities still held at the reporting date and a description of where those unrealized gains or losses are reported in the statement of income (or activities)
- f. For fair value measurements using significant other observable inputs (Level 2) and significant unobservable inputs (Level 3), a description of the valuation technique (or multiple valuation techniques) used, such as the market approach, income approach, or the cost approach, and the inputs used in determining the fair values of each class of assets or liabilities.

## Using Options to Hedge Foreign Currency Changes

### LO 8 Derivatives used as a hedge.

So far in this chapter, forward contracts have been used as hedging items. With the use of a forward contract, the firm will report either a gain or a loss. For example, if an accounts payable of 10,000 euros is hedged using a forward rate of \$1.30, the firm is guaranteed to pay only \$13,000. If the spot rate on the date of settlement is higher than \$1.30, the firm gains, but if the spot rate falls below \$1.30, the firm would have been better off not using the forward contract. While a forward contract is costless to acquire, upon entering into such a contract the firm must eventually deliver the specified amount of currency regardless of the gain or loss.

Conversely, suppose the firm wanted to hedge against only the upside or downside risk from changes in the exchange rate. To accomplish this, the firm could use an **option**, which gives the holder the advantage of *right* but not the obligation to buy or sell the currency. Thus, if the exchange rate changes in a negative manner, the firm can simply let the option

lapse without a loss. In other words, the holder of the option does not have to exercise the option. When using options, a call option is appropriate to hedge against upside risk. A **call option** is an option to purchase the foreign currency at a specified rate, referred to as the exercise price. A **put option** is an option to sell the foreign currency at a specified rate. The advantage of using options is that the option gives the holder the *right* to buy or sell the currency, but if the exchange rate changes in a negative manner, the firm can simply let the option lapse. In other words, the holder of the option does not have to exercise the option. The disadvantage of the option is that there is an initial cost (i.e., a premium) to acquire the option. For instance, in the preceding example, the firm could purchase an option for \$600<sup>15</sup> that would allow the firm to purchase 10,000 euros at an exercise price of \$1.295. If the spot rate on the settlement date exceeds \$1.295, the firm will exercise the option; if the spot rate is less than \$1.295, the firm will let the option expire.

An “in the money” option is an option where the firm benefits if the option is exercised. If on the date the call option was purchased, the spot rate of \$1.295 was equal to the exercise price of \$1.295, the option would be at the money at that point. This means that the entire value of the option is due to the “time value” of the option. The option has value because, over time, the spot rate may exceed the exercise price of the call option (or the spot rate may be less than the exercise price for a put option).

Continuing our example, suppose that one month later the spot rate increased to \$1.31. For a call option, this means that the firm can exercise the option and obtain 10,000 euros for \$1.295 when the current exchange rate is \$1.31. Thus the option has an intrinsic value of \$150 [the difference between the spot rate and exercise price multiplied by the amount of currency ( $\$1.31 - \$1.295$ )(10,000 euros)]. Thus, if the call option had a current market price of \$700, \$150 would be treated as the intrinsic value and \$550 would be treated as the time value of the option. Thus “in the money” options contain both an intrinsic and time value element. If the spot rate drops to \$1.28 (after the option was acquired), the firm would be better off not exercising the option and purchase the needed euros on the market at \$1.28.

The following chart helps illustrate when a call or a put option might be used and when the option is in the money.

| <i>Item Hedged</i> | <i>Option Used</i> | <i>Exercise Price Exceeds Spot Rate</i> | <i>Exercise Price Is Less Than the Spot Rate</i> |
|--------------------|--------------------|---|--|
| Payable            | Call Option        | “Out of the Money”                      | “In the Money”                                   |
| Receivable         | Put Option         | “In the Money”                          | “Out of the Money”                               |

Thus a call option is used when a foreign currency is needed to pay a liability in the future, and a put option is used when foreign currency received in the future needs to be sold and converted into dollars.

**Cash Flow Hedge Using Options: An Illustration** To illustrate the hedge of a forecasted foreign currency transaction with the use of an option, assume the following:

1. On December 1, 2015, a U.S. firm estimates that inventory will be sold to a company in Germany during January of 2016 for 500,000 euros. The cost of the inventory sold is estimated to be \$300,000.
2. Spot rates were as follows (dollars per euro):

|                               |        |
|-------------------------------|--------|
| December 1, 2015              | \$1.03 |
| Balance sheet date (12/31/15) | \$1.00 |
| February 1, 2016              | \$0.98 |
3. The transaction is to be denominated in euros.
4. On December 1, 2015, the company purchases a put option for \$5,000 to hedge any changes that may occur in the receivable denominated in euros. This option allows the firm to sell 500,000 euros at \$1.02 with an expiration date of February 1, 2016. The

<sup>15</sup> The seller of the option would use some option pricing model, such as Black-Scholes, for determining the amount of the premium paid.

spot rate was \$1.03 on this date so the option is out of the money. At year-end (the balance sheet date), the market value of the option increased to \$14,000. On the option expiration date, the option only has an intrinsic value (the difference between the exercise price and the spot rate). Therefore on February 1, the value of the option is \$20,000.

The rationale for use of the option is as follows. Because the sale is expected to occur in the future (next January) and because the exchange rate may change unfavorably, the company buys an option to sell 500,000 euros at \$1.02 or \$510,000. When the sale of inventory occurs and the company receives the euros, the firm is subject to any exchange losses. However, because the firm now has an option to sell euros, the company can use the euros that it receives from the sale to deliver on the option. Therefore, if the exchange rate drops below the exercise rate (\$1.02), the firm is covered (i.e., the firm exercises the option and sells the 500,000 euros for \$510,000). If the exchange rate exceeds the exercise rate, the option will not be exercised.

The entries to record the purchase and forward exchange contract are:

**December 1, 2015—Transaction Date**

|     |                                     |       |       |
|-----|-------------------------------------|-------|-------|
| (1) | Option to sell euros                | 5,000 |       |
|     | Cash                                |       | 5,000 |
|     | To record purchase of a put option. |       |       |

On the balance sheet date (December 31, 2015), the option is adjusted to its market value of \$14,000. Therefore on December 31, 2015, the following entry is made.

**December 31, 2015—Balance Sheet Date**

|     |   |       |       |
|-----|---|-------|-------|
| (2) | Option to sell euros  | 9,000 |       |
|     | Foreign exchange gain—Other Comprehensive Income (balance sheet equity) |       | 9,000 |
|     | To record a gain on the change in option value (\$14,000 – \$5,000).    |       |       |

The recognition of the gain is reported in other comprehensive income because it qualifies under the criteria designated in FASB ASC paragraph 815-30-35-9. For example, the forecasted transaction is probable, and it presents exposure to price changes that are expected to affect earnings and cause variability in cash flows. Amounts deferred from earnings are reported in other comprehensive income and are reclassified into earnings in the period during which the hedged forecasted transaction “affects earnings” (for example, when a forecasted sale actually occurs).<sup>16</sup>

**February 1, 2016—Option Expiration Date**

|     |   |       |       |
|-----|---|-------|-------|
| (3) | Option to sell euros  | 6,000 |       |
|     | Foreign exchange gain—Other Comprehensive Income (balance sheet equity)   |       | 6,000 |
|     | To adjust the option value to its market value of \$20,000.   |       |       |
|     | The value of the option [(\$1.02 exercise price less \$0.98 spot rate) × 500,000 euros] is \$20,000 less the carrying value of the option (\$14,000). |       |       |

Technically, since the forecasted transaction occurred on this date, the gain recorded in entry (3) could also be reported in earnings immediately. We chose to initially record the gain using the balance sheet account (other comprehensive income) and then immediately reclassify the total exchange gain into earnings (see entry 6 below).

|     |  |         |         |
|-----|--|---------|---------|
| (4) | Investment in FC (500,000 euros)                             | 490,000 |         |
|     | Revenues   |         | 490,000 |
|     | Cost of goods sold   | 300,000 |         |
|     | Inventory  |         | 300,000 |
|     | To sell the inventory (complete the forecasted transaction). |         |         |
| (5) | Cash (exercise price \$1.02 × 500,000 euros)                 | 510,000 |         |
|     | Option to sell euros (intrinsic value on option date)        |         | 20,000  |
|     | Investment in FC (500,000 euros @ \$0.98)                    |         | 490,000 |
|     | To exercise the option and settle with the trader.           |         |         |

<sup>16</sup> FASB ASC paragraph 815-30-35-3.

|  |        |        |
|--|--------|--------|
| (6) Foreign exchange gain—Other                          |        |        |
| Comprehensive Income                                     | 15,000 |        |
| Revenue (\$9,000 from entry 2 and \$6,000 from entry 3). |        | 15,000 |
| To reclassify the total exchange gains into earnings.    |        |        |

Note that in entry (4), revenue is recorded at the spot rate. However, entry (6) adjusts revenue to recognize the benefit of the option. Entry (6) is required because the amount recognized in other accumulated income is reclassified into earnings in the period the hedged item affects earnings. Thus the total amount of revenue recognized is \$505,000, which represents the revenue recognized at the spot rate (\$490,000) plus the net benefit of the option \$15,000 (\$1.02 exercise rate over the spot rate \$0.98 multiplied by 500,000 euros less the initial cost of the option of \$5,000).

**Split Accounting—Intrinsic and Time Value Elements** In order to qualify for “hedge accounting” under FASB ASC paragraph 815-20-25-72 to 87, the hedges must be effective. Firms are required to measure the effectiveness of their hedges quarterly. If the hedge is not highly effective, hedge accounting can no longer be used. Therefore, firms must determine how they measure hedge effectiveness. This usually means that the changes in value of the hedge (e.g., the forward contract or option) should be approximately equal to the changes in value of the hedged item. In the examples used in this chapter, we have used the change in the forward rate to measure the change in value of the forward contracts and the total change in the value of the option to measure the change in value of the option. The FASB allows split accounting for derivatives. This means that the intrinsic value of the derivative and the part of the option value related to time can be separated and accounted for differently. For instance, firms can use the total change in value of the option to measure gains and losses *or* the change in the intrinsic value to measure the change in value of the derivative. The change in the time value element would be taken immediately into earnings. Although it is important to know that these complicating factors exist, in this chapter we measure the change in value of the derivative using the total value of the derivative. Also, we assume that all hedges are highly effective.

## Other Forms of Foreign Borrowing or Lending

Earlier in the chapter, we illustrated the exporting or importing of inventory. Accounting for other types of foreign borrowing or lending transactions is similar; that is, the two-transaction approach is followed in which the cost of an asset acquired or revenue recognized is accounted for independently from the method of settlement. For example, if a fixed asset is acquired from a foreign company on credit, the cost of the asset is the number of foreign currency units that would be paid in a cash transaction multiplied by the exchange rate at the transaction date. The cost of the asset is not adjusted for subsequent changes in the exchange rate, but the liability is adjusted at each balance sheet date on the basis of the exchange rate in effect at that date. The adjustment to the liability is reported currently in income. The amount recorded for interest expense is the equivalent number of U.S. dollars needed to make the interest payment.

### SUMMARY

- 1** *Distinguish between the terms measured and denominated.* Transactions are normally **measured** and recorded in terms of the currency in which the reporting entity prepares its financial statements. Assets and liabilities are **denominated** in a currency if their amounts are fixed in terms of that currency.
- 2** *Describe what is meant by a foreign currency transaction.* A foreign currency transaction is a transaction that requires settlement in a foreign currency, not in U.S. dollars (for a U.S. firm).
- 3** *Understand some of the more common foreign currency transactions.* Some common transactions include: (1) importing or exporting goods or services on credit with the receivable or payable denominated in a foreign currency; (2) borrowing from or lending to a foreign company with the amount payable or receivable denominated in the foreign currency; (3) engaging in a transaction with the intention of hedging a net investment in a foreign entity; and (4) entering into a forward contract to buy or sell foreign currency.

- 4** *Identify three stages of concern to accountants for foreign currency transactions and explain the steps used to translate foreign currency transactions for each stage.* At the initial date, the transaction is recognized (in conformity with GAAP), the account (balance sheet or income statement) arising from the transaction is measured and recorded in dollars by multiplying the foreign currency unit by the current exchange rate. At each subsequent balance sheet date until settlement, recorded balances that are denominated in a foreign currency are adjusted to reflect the current exchange rate in effect at the balance sheet date. At the settlement date, the treatment depends on whether the balance to be settled is a foreign currency payable or receivable. If a foreign currency payable is being settled, a U.S. firm must convert U.S. dollars into foreign currency units to settle the account. At the settlement of a foreign currency receivable, the foreign currency units received are converted into dollars.
- 5** *Describe a forward exchange contract.* A forward exchange contract is an agreement to exchange currencies of two different countries at a specified rate (the forward rate) on a stipulated future date. At the inception of the contract, the forward rate is usually different from the spot rate.
- 6** *Explain the use of forward contracts as a hedge of an unrecognized firm commitment.* In many cases, the firm enters into an agreement to purchase or sell goods where the transaction is denominated in a foreign currency. Because the exchange rate might change before the payable is paid or the receivable is collected, a firm can use a forward contract to lock in the amount of cash paid or the amount of cash received.
- 7** *Identify some of the common situations in which a forward exchange contract can be used as a hedge.* Hedges may be used to hedge a foreign currency exposed receivable or payable position, to hedge a net investment in a foreign subsidiary, to hedge an identifiable foreign currency commitment, or to hedge a forecasted transaction.
- 8** *Describe a derivative instrument and understand how it may be used as a hedge.* A derivative is an executory contract between two parties to be executed at a later date, with the resulting future cash flows dependent on the change in some other underlying measure of value. The eventual dollar amount of the performance is determined by subsequent value changes, and the eventual outcome is necessarily favorable to one of the parties involved and unfavorable to the other.
- 9** *Explain how exchange gains and losses are reported for fair value hedges and cash flow hedges.* The FASB allows deferral of the exchange gain and loss on cash flow hedges (a forecasted transaction). Like other gains and losses that are excluded from the income statement, they are included as components of “other comprehensive income” and reported in the stockholders’ equity section of the balance sheet. On the other hand, exchange gains and losses on fair value hedges (unrecognized firm commitments) are reported in current periods earnings along with the exchange gain or loss on the hedged item.

### TEST YOUR KNOWLEDGE SOLUTIONS

**12.1** 1. c. 2. b    **12.2** 1. a 2. b    **12.3** 1. b 2. c 3. a

### QUESTIONS

- LO 2** 1. Define currency exchange rates and distinguish between “direct” and “indirect” quotations. **LO 6**
- LO 3** 2. Explain why a firm is exposed to an added risk when it enters into a transaction that is to be settled in a foreign currency. **LO 5**
- LO 4** 3. Name the three stages of concern to the accountant in accounting for import–export transactions. Briefly explain the accounting for each stage. **LO 9**
- LO 4** 4. How should a transaction gain or loss be reported that is related to an unsettled receivable recorded when the firm’s inventory was exported? **LO 8**
- LO 4** 5. A U.S. firm carried a receivable for 100,000 yen. Assuming that the direct exchange rate declined from \$.009 at the date of the transaction to \$.006 at the balance sheet date, compute the transaction gain or loss. What balance would be reported for the receivable in the firm’s balance sheet? **LO 8**
- LO 4** 6. Explain what is meant by the “two-transaction method” in recording exporting or importing transactions. What support is given for this method? **LO 8**
- LO 5** 7. Describe a forward exchange contract. **LO 9**
- LO 7** 8. Explain the effects on income from hedging a foreign currency exposed net asset position or net liability position. **LO 8**
9. What criteria must be satisfied for a foreign currency transaction to be considered a hedge of an identifiable foreign currency commitment? **LO 9**
10. The FASB classifies forward contracts as those acquired for the purpose of hedging and those acquired for the purpose of speculation. What main differences are there in accounting for these two classifications? **LO 8**
11. How are foreign currency exchange gains and losses from hedging a forecasted transaction handled? **LO 8**
12. What is a put option, and how might it be used to hedge a forecasted transaction? **LO 9**
13. Define a derivative instrument, and describe the keystones identified by the FASB for the accounting for such instruments. **LO 8**
14. Differentiate between forward-based derivatives and option-based derivatives. **LO 8**
15. List some of the criteria laid out by the FASB that are required for a gain or loss on forecasted transactions (a cash flow hedge) to be excluded from the income statement. If these criteria are satisfied, where are the gains or losses reported, and when (if ever) are they shown in the income statement? What is the rationale for this treatment? **LO 9**



**Business Ethics**

Executive stock options (ESOs) are used to provide incentives for executives to improve company performance. ESOs are usually granted “at-the-money,” meaning that the exercise price of the options is set to equal the market price of the underlying stock on the grant date. Clearly, executives would prefer to be granted options when the stock price (and thus the exercise price) is at its lowest.

Backdating options is the practice of choosing a past date when the market price was particularly low. Backdating has not, in

the past, been illegal if no documents are forged, if communicated to the shareholders, and if properly reflected in earnings and in taxes.

1. Since backdating gives the executive an “instant” profit, why wouldn’t the firm simply grant an option with the exercise price lower than the current market price?
2. Suppose the executive was not involved in backdating the ESOs. Does the executive face any ethical issues?<sup>17</sup>

*Note:* Students are encouraged to read the *WSJ* referenced above.

**ANALYZING FINANCIAL STATEMENTS****AFS12-1 Mattel’s Exchange Rate Exposure LO 7**

Currency exchange rate fluctuations may impact Mattel’s results of operations and cash flows. Mattel’s currency transaction exposures include gains and losses realized on unhedged inventory purchases and unhedged receivables and payables balances that are denominated in a currency other than the applicable functional currency.

Inventory purchase transactions denominated in the euro, British pound sterling, Canadian dollar, Mexican peso, Hong Kong dollar, and Indonesian rupiah were the primary transactions that caused foreign currency transaction exposure for Mattel in 2010.

Mattel uses foreign currency forward exchange contracts as cash flow hedges primarily to hedge its purchases and sales of inventory denominated in foreign currencies. These contracts generally have maturity dates up to 18 months. These derivative instruments have been designated as effective cash flow hedges.

Additionally, Mattel uses foreign currency forward exchange contracts to hedge inter-company loans and advances denominated in foreign currencies. Due to the short-term nature of the contracts involved, Mattel does not use hedge accounting for these contracts.

**Required:**

- A. During 2010, for the forward contracts designated as a cash flow hedge, the value of unsettled forward contracts increased by \$8,725 and the value of settled forward contracts decreased by \$3,024. Prepare the journal entries to record the change in value of the forward contract and indicate on which financial statement the item is reported.
- B. For the forward contracts not designated as a hedging instrument, the value of unsettled forward contracts decreased by \$3,797 and the value of settled forward contracts increased by \$3,052. Prepare the journal entries to record the change in value of the forward contracts and indicate on which financial statement the item is reported.
- C. All forward contracts used by Mattel are classified as Level 2 investments. What does this mean?

**EXERCISES****EXERCISE 12-1 Importing and Exporting Journal Entries LO 4**

Selco, a U.S. Company, imports and exports tools, shop equipment, and industrial construction supplies. The company uses a periodic inventory system. During April the company entered into the following transactions. All rate quotations are direct exchange rates.

- April 3 Purchased power tools from a wholesaler in Japan, on account, at an invoice cost of 1,600,000 yen. On this date the exchange rate for the yen was \$.0072.
- 5 Sold hand tools on credit that were manufactured in the U.S. to a retail outlet located in West Germany. The invoice price was \$2,800. The exchange rate for marks was \$.5829.
- 9 Sold electric drills on account to a retailer in New Zealand. The invoice price was 16,800 U.S. dollars and the exchange rate for the New Zealand dollar was \$.576.

<sup>17</sup> *WSJ*, “Options Study Becomes Required Reading,” by Steve Stecklow, 5/30/06.

- 11 Purchased drill bits on account from a manufacturer located in Belgium. The billing was for 801,282 francs. The exchange rate for francs was \$.0312.
- 16 Paid 1,000,000 yen on account to the wholesaler for purchases made on April 3. The exchange rate on this date was \$.0067.
- 18 Settled the accounts payable with the Belgium manufacturer. The exchange rate was \$.0368.
- 22 Received full payment from the New Zealand retailer. The exchange rate was \$.568.
- 30 Completed payment on the April 3 purchase. The exchange rate was \$.0078.

**Required:**

Prepare journal entries on the books of Selco to record the transactions listed above.

**EXERCISE 12-2 Importing and Exporting Journal Entries LO 4**

During December of the current year, Teletex Systems, Inc., a company based in Seattle, Washington, entered into the following transactions:

- Dec 10 Sold seven office computers to a company located in Colombia for 8,541,000 pesos. On this date, the spot rate was 365 pesos per U.S. dollar.
- 12 Purchased computer chips from a company domiciled in Taiwan. The contract was denominated in 500,000 Taiwan dollars. The direct exchange spot rate on this date was \$.0391.

**Required:**

- A. Prepare journal entries to record the transactions above on the books of Teletex Systems, Inc. The company uses a periodic inventory system.
- B. Prepare journal entries necessary to adjust the accounts as of December 31. Assume that on December 31 the direct exchange rates were as follows:

|               |           |
|---------------|-----------|
| Colombia peso | \$ .00268 |
| Taiwan dollar | \$ .0351  |

- C. Prepare journal entries to record settlement of both open accounts on January 10. Assume that the direct exchange rates on the settlement dates were as follows:

|               |           |
|---------------|-----------|
| Colombia peso | \$ .00320 |
| Taiwan dollar | \$ .0398  |

- D. Prepare journal entries to record the December 10 transaction, adjust the accounts on December 31, and record settlement of the account on January 10, assuming that the transaction was denominated in dollars rather than pesos. Assume the same exchange rates as those given.

**EXERCISE 12-3 Multiple Choice—Importing Transactions LO 6**

On December 1, 2014, Tuscano Corp. entered into a transaction to import raw materials from a foreign company. The account is to be settled on February 1 with the payment of 60,000 foreign currency units (FCU). On December 1, Tuscano also entered into a forward contract to hedge the exposed position resulting from the import transaction. The forward rate is \$.71 per unit of foreign currency. Tuscano Corp. has a December 31 fiscal year-end. Spot rates and the forward rates on relevant dates were:

| <i>Date</i> | <i>Spot Rate per Unit<br/>of Foreign Currency</i> | <i>Forward Rate<br/>(Feb. 1 Settlement)</i> |
|-------------|---|---|
| December 1  | \$.69   | \$.71                                       |
| December 31 | .72   | .715  |
| February 1  | .73   | .73   |

**Required:**

Use the data given to select the best answer to each question.

- 1. The forward contract entered into on December 1 is an example of
  - (a) A hedge of an exposed receivable position.
  - (b) A hedge of a foreign currency commitment.
  - (c) A contract entered into for speculation.
  - (d) A hedge of an exposed payable position.

2. The entry to record the forward contract is
- |                        |        |        |
|------------------------|--------|--------|
| (a) Dollars Receivable | 41,400 |        |
| FCU Payable            |        | 41,400 |
| (b) FCU Receivable     | 41,400 |        |
| Dollars Receivable     |        | 41,400 |
| (c) Dollars Receivable | 42,600 |        |
| FCU Payable            |        | 42,600 |
| (d) FCU Receivable     | 42,600 |        |
| Dollars Payable        |        | 42,600 |
| (e) None of the above  |        |        |
3. On December 31, what will be the adjusted balance in the Accounts Payable account and how much gain or loss was recorded as a result of the adjustment?
- |     | <i>Payable Balance</i> | <i>Gain or Loss Recorded</i> |      |
|-----|------------------------|------------------------------|------|
| (a) | \$43,200               | \$1,800                      | gain |
| (b) | 40,800                 | 2,400                        | loss |
| (c) | 40,800                 | 2,400                        | gain |
| (d) | 43,200                 | 1,800                        | loss |
4. What amount of net transaction gain or loss from the transactions should be included in the determination of the 2014 net income?
- (a) \$1,500 loss.  
 (b) \$1,800 loss.  
 (c) \$—0—Because a gain or loss on the forward contract is offset by a loss or gain on the exposed position.  
 (d) \$2,400 gain.
5. Which of the following statements is *not* true?
- (a) Assuming the account payable is to be settled on February 1, Tuscano Corp. was able to reduce its cash outflow for the purchases as a result of entering into the forward contract.  
 (b) During 2015, a transaction loss of \$600 was recorded on the forward contract.  
 (c) Tuscano Corp. paid \$42,600 to complete the forward contract.  
 (d) During 2015 a transaction loss of \$600 was recorded on the exposed payable.

#### EXERCISE 12-4 Multiple Choice **LO 2** **LO 4** **LO 6**

Select the best answer for each of the following.

1. A forward contract is a hedge of an identifiable foreign currency commitment if
- (a) The forward contract is designated as, and is effective as, a hedge of a foreign currency commitment.  
 (b) The foreign currency commitment is firm.  
 (c) The amount of the forward contract is equal to the amount of the commitment.  
 (d) Both (a) and (b).  
 (e) Both (a) and (c).
2. The Carnival Company has a receivable from a foreign customer that is payable in the local currency of the foreign customer. The account receivable for 800,000 local currency units (LCU) has been translated into \$280,000 on Carnival's December 31, 2014, balance sheet. On January 15, 2015, the receivable was collected in full when the exchange rate was 4 LCU to \$1. What journal entry should Carnival make to record the collection of this receivable?
- |                           |         |         |
|---------------------------|---------|---------|
| (a) Cash                  | 200,000 |         |
| Accounts Receivable       |         | 200,000 |
| (b) Cash                  | 200,000 |         |
| Transaction Loss          | 80,000  |         |
| Accounts Receivable       |         | 280,000 |
| (c) Cash                  | 200,000 |         |
| Deferred Transaction Loss | 80,000  |         |
| Accounts Receivable       |         | 280,000 |
| (d) Cash                  | 280,000 |         |
| Accounts Receivable       |         | 280,000 |

3. A foreign currency transaction to a company domiciled in the United States is a transaction in which the amount is
  - (a) Measured in a foreign currency.
  - (b) Denominated in U.S. dollars.
  - (c) Denominated in a foreign currency.
  - (d) Measured in U.S. dollars.
4. A direct exchange quotation is one in which the exchange rate is quoted
  - (a) In terms of how many units of the domestic currency can be converted into one unit of foreign currency.
  - (b) In terms of how many units of the foreign currency can be converted into one unit of the domestic currency.
  - (c) For the future delivery of currencies exchanged.
  - (d) For the immediate delivery of currencies exchanged.

**EXERCISE 12-5 Multiple Choice LO 4**

Select the best answer for each of the following.

1. A sale of goods by a U.S. company was denominated in a foreign currency. The sale resulted in a receivable that was fixed in terms of the amount of foreign currency that would be received. Exchange rates between the dollar and the currency in which the transaction was denominated changed so that a loss was incurred. This loss should be included as a(n)
  - (a) Extraordinary item in the income statement.
  - (b) Component of income from continuing operations.
  - (c) Separate component of stockholders' equity.
  - (d) Deferred item in the balance sheet.
2. On September 1, 2014, Change Corp. received an order for equipment from a foreign customer for 300,000 units of foreign currency when the U.S. dollar equivalent was \$96,000. Change shipped the equipment on October 15, 2014, and billed the customer for 300,000 units of foreign currency when the U.S. dollar equivalent was \$110,000. Change received the customer's remittance in full on November 16, 2014, and sold the 300,000 foreign currency units for \$105,000. In its income statement for the year ended December 31, 2014, Change should report a foreign exchange loss of
  - (a) \$9,000
  - (b) \$5,000
  - (c) \$14,000
  - (d) \$—
3. McNeil, a U.S. corporation, bought inventory items from a supplier in Denmark on November 5, 2014, for 100,000 kroner, when the spot rate was \$.4395. At McNeil's December 31, 2014, year-end, the spot rate was \$.4345. On January 15, 2015, McNeil bought 100,000 kroner at the spot rate of \$.4445 and paid the invoice. How much should McNeil report in its income statement for 2014 and 2015 as transaction gain or loss?

| 2014           | 2015         |
|----------------|--------------|
| (a) \$—        | \$ 500 loss  |
| (b) \$500 loss | \$—          |
| (c) \$500 loss | \$1,000 gain |
| (d) \$500 gain | \$1,000 loss |

4. During 2014 a U.S. firm sold inventory to a foreign customer. The transaction was denominated in the local currency of the buyer. The direct exchange rate decreased from the date of the transaction to the end of the fiscal period; the rate increased from the end of the fiscal year to the date the account was settled in 2015. A transaction gain or loss should be recognized

| 2014     | 2015 |
|----------|------|
| (a) Loss | Loss |
| (b) Gain | Loss |
| (c) Loss | Gain |
| (d) Gain | Gain |

(AICPA adapted)

**EXERCISE 12-6 Transaction Gain or Loss LO 4**

Agentel Corporation is a U.S.-based importing-exporting company. The company entered into the following transactions during the month of November.

- Nov. 6 Purchased merchandise from AGT, a Swiss firm, for 600,000 francs.  
 5 Sold merchandise to SLS, Inc., a firm located in Rio De Janeiro, for \$200,000.  
 18 Sold merchandise to TNT, Ltd., a British firm, for 130,000 pounds.  
 20 Purchased merchandise from SDS, Ltd., a British firm, for \$160,000.

All the transactions were unsettled at December 31, Agentel's fiscal year-end. Spot rates are as follows:

| Date        | Franc  | Currency |         |
|-------------|--------|----------|---------|
|             |        | Real     | Pound   |
| November 6  | \$.490 | \$.412   | \$1.520 |
| November 15 | .487   | .409     | 1.509   |
| November 18 | .476   | .414     | 1.506   |
| November 20 | .468   | .405     | 1.498   |
| December 31 | .460   | .398     | 1.482   |

**Required:**

- A. Compute the amount that Agentel would report for each unsettled receivable and payable in its balance sheet prepared at December 31.  
 B. Compute the transaction gain or loss on each unsettled receivable and payable that would be reported in the income statement prepared for the year ended December 31.

**EXERCISE 12-7 Journal Entries, Income Effect, and Amount of Cash Received LO 6**

ASI recently completed the development and installation of an accounting information system for a company located in Rio De Janeiro, Brazil. The company considered that all revenue realization criteria were satisfied and accordingly recorded on October 2, 2014, a receivable from the foreign company. The receivable is to be settled in 120 days on February 1 by the delivery of 300,000 real. To hedge against an unfavorable change in the foreign exchange rate, ASI acquired a forward contract to sell 300,000 real on February 1 for \$.4730 per real. The following exchange rates were quoted:

| Date        | Spot Rate | Forward Rate<br>(Delivery on 2/1) |
|-------------|-----------|-----------------------------------|
| October 2   | \$.4737   | \$.4730                           |
| December 31 | .4895     | .4810                             |
| February 1  | .4950     | —                                 |

ASI is a calendar-year company.

**Required:**

- A. Prepare the journal entries to record the transactions, adjust the accounts on December 31, and settle the receivable and forward contract on February 1.  
 B. (1) Based on the data given above, complete the following table.

|   | 2014  | 2015  |
|---|-------|-------|
| Revenue   | _____ | _____ |
| Transaction gain (loss) related to the exposed receivable balance | _____ | _____ |
| Transaction gain (loss) related to the forward contract           | _____ | _____ |
| Effect on net income  | _____ | _____ |

- (2) What was the cumulative effect on net income (i.e., 2014 plus 2015)?  
 (3) How much cash was received when the account was settled?

**EXERCISE 12-8 Fair Value Hedge (Unrecognized Firm Commitment) LO 6**

Vanderbilt Clothing Company placed a clothing order with a company located in Taiwan. The order was placed on November 1, 2014, for delivery on May 1, 2015. Vanderbilt agreed to pay for the goods on May 1, 2015, with the delivery of 5,000,000 Taiwan dollars. To protect against fluctuations in the exchange rate, the company entered into a forward contract on November 1, 2014, to buy 5,000,000 Taiwan dollars on May 1, 2015, for \$.02634 per unit.

Direct exchange rates per Taiwan dollar on specific dates are as follows:

| <i>Date</i>       | <i>Spot Rate</i> | <i>Forward Rate—<br/>Maturity May 1</i> |
|-------------------|------------------|---|
| November 1, 2014  | \$.02631         | \$.02634                                |
| December 31, 2014 | .02740           | .02735                                  |
| May 1, 2015       | .02591           | —                                       |

**Required:**

Prepare the journal entries to be made by Vanderbilt Clothing Company during 2014 and 2015 to account for the transactions described above.

**EXERCISE 12-9 Journal Entries—Speculation Using a Forward Contract LO 5**

Sharon Myers, chief finance officer for Sitco Products, convinced the president of the company to enter into a 90-day forward contract *to sell* 900,000 Swedish kronas as a speculative venture. When the forward contract was acquired on November 1, 2014, the spot rate for the krona was \$.5045 and the 90-day future rate was \$.5085. At December 31, 2014, the end of the firm's fiscal year, the spot rate was \$.4981 and the future rate for kronas to be sold on January 30, 2015, was \$.4996. On January 30, 2015, the spot rate was \$.4826.

**Required:**

Prepare all necessary journal entries in regard to the forward contract.

**EXERCISE 12-10 Journal Entries—Speculation Using a Forward Contract LO 5**

Use the data given in Exercise 12-9, except assume that on November 1, Sitco Products entered into a 90-day forward contract *to buy* 900,000 Swedish kronas on January 30 for \$.5085 per krona.

**Required:**

Prepare all necessary journal entries in regard to the forward contract.

**EXERCISE 12-11 Equipment Purchase, Issuance of a Note LO 4**

Roland Brothers, Inc. purchased equipment from a British firm for £120,000 on April 1, 2014. To finance the purchase of the equipment, the president of the company signed a note for £120,000 with a British bank. The loan is denominated in pounds, matures on March 31, 2015, and bears interest at 12% per annum payable on June 30, September 30, December 31, and March 31. Spot rates for the British pound are as follows:

|                    |         |
|--------------------|---------|
| April 1, 2014      | \$1.574 |
| June 30, 2014      | 1.560   |
| September 30, 2014 | 1.526   |
| December 31, 2014  | 1.498   |
| March 31, 2015     | 1.538   |

**Required:**

Prepare journal entries to record the purchase of the equipment, the interest payments, the adjustment of the accounts on December 31 (the fiscal year-end), and the payment of the note at maturity.

**EXERCISE 12-12 Forward Contract Hedge of an Importing Transaction LO 6**

On November 15, 2014, Solanski Inc. imported 500,000 barrels of oil from an oil company in Venezuela. Solanski agreed to pay 50,000,000 bolivars on January 15, 2015. To ensure that the dollar outlay for the purchase will not fluctuate, the company entered into a forward contract *to buy* 50,000,000 bolivars on January 15 at the forward rate of \$.0269. Direct exchange rates on various dates were:

|             | <i>Spot Rate</i> | <i>Forward Rate<br/>1/15 Delivery</i> |
|-------------|------------------|---------------------------------------|
| November 15 | \$.0239          | \$.0269                               |
| December 31 | .0224            | .0254                                 |
| January 15  | .0291            |                                       |

Solanski Inc. is a calendar-year company.

**Required:**

Compute the following:

1. The dollars to be paid on January 15, 2015, to acquire the 50,000,000 bolivars from the exchange dealer.
2. The dollars that would have been paid to settle the account payable had Solanski not hedged the purchased contract with the forward contract.
3. The discount or premium on the forward contract.
4. The transaction gain or loss on the exposed liability related to the oil purchase in 2014 and 2015.
5. The transaction gain or loss on the forward contract in 2014 and 2015.

**EXERCISE 12-13 Cash Flow Hedge Illustration LO 9**

Consider the following information:

1. On December 1, 2014, a U.S. firm *plans* to purchase a piece of equipment (with an asking price of 100,000 francs) in Switzerland during January of 2015. The transaction is probable, and the transaction is to be denominated in euros.
2. On December 1, 2014, the company enters into a forward contract to buy 100,000 francs for \$1.01 on January 31, 2015.
3. Spot rates and the forward rates for January 31, 2015, settlement were as follows (dollars per franc):

|                                 | <i>Spot Rate</i> | <i>Forward Rate<br/>for 1/31/15</i> |
|---------------------------------|------------------|-------------------------------------|
| December 1, 2014                | \$0.99           | \$1.01                              |
| Balance sheet date (12/31/14)   | \$1.01           | \$1.02                              |
| January 31 and February 1, 2015 | \$1.04           |                                     |

4. On February 1, the equipment was purchased for 100,000 francs.

**Required:**

- A. Prepare all journal entries needed on December 1, December 31, January 31, and February 1 to account for the forecasted transaction, the forward contract, and the transaction to buy the equipment.
- B. When should the company reclassify any amounts reported in other accumulated comprehensive income as a result of the cash flow hedge?

**EXERCISE 12-14 Fair Value Hedge Illustration—Forward Contract LO 6**

Consider the following information:

1. On December 1, 2014, a U.S. firm *contracts* to sell equipment (with an asking price of 1,000,000 pesos) in Mexico. The firm will take delivery and will pay for the equipment on March 1, 2015.
2. On December 1, 2014, the company enters into a forward contract to sell 1,000,000 pesos for \$0.0948 on March 1, 2015.
3. Spot rates and the forward rates for March 1, 2015, settlement were as follows (dollars per peso):

|                               | <i>Spot Rate</i> | <i>Forward Rate<br/>for 3/1/15</i> |
|-------------------------------|------------------|------------------------------------|
| December 1, 2014              | \$0.0954         | \$0.0948                           |
| Balance sheet date (12/31/14) | 0.0949           | 0.0944                             |
| March 1, 2015                 | 0.0947           |                                    |

4. On March 1, the equipment was sold for 1,000,000 pesos. The cost of the equipment was \$40,000.

**Required:**

Prepare all journal entries needed on December 1, December 31, and March 1 to account for the forward contract, the firm commitment, and the transaction to sell the equipment.

**EXERCISE 12-15 Fair Value Hedge Illustration—Options LO 8**

1. On June 1, 2014, a U.S. firm *contracts* to sell equipment (with an asking price of 2,000,000 krona) in Sweden. The firm will take delivery and will pay for the equipment on August 1, 2014.
2. Spot rates were as follows (dollars per krona):

|                | <i>Spot Rate</i> |
|----------------|------------------|
| June 1, 2014   | \$0.107          |
| August 1, 2014 | 0.102            |

3. On August 1, the equipment was sold for 2,000,000 krona. The cost of the equipment was \$100,000.

Suppose that on June 1, 2014, the firm believes, based on recent changes in the economy, that there is a high probability of exchange rate losses from the transaction. If the firm acquires an option to hedge the transaction, answer the following questions.

**Required:**

- Does the firm believe that the krona is strengthening or weakening relative to the U.S. dollar?
- What kind of option should the firm use: a put or a call option?
- Suppose the following options are available. Each option can only be exercised on August 1. Choose the option that should be used to hedge the transaction and prepare all journal entries needed to record the hedge and the transaction to sell the equipment.

| <i>Option Type</i> | <i>Amount</i>   | <i>Exercise Rate</i> | <i>Cost to Acquire</i> |
|--------------------|-----------------|----------------------|------------------------|
| Call Option        | 2,000,000 krona | \$0.1035             | \$ 8,000               |
| Put Option         | 2,000,000 krona | \$0.1035             | \$15,000               |

**ASC Exercises:** For all ASC exercises indicate as part of your answer: the Codification topic, subtopic, section, and/or paragraph upon which your answer is based (unless otherwise specified). All ASC questions require access to the FASB Codification.

**ASC12-1** **Scope and Disclosure** Is a company that prepares financial statements in U.S. dollars required to disclose supplementary information on the effects of changing prices?

**ASC12-2** **Disclosure** A company estimates an allowance for inventory obsolescence. However, this estimate is sensitive to changes in the short term. What are the disclosures required by current GAAP?

**ASC12-3** **Presentation** Is a firm required to reconcile net income and net cash flows from operating activities if the direct format is used to present the statement of cash flows?

**ASC12-4** **General** Where in the Codification is the guidance for foreign currency transactions located? List the topic number (i.e., ASC XXX).

**ASC12-5** **Cross-Reference** The rules providing guidance on using the current rate in foreign currency translation can be found in *FASB Statement No. 52*, paragraph 12. Where is this information located in the Codification? List the paragraph number (i.e., ASC XXX-XX-XX-X).

## PROBLEMS

### PROBLEM 12-1 Journal Entries—Exporting Transactions LO 4

GAF manufactures electrical cells at its St. Louis facility. The company's fiscal year-end is September 30. It has adopted the perpetual inventory cost flow method to control inventory costs. The company entered into the following transactions during the month of September. All exchange rates are direct quotations.

| <i>Date</i> | <i>Transaction</i>  | <i>Billing Amount</i> | <i>Rate of Exchange</i> |
|-------------|---|-----------------------|-------------------------|
| 2014        |   |                       |                         |
| Sept. 5     | Exported 10 electrical cells to a company located in Argentina. Cost per unit, \$950.   | 17,341 pesos          | \$1.1291                |
| 9           | Received raw materials ordered from a British company. The goods were shipped FOB destination and had not been recorded on the books of GAF, Inc. | 12,200 Pounds         | 1.6821                  |
| 14          | Exported 12 electrical cells to a company domiciled in Norway. Cost per unit, \$970.  | 160,274 Krone         | .1450                   |
| 30          | End of fiscal year-end.   |                       |                         |
|             | Peso  |                       | 1.1091                  |
|             | British pound   |                       | 1.6911                  |
|             | Krone   |                       | .1530                   |



| <i>Date</i> | <i>Transaction</i>  | <i>Billing Amount</i> | <i>Rate of Exchange</i> |
|-------------|---|-----------------------|-------------------------|
| Oct. 5      | Received full payment for the 10 units sold on September 5.           |                       | 1.1190                  |
| 9           | Paid British company in full for raw materials purchased September 9. |                       | 1.5948                  |
| 30          | Received full payment for 12 units sold on September 14.              |                       | .1440                   |

**Required:**

- A. Prepare the journal entries required on the books of GAF to record the transactions and year-end adjustments. Round all computations to the nearest dollar.
- B. Based on the two exporting transactions listed above, complete the following table.

|  | <i>Transaction</i> |                 |
|--|--------------------|-----------------|
|  | <i>Sept. 5</i>     | <i>Sept. 14</i> |
| September 30, 2014, year-end:                          |                    |                 |
| 1. Sales   | _____              | _____           |
| 2. Transaction gain (loss)                             | _____              | _____           |
| September 30, 2015, year-end:                          |                    |                 |
| 3. Sales   | _____              | _____           |
| 4. Transaction gain (loss)                             | _____              | _____           |
| 5. Net effect on income for both years (Sum lines 1–4) | _____              | _____           |
| 6. Cash received on settlement date                    | _____              | _____           |

**PROBLEM 12-2 Importing/Exporting Transactions with a Forward Contract Hedge LO 6**

Crystal Exporting Co. is a U.S. wholesaler engaged in foreign trade. The following transactions are representative of its business dealings. The company uses a periodic inventory system and is on a calendar-year basis. All exchange rates are direct quotations.

- Dec. 1 Crystal Exporting purchased merchandise from Chang’s Ltd., a Hong Kong manufacturer. The invoice was for 210,000 Hong Kong dollars, payable on April 1. On this same date, Crystal Exporting acquired a forward contract to buy 210,000 Hong Kong dollars on April 1 for \$.1314.
- Dec. 29 Crystal Exporting sold merchandise to Zintel Retailers for 120,000 Hong Kong dollars, receivable in 90 days. No hedging was involved.
- April 1 Crystal Exporting received 120,000 Hong Kong dollars from Zintel Retailers.
- 1 Crystal Exporting submitted full payment of 210,000 Hong Kong dollars to Chang’s, Ltd., after obtaining the 210,000 Hong Kong dollars on its forward contract.

Spot rates and the forward rates for the Hong Kong dollar were as follows:

|         | <i>Spot Rate</i> | <i>Forward Rate for April 1 Delivery</i> |
|---------|------------------|--|
| Dec. 1  | \$.1265          | \$.1314                                  |
| Dec. 29 | .1240            | .1305                                    |
| Dec. 31 | .1259            | .1308                                    |
| April 1 | .1430            |  |

**Required:**

- A. Prepare journal entries for the transactions including the necessary adjustments on December 31.
- B. Explain the income statement treatment given to any transaction gains and losses recognized at December 31.

**PROBLEM 12-3 Foreign Trade Journal Entries and Forward Contract Hedge LO 6**

On December 1, 2014, King Company exported equipment that had cost \$210,000 to a Brazilian company for 1,000,000 real. The account is to be settled on January 31, 2015. King Company is a calendar-year company and uses a perpetual inventory system. Direct exchange rates were:

|             | <i>Spot Rate</i> |
|-------------|------------------|
| December 1  | \$.4441          |
| December 31 | .3690            |
| January 31  | .4421            |

**Required:**

- A. Prepare journal entries to record the exporting transaction, adjust the accounts on December 31, and settle the account on January 31.
- B. What effect did changes in the exchange rate have on income in 2014 and 2015?
- C. Assume the facts given above, except that on December 1, King Company entered into a forward contract to sell 1,000,000 Real on January 31 for \$.4451 per real. Prepare the journal entries needed in 2014 and 2015 to record the forward contract and settle the accounts. The forward rate on December 31 for January 31 delivery was \$.3810.
- D. What is the combined effect on income in 2014 and 2015 from the exporting transaction and the forward contract?

**PROBLEM 12-4 Journal Entries—Exporting Transactions with Forward Contract Hedges LO 6**

Centennial Exchange of St. Louis, Missouri, imports and exports grains. The company has a September 30 fiscal year-end. The periodic inventory system and the weighted-average cost flow method are used by the company to account for inventory cost. The company negotiated the following transactions during 2014 (assume forward contracts exist for the krone and forint).

- Sept. 1 Sold 1,000,000 bushels of wheat to a Norwegian company for 16,500,000 krone. The account is to be settled on October 30.
- Sept. 1 The management of Centennial was concerned that the krone would decline in value. They therefore entered into a forward contract to sell 16,500,000 Krone on October 30 for \$.1442 per krone.
- Sept. 5 Sold 1,000,000 bushels of wheat to a Tokyo company for \$5,300,000. The account is to be settled on November 5.
- Sept. 15 Purchased grain from an exporting company that operates in Hungary. The contract provides for the payment of 20,000,000 forint on October 15.
- Sept. 15 Entered into a forward contract to buy 20,000,000 forint on October 15 for \$.006490 per Forint.
- Sept. 18 Sold 500 tons of soybean meal to Able & Born, Ltd., a Toronto company, for 48,000 Canadian dollars. The account is to be settled on December 17.
- Oct. 15 Completed the forward contract to buy 20,000,000 forint and then submitted payment to pay for the grain purchased on September 15.
- Oct. 30 Received 16,500,000 Kroner from the Norwegian customer and settled forward contract.
- Nov. 5 Received payment in full for the wheat sold on September 5 to the Tokyo company.
- Dec. 17 Received payment from Able & Born, Ltd. for the September 18 sale.

Direct exchange quotations for specific dates are presented below:

|              | <i>Norway—Krone</i> | <i>Japan—Yen</i> | <i>Hungary—Forint</i> | <i>Canada—Dollar</i> |
|--------------|---------------------|------------------|-----------------------|----------------------|
| September 1  | \$.1480             | \$.00738         | \$.006427             | \$.8250              |
| September 5  | .1458               | .00740           | .006428               | .8248                |
| September 15 | .1456               | .00741           | .006430               | .8246                |
| September 18 | .1456               | .00737           | .006431               | .8245                |
| September 30 | .1455               | .00736           | .006433               | .8243                |
| October 15   | .1458               | .00734           | .006435               | .8241                |
| October 30   | .1457               | .00732           | .006370               | .8241                |
| November 5   | .1456               | .00730           | .006439               | .8244                |
| December 17  | .1453               | .00731           | .006438               | .8250                |

On September 30, the forward rate for krone (with an October 30 settlement) was \$.1450 and the forward rate for forints (with an October 15 settlement) was \$.00640.

**Required:**

Prepare journal entries, including year-end adjustments, to record the above transactions.

**PROBLEM 12-5 Various Hedging Cases LO5 LO9**

Apple Company was incorporated in Delaware in 2012. On November 2, 2014, the controller of the company entered into a forward contract to sell 50,000 British pounds for \$1.5920 on March 1, 2015. The following exchange rates were quoted on the indicated dates:

|                   | <i>Spot Rate</i> | <i>Forward Rate<br/>March 1 Delivery</i> |
|-------------------|------------------|--|
| November 2, 2014  | \$1.6021         | 1.5920                                   |
| December 31, 2014 | 1.5820           | 1.58                                     |
| March 1, 2015     | 1.6543           |  |

Apple Company's fiscal year-end is December 31.

**Required:**

- A.** Assume that the forward contract was entered into as a hedge against an exposed foreign currency receivable balance in the amount of £50,000. Prepare the journal entries that would be made by Apple Company on
  - (1) November 2—to record the sale of the goods on account for £50,000 and to record the forward contract.
  - (2) December 31—to adjust the accounts related to the exposed asset and forward contract at fiscal year-end.
  - (3) March 1—to adjust the accounts related to the exposed asset and forward contract and to record the settlement of the receivable and delivery of the pounds to the exchange dealer.
- B.** Assume that the controller indicated on November 2 that the forward contract was acquired as a hedge of a future foreign currency transaction that is a commitment of Apple to sell inventory for £50,000 on March 1. Apple Company designates this hedge as a fair value hedge of an unrecognized firm commitment. Prepare the journal entries related to the forward contract and commitment to sell inventory that would be made by Apple Company on November 2, December 31, and March 1.
- C.** Assume that the contract was entered into to speculate in future exchange rate fluctuations. Prepare the journal entries that would be made by Apple Company on November 2, December 31, and March 1.
- D.** Compute the effect of the transactions in (A), (B), and (C) on the net income for the fiscal years ended December 31, 2014, and December 31, 2015. Indicate how the balance sheet accounts related to the forward contract would be reported in the December 31, 2014, balance sheet.

**PROBLEM 12-6 Hedge of an Unrecognized Foreign Currency Commitment – Fair Value Hedge LO6**

Citron Company is a U.S.-based citrus grower. On October 1, 2014, the company entered into a contract to ship 25,000 boxes of grapefruit on January 28 to Japan. Payment of 50,100,000 yen is to be received on March 29, 2015. On October 1, Citron also entered into a forward contract to sell 50,100,000 yen on March 29 at the forward rate of \$.007412. The forward contract is considered a hedge of the unrecognized foreign currency commitment. The direct exchange rate and forward rate for the yen were as follows:

|   | <i>October 1</i> | <i>December 31</i> | <i>January 28</i> | <i>March 29</i> |
|---|------------------|--------------------|-------------------|-----------------|
| Spot rate   | \$.007235        | \$.007879          | \$.007623         | \$.007640       |
| Forward rate available for the remaining period of the forward contract | .007412          | .007910            | .007674           | No appl.        |

**Required:**

- A.** Prepare the necessary journal entries to record the following transactions and events:
 

Oct. 1 Entered into the contract to sell the grapefruit and negotiated the forward contract.

Dec. 31 Fiscal year-end of Citron Company.

Jan. 28 The grapefruit were shipped FOB shipping point. The grapefruit cost Citron \$7.50 per box. Citron uses a perpetual inventory system.

Mar. 29 Received the payment and delivered the yen to the exchange broker to settle the forward contract.
- B.** Compute the increase or decrease in income for each fiscal year as a result of the transactions above.
- C.** Compute the increase or decrease in income each period that would have occurred if Citron had not entered into the forward contract.

**PROBLEM 12-7 Foreign Currency Risk LO2 LO5**

During her first quarter review of the financial statements, Debra Bell, the CFO of HAL Computer Corporation, was distressed to notice the company's transaction loss had been steadily increasing each month. HAL is a publicly held manufacturer of "PC clone" personal computers. Like most manufacturers of its kind, HAL does not

manufacture domestically but utilizes lower cost offshore suppliers for components and subcontractors for assembly. As it is HAL's policy to denominate foreign contracts in U.S. dollars whenever possible, the increase in transaction losses was particularly puzzling.

Subsequent conversations with HAL's controller, Tom Stewart, revealed all new contracts had been denominated in foreign currencies (primarily the South Korean won and Taiwanese dollar) in order to obtain more favorable purchase terms. Further, Mr. Stewart believed that the U.S. dollar would strengthen due to it being an election year. Since these contracts specify delivery and payment at various dates over the next 12 months, tremendous potential for exposure exists for the company if the dollar continues to decline against the major foreign currencies.

**Required:**

- A. Mr. Stewart executed all new foreign contracts in foreign currencies in the belief it would help the company.
  - (1) Do you think he was justified in his actions given the company policy?
  - (2) On what basis did you decide if the controller was justified or not?
  - (3) Was the loss a factor in your decision? Is this appropriate?
- B. A substantial amount of foreign denominated contracts already exist for goods and services not yet received.
  - (1) What actions may HAL take to minimize potential losses?
  - (2) What are the advantages and disadvantages of these actions?
  - (3) What implication does each of these scenarios have for financial statement disclosure?
- C. Assume that you are Ms. Bell, and you are concerned about how the Board of Directors and the stockholders may react. Additionally, you are about to purchase a new home and are planning to sell some HAL stock for the down payment.
  - (1) After carefully considering all of your options, what action do you decide to take?
  - (2) Did concern over the Board, stockholders, or HAL's stock price enter into your decision? Why or why not?

**PROBLEM 12-8 Hedge of a Forecasted Sale Using a Foreign Currency Option LO 8**

A U.S. company estimated that, in the first two months of 2016, its export sales to a Swiss company would generate 400,000 francs. On December 1, 2015, in an effort to protect against the weakening franc, the company purchased an option (out of the money) to sell 400,000 Swiss francs at an exchange rate of \$0.60 with an expiration date of February 25, 2016. The cost of the option was \$6,000. The spot rates on the following dates were:

|                   |        |
|-------------------|--------|
| December 1, 2015  | \$0.62 |
| December 31, 2015 | \$0.60 |
| February 25, 2016 | \$0.57 |

The option's value in the options market on December 31, 2015, was \$9,000. December 31 is also an interim reporting date. The option was exercised on February 25, 2016.

**Required:**

Prepare all journal entries needed on December 1, December 31, and February 25 to account for the option.

**PROBLEM 12-9 Cash Flow Hedge Illustration—Forward Contract LO 9**

Consider the following information:

1. On December 1, 2011, a U.S. firm *plans* to sell a piece of equipment [with an asking price of 200,000 units of a foreign currency (FC)] during January of 2012. The transaction is probable, and the transaction is to be denominated in euros.
2. The company enters into a forward contract on December 1, 2011 to sell 200,000 FC on February 1, 2012, for \$1.02.
3. Spot rates and the forward rates for January 31, 2012, settlement were as follows (dollars per euro):

|                                 | <i>Spot Rate</i> | <i>Forward Rate<br/>for 2/1/12</i> |
|---------------------------------|------------------|------------------------------------|
| December 1, 2011                | \$1.04           | \$1.02                             |
| Balance sheet date (12/31/11)   | \$1.01           | \$1.00                             |
| January 31 and February 1, 2012 | \$0.99           |                                    |

4. On January 31, the equipment was sold for 200,000 FC. The cost of the equipment was \$170,000.

**Required:**

- A. Prepare all journal entries needed on December 1, December 31, January 31, and February 1 to account for the forecasted transaction, the forward contract, and the transaction to sell the equipment.
- B. Prepare any entry needed on February 1 to reclassify amounts from other accumulated comprehensive income into earnings.

**PROBLEM 12-10 Fair Value Hedge of an Unrecognized Firm Commitment LO 5**

On October 1, 2014, Fairchange Corporation ordered some equipment from a supplier for 300,000 euros. Delivery and payment are to occur on November 15, 2014. The spot rates on October 1 and November 15, 2014, are \$1.20 and \$1.30, respectively.

**Required:**

- A. Assume that Fairchange entered into a forward contract on October 1, 2014, to hedge the firm commitment. The forward rates for euros for November 15 delivery were

|             |        |
|-------------|--------|
| October 1   | \$1.23 |
| November 15 | \$1.30 |

Furthermore, assume the equipment was purchased and paid for on November 15. Prepare all journal entries needed to record and settle the hedge and to record the purchase of the equipment.

- B. If the forward contract was not acquired, record the journal entry to purchase the equipment.

**PROBLEM 12-11 Fair Value Hedge of an Unrecognized Firm Commitment LO 6**

(This is a more complicated version of Problem 12-10.)

On October 1, 2014, Fairchange Corporation ordered some equipment from a supplier for 300,000 euros. Delivery is to occur on November 15, 2014, while payment is expected to occur on December 15, 2014. The spot rates on October 1, November 15, and December 15, 2014, are \$1.20, \$1.30, and \$1.28, respectively.

**Required:**

- A. Assume that Fairchange entered into a forward contract on October 1, 2014, to hedge the firm commitment. The forward rates for euros for December 15 delivery were

|             |        |
|-------------|--------|
| October 1   | \$1.23 |
| November 15 | \$1.30 |
| December 15 | \$1.28 |

Furthermore, assume the equipment was purchased on November 15 and was paid for on December 15, 2014. Prepare all journal entries needed to record and settle the hedge and to record the purchase and payment of the equipment.

- B. If the forward contract was not acquired, record the journal entries to purchase and pay for the equipment.

**PROBLEM 12-12 Fair Value Hedge of an Unrecognized Firm Commitment LO 6**

(This is the same as Problem 12-10 except that an option is used to hedge the commitment.) On October 1, 2014, Fairchange Corporation ordered some equipment from a supplier for 300,000 euros. Delivery and payment are to occur on November 15, 2014. The spot rates on October 1 and November 15, 2014, are \$1.20 and \$1.30, respectively.

**Required:**

- A. Assume that Fairchange purchased an option for \$4,000 on October 1, 2014, to hedge 300,000 euros. The call option has an exercise price of \$1.24. The values of the option on various dates are as follows:

|             |           |
|-------------|-----------|
| October 1   | \$ 4,000  |
| November 15 | \$ 18,000 |

Furthermore, assume the equipment was purchased and paid for on November 15. Prepare all journal entries needed to record and settle the hedge and to record the purchase of the equipment.

- B. If the option was not acquired, record the journal entry to purchase the equipment.

## Chapter 12 – Review Questions

The review questions accompanying this course are designed to assist you in achieving the course learning objectives. The review section is not graded; do not submit it in place of your qualified assessment. While completing the review questions, it may be helpful to study any unfamiliar terms in the glossary in addition to course content. After completing the review questions, proceed to the review question answers and rationales.

79. Which of the following is accurate regarding foreign exchange?
- The forward exchange rate is the rate that would be offered to someone today to exchange their currency.
  - The offer rate is the quote for the trader to buy the seller's currency.
  - The floating rate is really the range of exchange rates listed in a forward exchange contract.
  - Forward exchange contracts are used to lock in a rate today for the exchange of currency at a future date.
80. Which of the following statements is accurate?
- Transactions must be measured and denominated in the same currency.
  - Transactions are denominated in the reporting currency.
  - The two parties to a transaction will generally negotiate which currency the transaction will be denominated in.
  - The two parties to a transaction will generally negotiate which currency the transaction will be measured in.
81. All of the following stages of a foreign currency transaction are of concern to an accountant with the **EXCEPTION** of:
- The original recognition date.
  - At each balance sheet date between the transaction date and the settlement date.
  - The settlement date.
  - The balance sheet date immediately after settlement.
82. A change in the direct exchange rate:
- Will create an exchange gain on an exporting transaction when the rate increases.
  - Will create an exchange loss on an exporting transaction when the rate increases.
  - Will create an exchange gain on an exporting transaction when the rate decreases.
  - Will create an exchange loss on an importing transaction when the rate decreases.

83. In a forward contract:
- The forward rate is usually greater than the spot rate.
  - One party to a forward contract will have a receivable and one party will have a payable.
  - When the spot rate is greater than the forward rate, the contract would be at a premium.
  - The forward rate is usually less than the spot rate.
84. Which of the following is accurate?
- Forward contracts are valued on a gross basis.
  - The change in value of a forward contract is calculated as the difference between the original forward rate and the spot rate on the date of settlement.
  - If a company is hedging an accounts receivable, it will use a forward contract to sell currency.
  - The change in the spot rate of a forward contract from the inception date to settlement date is the time element of a forward contract.
85. Which of the following statements regarding the reporting of a fair value hedge is accurate?
- No gain or loss on a fair value hedge contract will be recognized until realized.
  - On a fair value hedge, only the gain or loss on the forward contract will be recognized in the financial statements on the balance sheet date.
  - On the balance sheet date, both the gain or loss on the firm commitment and the gain or loss on the forward contract must be recognized.
  - On a fair value hedge, only the gain or loss on the firm commitment will be recognized in the financial statements even though the firm commitment has not been recognized.

## **Chapter 13 – Translation of Financial Statements of Foreign Affiliates**

### **Learning Objectives**

After completing this section of the course, you will be able to:

- Identify current and historical exchange rates and the functional currency of the entity, citing the objective of financial statement translation.
- Compare the two methods used to convert financial statements of a foreign entity into U.S. dollars, noting the appropriate use of each.
- Note the impact of a highly inflationary economy on the translation of a foreign entity.
- Recognize differences between financial statements when the functional currency is the local currency and when it is the U.S. dollar.
- Identify the impact of foreign currency translation on comprehensive income and determine the appropriate disclosures for firms with foreign entity subsidiaries.



# TRANSLATION OF FINANCIAL STATEMENTS OF FOREIGN AFFILIATES

## CHAPTER CONTENTS

- 13.1 ACCOUNTING FOR OPERATIONS IN FOREIGN COUNTRIES
- 13.2 TRANSLATING FINANCIAL STATEMENTS OF FOREIGN AFFILIATES
- 13.3 OBJECTIVES OF TRANSLATION
- 13.4 TRANSLATION METHODS
- 13.5 IDENTIFYING THE FUNCTIONAL CURRENCY
- 13.6 TRANSLATION OF FOREIGN CURRENCY FINANCIAL STATEMENTS
- 13.7 TRANSLATION OF FOREIGN FINANCIAL STATEMENTS ILLUSTRATED
- 13.8 FINANCIAL STATEMENT DISCLOSURE
- 13.9 HISTORICAL DEVELOPMENTS OF ACCOUNTING STANDARDS

### IN THE NEWS

Walmart's foreign currency translation impact reduced sales by \$680 million for the three months ending July 31, 2013, which represented one-third of its full-year sales forecast reduction.<sup>1</sup>

In the preceding chapter, the translation of various types of foreign currency transactions entered into by a U.S. company was described. A U.S. company also may be involved in foreign activities through the operations of a branch, a subsidiary, or an investee company in a foreign country. If the foreign entity maintains its books in a foreign currency, its accounts must be restated into dollars so that the accounts of the U.S. company and the foreign entity are stated in a common currency before the accounts are combined or consolidated or the equity method of accounting is applied. The concepts underlying the restatement of the accounts of a foreign entity are discussed in this chapter.

<sup>1</sup> Walmart Form 8-K, August 15, 2013.



IN  
THE  
NEWS

"The US dollar is the world's premiere currency, with approximately two thirds of world official foreign-exchange holdings being dollars. Moreover, many countries appear willing to run sustained trade surpluses with the US, supplying everything from t-shirts to Porsches in return for additional dollar holdings."<sup>2</sup>



IN  
THE  
NEWS

The rise in gold prices and fall of the dollar have begun to unsettle investors. In the short term, a weaker dollar means higher prices for imports and more expensive trips abroad. In the long run, a falling dollar could reduce the demand for U.S. debt. This could cause interest rates to increase, have a negative impact on the economy, and perhaps bring an end to the dollar as the world's premier currency.<sup>3</sup>

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## 13.1 ACCOUNTING FOR OPERATIONS IN FOREIGN COUNTRIES

A U.S. firm may maintain branch offices or hold equity interests in companies that are domiciled in foreign countries. As a general rule, a foreign subsidiary is consolidated if the parent company owns, directly or indirectly, a controlling interest in the voting stock of the subsidiary. The exceptions to the general rule are as follows:

1. The intent to control is likely to be temporary.
2. Control does not actually rest with the parent company. For example, some governments restrict the withdrawal of assets from the country or impose exchange restrictions. Thus, a foreign entity may operate under conditions of foreign exchange restrictions, controls, or other government-imposed regulations that are of a type that raise significant doubt as to the parent company's ability to control the subsidiary.<sup>4</sup>

FASB ASC paragraph 810-10-15-10 extended the equity method of accounting to an investment in common stock of a foreign company in which the investor can exert significant influence (generally holds a 20 to 50% interest in the voting stock) over the investee, unless the investee operates under conditions of exchange restrictions, controls, or other uncertainties that would affect the ability to influence the policies of the foreign investee. In other words, the APB considered it misleading to include in operations the investor's equity interest in the investee's net income if the income might not be distributed because of government restrictions. Investments in common stock not accounted for using the equity method are reported at fair value or at cost.

Accounting for a foreign entity is further complicated when there are significant differences between accounting principles in the United States and those in the other country. When such differences in accounting concepts exist, it is difficult to compare the results of operations and the financial position of companies operating in different countries. To aid statement users in making comparisons, foreign statements that are not in conformity with generally accepted accounting standards in the United States must be adjusted to conform to U.S. standards before conversion into U.S. dollars.

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## 13.2 TRANSLATING FINANCIAL STATEMENTS OF FOREIGN AFFILIATES

A foreign entity will generally measure and record its transactions in terms of the currency of the country in which it is located, called the **local currency**. A U.S. company maintaining a branch office in a foreign country or holding an equity interest in a

<sup>2</sup> *YaleGlobal*, "Why Dollar Hegemony Is Unhealthy," Yale Global Online by Thomas I. Palley, 6/20/06.

<sup>3</sup> *USA Today*, "Beaten-up Dollar Unsettles Investors in USA and Abroad," by John Waggoner, 6/22/2006, p. B.1.

<sup>4</sup> FASB ASC paragraph 323-10-15-6.

foreign company must convert the account data expressed in a foreign currency into dollars before the financial statements can be combined or consolidated. Furthermore, if the equity method of accounting is used to account for an investment in a foreign investee company, the financial statements of the affiliate must be converted into dollars before the investor's share of the investee's reported net income or loss is properly determinable. The conversion from another currency into the currency of the parent company is frequently called "translation." Because the term is popularly used in this manner and because the FASB used the term "translation" in this way in the definitive standard (*SFAS No. 52*) on which much of this chapter is based, we too use the term to refer to the conversion process. Note, however, that the word has a dual meaning as used in the context of foreign currency conversion, and some users may prefer to restrict their use of the term to one of the following two definitions: (1) a generic term to apply to any restatement of foreign currency units into the currency of the parent (as used heretofore in this text) and (2) a specific term that applies only to one of the two methods of conversion described in the following sections (i.e., to the "current method" rather than to the "temporal method"). The FASB uses the term in both ways, as do we.

**LO 1** Current versus historical exchange rates.

In the process of translation, all accounts of the foreign entity stated in units of foreign currency are converted into the reporting currency by multiplying the foreign currency amounts by an exchange rate. The development of translation procedures is complicated by the fact that the rate of exchange between two currencies is not stable. There has been considerable controversy as to which foreign currency accounts should be translated using the current exchange rate and which accounts should be converted using historical exchange rates. The **current exchange rate** is the spot rate in effect at the end of the accounting period (i.e., the balance sheet date). The **historical exchange rate** is the spot rate in effect on the date a transaction takes place. Another controversial area relates to how to report the adjustment that is needed to balance the accounts that result when there are changes in the exchange rate.

IN  
THE  
NEWS

The Sherwin-Williams Company announced its financial results for the first quarter ended March 31, 2010. Compared to the same period in 2009, consolidated net sales increased \$14.8 million, or 1.0%, to \$1.565 billion in the quarter due to the favorable impact of foreign currency translation rate changes partially offset by a decline in domestic paint sales volume. Favorable currency translation rate changes increased consolidated net sales 2.9% in the quarter.<sup>5</sup>

## Translation Adjustment or Translation Gain or Loss

The translation of some accounts using the current exchange rate and others using the historical exchange rate will result in an inequality between the total of the debit account balances and the total of the credit account balances. This difference may be referred to as a **translation adjustment** or **translation gain or loss**. As will be shown in a later section of this chapter, the amount of the translation adjustment is affected by an entity's accounting exposure to changes in the exchange rate. In an accounting sense, an entity's exposure to exchange risk is related to the set of accounts translated at the current rate. Current accounting standards require that the translation adjustment (gain or loss) be reported currently in income **or** deferred as a component of stockholders' equity, depending on the method used to translate the accounts. The appropriate method is not a free choice, but rather is dictated by the circumstances as described in *SFAS No. 52* [ASC 830-30-45-12]. If the adjustment is reported as a component of equity, it is not included in current earnings **but** is nonetheless a component of **comprehensive income**.

<sup>5</sup> Sherwin-Williams Company 8-K, April 22, 2010.

## 13.3 OBJECTIVES OF TRANSLATION

### Functional Currency Concept

The objectives of translation are to:<sup>6</sup>

1. Provide information that is generally compatible with the exposed economic effects of an exchange rate change on an enterprise's cash flows and equity [par. 4(a)].
2. Reflect in consolidated statements the financial results and relationships of the individual consolidated entities as measured in their *functional currencies* in conformity with U.S. generally accepted accounting principles [par. 4(b)].

**LO 2** The objectives of translation.

With respect to the first objective, compatibility in terms of effect on equity is achieved if, for example, an entity is in an exposed asset position and the translation process results in an increase in stockholders' equity when there is a favorable change in the exchange rate. (An entity's exposed asset position is the excess of assets that are translated at the current exchange rate over liabilities that are translated at the current exchange rate.) An unfavorable change in the exchange rate should result in a reduction in stockholders' equity. Compatibility in terms of cash flow consequences is achieved if favorable (unfavorable) rate changes that are reasonably expected to affect cash flows are *reflected* as gains (losses) in determining net income for the period, and the effect of rate changes that have only remote and uncertain implications for realization are *excluded* from determining net income for the period.

#### RELATED CONCEPTS

The functional currency approach was adopted to provide information compatible with the expected economic effects of a change in the exchange rate on the enterprise's cash flows and equity, consistent with the objective of financial reporting as specified in FASB Concept No. 1.

In objective 2, the Board moved from a single-enterprise perspective of consolidation of a foreign entity to a multiple-enterprise perspective. The Board reasoned that foreign operations are often conducted in economic and currency environments that differ from those of the U.S. parent. Thus, a foreign entity is viewed as a separate business entity that generates its earnings in its local economic, legal, and political environment. The Board believes that the operating performance and financial condition of a foreign entity are best measured by expressing its accounts in the currency of the economic environment in which it primarily conducts its operations and generates and expends its cash, its *functional currency*. The determination of an entity's functional currency is discussed in a later section of this chapter. Also see Illustration 13-1 for a list of indicators to help in identifying the functional currency. Under the Board's view of a foreign entity, the translation of accounts expressed in the functional currency should retain the financial results and relationships that were created in the economic environment of the foreign operations rather than as if the operations had been conducted in the economic environment of the reporting currency.

## 13.4 TRANSLATION METHODS

**LO 4** Two methods of conversion.

To accomplish the objectives of translation, two translation methods are used depending on the functional currency of the foreign entity:

**Current rate method.** When using the current rate method, all assets and liabilities are translated using the current exchange rate. Revenue and expense transactions are translated at the exchange rate prevailing on the date each underlying transaction occurred. Since separate translation of each transaction is usually impractical, an appropriate average rate can be used to approximate the results that would be obtained from translation of each transaction.

<sup>6</sup> FASB ASC subtopic 830-30.

## ILLUSTRATION 13-1

## Functional Currency Indicators

| <i>Economic Indicator</i> | <i>Indicators Pointing to Local Currency as Functional Currency</i>  | <i>Indicators Pointing to U.S. Dollar as Functional Currency</i>   |
|---------------------------|--|--|
| Cash flows                | Primarily in the local currency and do not directly affect parent's cash flows.  | Directly affect the parent's cash flows on a current basis and are readily available for remittance to the parent.   |
| Sales prices              | Are not primarily responsive in the short term to exchange rate changes; determined primarily by local conditions.   | Are primarily responsive in the short term to exchange rate changes; determined primarily by worldwide competition.  |
| Sales market              | Active local market although there may be significant amounts of exports.  | Sales are mostly in the United States, or sales contracts are denominated in dollars.  |
| Expenses                  | Production costs and operating expenses are determined primarily by local conditions.  | Production costs and operating expenses are obtained primarily from U.S. sources.  |
| Financing                 | Primarily denominated in the local currency, and foreign entity's cash flow from operations is sufficient to service existing and normally expected obligations.   | Primarily from parent or other dollar-denominated obligations, or parent company is expected to service the debt.  |
| Intercompany transactions | Low volume of intercompany transactions and there is not an extensive interrelationship between operations of the foreign entity and those of the parent. However, foreign entity may rely on parent's or affiliates' competitive advantages such as patents and trademarks. | High volume of intercompany transactions; there is an extensive interrelationship between operations of the parent and those of the foreign entity, or the foreign entity is an investment or financing device for the parent. |

Source: *Statement of Financial Accounting Standards No. 52*, par. 42, [ASC 830-10-55-5].

**Temporal method.** Under this method, monetary assets and liabilities such as cash, receivables, and payables are translated at the current exchange rate. Assets and liabilities carried at historical cost are translated at historical exchange rates. Assets and liabilities carried at current values (such as inventory carried at market when applying the lower of cost or market rule) are translated at the current exchange rate. Thus, the temporal method places emphasis on whether an account is measured in terms of historical cost or current values.

Revenue and expense transactions, except those related to assets and liabilities translated at historical rates, are translated at exchange rates in effect on the dates the underlying transaction occurred. An appropriate average rate can be used to approximate the results that would be obtained from translation of each transaction. Revenues and expenses that relate to assets and liabilities translated at historical rates (such as depreciation expense, amortization expense, and the cost of sales) are translated at the historical rates used to translate the related assets and liabilities.

IN  
THE  
NEWS

"You have to separate out the effect of the currency and ask yourself, how would the company have done in local currency?" says Terry Bivens, food, tobacco, and beverage analyst for Argus Research. "If you see a company that has done badly because of currency translations, but is going strong in local terms, then you're more reassured."<sup>7</sup>

<sup>7</sup> *The Wall Street Journal*, "Dollar to Play a Central Role in Profit Data," by Michael Gonzalez, 4/17/95, p.C1.

## 13.5 IDENTIFYING THE FUNCTIONAL CURRENCY

The functional currency may be (1) the currency of the country in which the foreign entity is located (the local currency), (2) the U.S. dollar, or (3) the currency of another foreign country. Often, the functional currency is the local currency of the country in which the entity is located and in which the accounting records are maintained. For example, a French subsidiary with operations that are relatively self-contained and integrated in France would have the euro as its functional currency. In this example, the French subsidiary primarily generates and expends euros.

**LO 3** Identifying the functional currency.

In other cases, the dollar may be identified as the functional currency when a foreign subsidiary is a direct extension or an integral component of the reporting U.S. parent company. For example, the dollar would ordinarily be the functional currency for a subsidiary domiciled in Mexico that is financed by a U.S. parent company, that acquires significant assets by expending dollars, and whose only business is to assemble components that are manufactured in the United States and are returned to the United States to be sold by the parent company. In this case, the dollar may be the functional currency even though transactions of the subsidiary are recorded in pesos in the subsidiary's books.

### RELATED CONCEPTS

One objective not considered in *FASB Statement No. 52*, the appropriateness of using a single *unit of measure* for the financial statements essentially requiring the U.S. dollar to be the monetary unit. This requirement ignores the fact that foreign operations are often entirely conducted in the currency of another country.

In still other cases, the identification of the functional currency will not be as clear as in these two examples. For example, a Mexico City subsidiary might manufacture a component for a product, a significant number of which are sold in Mexico or to companies domiciled in other foreign countries, in addition to providing some units for the U.S. parent, or a foreign entity might conduct significant amounts of business in two or more currencies. In such situations the functional currency could be a currency other than the dollar, such as the local currency of the foreign entity or the currency of a third country. To provide some guidance in selecting the functional currency, the FASB identified six economic indicators for management to consider. These indicators are listed in Illustration 13-1. The order in which the indicators are listed does not suggest any priority; rather, the indicators are to be considered both individually and collectively. When the indicators are mixed and the functional currency cannot be clearly identified, the standard indicates that management's judgment is required to assess the facts and circumstances in identifying the functional currency.

A foreign entity may operate and generate cash flows through more than one distinct and separable operation. Each of these operations may be identified as an entity and may have a different functional currency if conducted in different economic environments.

### TEST YOUR KNOWLEDGE 13.1

**NOTE:** Solutions to *Test Your Knowledge* questions are found at the end of each chapter before the end-of-chapter questions.

#### Multiple Choice

- Indicators that the local currency is also the functional currency include all of the following *except*:
  - The majority of the cash flows are in the local currency.
  - Sales prices are determined by local market conditions.
  - Financing is generally from the parent or guaranteed by the parent.
  - Production costs and expenses are determined by local conditions.
- Indicators that the local currency is also the functional currency for a foreign subsidiary include:
  - Sales are mostly in the United States.
  - There is a high volume of intercompany transactions.
  - Financing is primarily from the parent.
  - Sales prices are not primarily responsive to short-term exchange rates.

## 13.6 TRANSLATION OF FOREIGN CURRENCY FINANCIAL STATEMENTS

The method used to translate a foreign entity's financial statements and the disposition of the resulting translation adjustment depends on the determination of the functional currency. As indicated earlier, the functional currency of the foreign entity might be (1) the local currency of the foreign entity, (2) the U.S. dollar, or (3) the currency of a third country (i.e., a country

other than the country in which the subsidiary is located or the United States). The translation process and the disposition of the translation adjustment for these three situations, assuming that the books are kept in the local currency of the foreign entity and that the accounting conforms to U.S. generally accepted accounting principles, are summarized in a flow chart in Illustration 13-2. As shown in Illustration 13-2, an exception is made when the foreign economy is highly inflationary. In this case, the functional currency (as defined here) is not used to determine the appropriate accounting. Also, if the books of the foreign entity are kept in U.S. dollars, translation is not necessary. Further, if the books of the foreign entity are not kept in accordance with U.S. generally accepted accounting principles, the accounts must be adjusted to conform to U.S. GAAP, preferably before translating the account balances.

Note in Illustration 13-2 that the terms *remeasurement* and *translation* are used when the accounts stated in one currency are converted into another currency. The distinction between the two is as follows:

**Lo 5** Which methods of conversion to use.

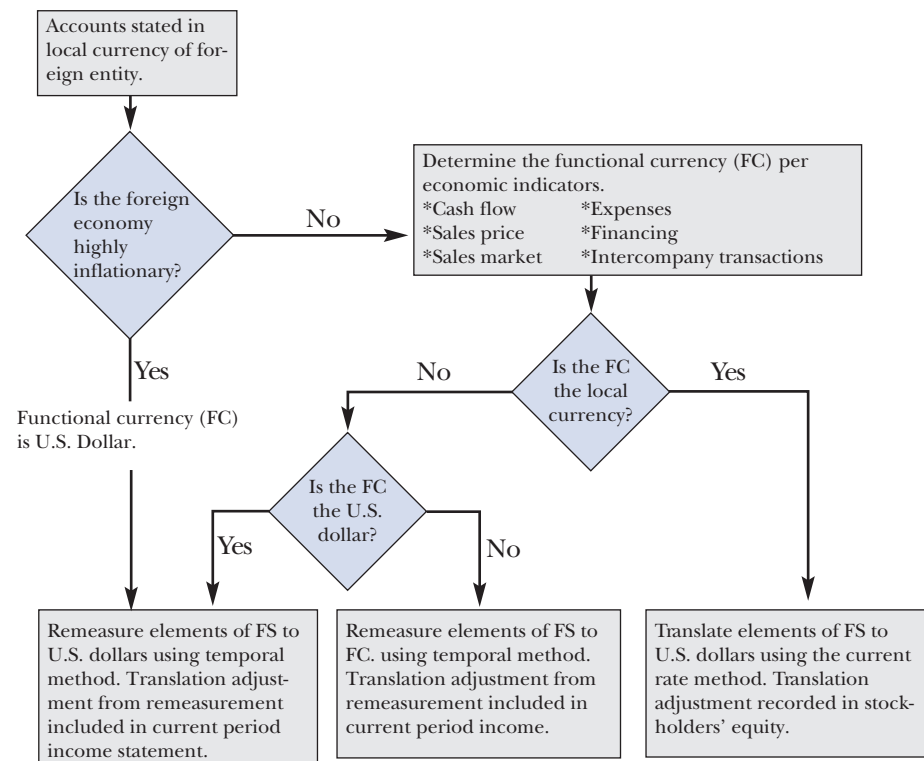
**Remeasurement.** If a foreign entity does not maintain its records in its functional currency, the local currency accounts are remeasured into the functional currency using the temporal method. *Remeasurement* is the process of translating the accounts of a foreign entity into its functional currency when they are stated in another currency.

**Translation.** Accounts measured in the functional currency are translated into the reporting currency using the current rate method.

As explained later, remeasurement is a change in the unit of measure, whereas translation retains the functional currency as the unit of measure and simply changes the form in which the accounts are stated. Recall that the term *translation* is used in two different ways: (1) as a generic term to apply to any restatement of foreign currency

#### ILLUSTRATION 13-2

##### Summary of Translation Process and Disposition of Translation Gain or Loss



Source: Adapted from Dahli Gray, "Functional Currency Concept—Flexibility and Comparability Effects," *The Woman CPA*, January 1983, p. 22.

units into dollars and (2) more specifically to apply to the restatement of foreign currency units that are already measured in the functional currency into dollars (current rate method). Thus, “translation” may be used synonymously with the current method, while “remeasurement” is used synonymously with the temporal method. The first step in the translation process is to determine if the foreign entity is operating in a highly inflationary economy.

## Foreign Entity Operates in a Highly Inflationary Economy

**LO 6** Factors involved in translating the statements of a foreign entity operating in a highly inflationary economy.

The relative rate of inflation between two countries is an important contributing factor to changes in exchange rates. Often, the currency of a country experiencing high inflation will weaken (i.e., one unit of that country’s currency can be purchased with less domestic currency) substantially against the currency of a more stable economy. Thus, using the current rate method to translate inventories and fixed assets of foreign operations in highly inflationary economies often results in a substantial reduction in the translated amounts.

To illustrate, assume that a foreign subsidiary acquired land for 100,000 foreign currency units (FCU) when the exchange rate was \$1 per FCU. In subsequent years, the foreign country experienced significant inflation and the exchange rate decreased to \$.20 per FCU. If the current exchange rate is used, the land would translate to \$20,000 (100,000 FCU × \$.20) and a cumulative translation loss of \$80,000 is reported.

It is the Board’s belief that the currency of a country that has a highly inflationary economy has lost its utility as a store of value and cannot be a functional measuring unit. As a practical solution to the problem, the Board prescribed that the financial statements of a foreign entity operating in a highly inflationary economy shall be remeasured as if the functional currency were the reporting currency (U.S. dollar). For such entities this means that the foreign financial statements should be translated using the *temporal method*. According to the foregoing illustration, the land account would be translated to \$100,000 (100,000 FCU × \$1.00) using the historical exchange rate when the land was purchased.

FASB defines a highly inflationary economy as one with a cumulative inflation of approximately 100% over a three-year period (which is approximately a 26% annual rate).<sup>8</sup> The International Practices Task Force of the AICPA’s Center for Audit Quality (CAQ) monitors the status of “highly inflationary” countries.

At the November 2013 meeting of the Center for Audit Quality SEC Regulations Committee’s International Practices Task Force, the SEC staff indicated that Venezuela, South Sudan, and Belarus should continue to be considered highly inflationary economies under US GAAP. The SEC staff also said it expected companies to consider Iran highly inflationary no later than the first reporting period beginning on or after January 1, 2014 and to monitor Sudan’s reported data to determine when to consider that economy highly inflationary.

### RELATED CONCEPTS

Under the *historical cost principle*, a *stable monetary unit* is important for reporting the financial position and operations over time. In a highly inflationary economy, historical cost numbers measured in nominal currency amounts lose *relevance*.

## Foreign Entity Operates in an Economy That Is Not Highly Inflationary

If the foreign entity does not operate in a highly inflationary economy, the functional currency must be identified. The translation process for the three possibilities follows:

1. *The local currency is the functional currency.* The accounts are translated into dollars using the current rate method. Since the functional currency is the local currency, the accounts are already measured in the functional currency, and remeasurement is unnecessary. The resulting translation adjustment is recorded as a separate component of stockholders’ equity.
2. *The U.S. dollar is the functional currency.* When the foreign entity does not maintain its records in its functional currency, the accounts are remeasured into the functional currency, in this case dollars, using the temporal method. Since the U.S. dollar is the functional currency, remeasurement translates the accounts into dollars and no further

<sup>8</sup> FASB ASC paragraph 830-10-45-11.



translation is necessary. The resulting translation adjustment is reported in the current period's income statement.

3. *The functional currency is the currency of a third country.* The local currency accounts are first (a) remeasured in the functional currency (the currency of the third country) using the temporal approach, and then (b) the remeasured functional currency amounts are translated into dollars using the current rate approach. The translation gain or loss from using the temporal method is reported in income, while the adjustment resulting from use of the current rate approach is reported in a separate component of owners' equity.

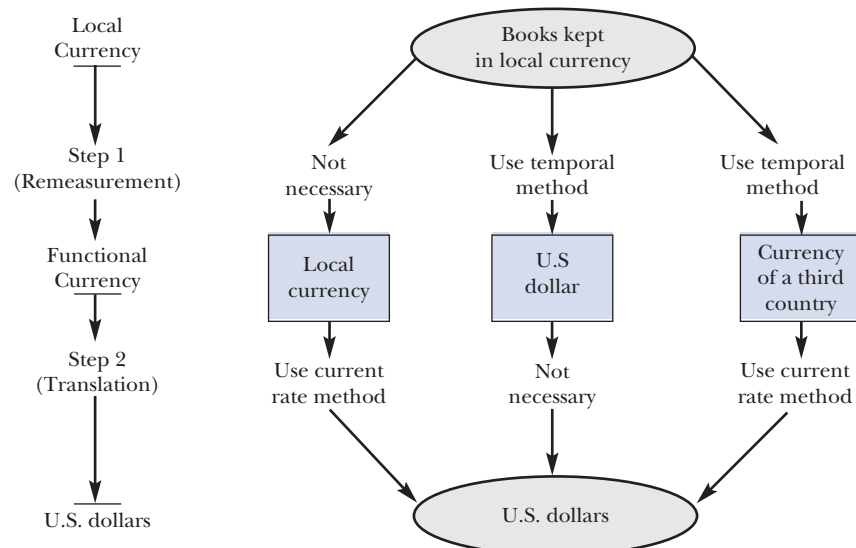
The steps in the translation process may be diagrammed as shown in Illustration 13-3. Identification of the functional currency is the key step in the translation process as it determines the method to be used to translate the foreign currency accounts.

The approach outlined is consistent with the objective of preserving the financial results and relationships of an individual consolidated entity as measured in its functional currency. That is, when the local currency is identified as the functional currency, use of the current rate method retains the local currency as the unit of measure. A translation method preserves the financial results if a net income or loss reported in the functional currency statements is retained in the translated income statement. Maintaining relationships as measured in their functional currency is achieved when, for example, the current ratio is 2 : 1 when computed from the functional currency balance sheet and the ratio is also 2 : 1 when computed from the translated statements. The current rate method retains the financial results and relationships as measured in their functional currency by translating the assets and liabilities at one constant rate (the current rate) and the income statement items at one constant rate (the average rate).

Remeasurement using the temporal method when the functional currency is the U.S. dollar is consistent with a single-enterprise perspective of consolidation. In this case, the operations of the foreign entity are viewed as a direct extension or an integral component of the parent's domestic operations. That is, the parent and subsidiary are viewed as if they were a single company. The objective of translation is to change the unit of measure from that of the local currency to the reporting currency of the parent company, the functional currency. The translation process should then reflect all transactions of the subsidiary as if they were conducted or measured in one currency only, the parent's reporting currency. The use of historical exchange rates to translate accounts carried at historical cost preserves the original cost of the accounts in conformity with the historical cost concept. In effect, the accounts are restated as if dollars had been used to measure and record the assets and liabilities on the transaction dates.

#### ILLUSTRATION 13-3

##### Diagram of Translation Process



When the functional currency is that of a third country, the accounts of the foreign entity maintained in its local currency are remeasured (translated) into the functional currency using the temporal method. The relationships as measured in the functional currency are retained by translating the functional currency balances into the reporting currency using the current rate method.

The reporting of the translation adjustment is also dependent on the selection of the functional currency. When the foreign entity’s accounts are remeasured (temporal method) to the functional currency, either the U.S. dollar or the currency of a third country, the resulting adjustment is reported in the current period’s income statement. When translating the accounts from the functional currency into dollars (current rate method), translation adjustments are accumulated and reported as a separate component of stockholders’ equity. In the latter case, the Board regarded translation adjustments associated with a foreign investment as unrealized and considered their effect on cash flow to be uncertain and remote. As discussed earlier, one objective of translation is to provide information that is compatible with the expected economic effects of rate changes on cash flow. Compatibility is achieved when the effect of rate changes that have uncertain and remote implications for realization are excluded from income.

The cumulative translation adjustment is carried in the accounts until sale of the foreign entity. At that time, the amount attributable to that entity is removed from the separate component of equity and reported as part of the gain or loss on the sale.

**TEST YOUR KNOWLEDGE**  **13.2**

**NOTE:** Solutions to *Test Your Knowledge* questions are found at the end of each chapter before the end-of-chapter questions.

**Multiple Choice**

1. If the functional currency is the currency of a third country (not the parent’s and not the local currency), the appropriate approach to converting the account balances into U.S. dollars is:
  - a. The temporal approach.
  - b. The current approach.
  - c. Both approaches, with the accounts first converted into the functional currency using the temporal approach and then into U.S. dollars using the current approach.
  - d. Both approaches, with the accounts first converted into the functional currency using the current approach and then into U.S. dollars using the temporal approach.

**13.7 TRANSLATION OF FOREIGN FINANCIAL STATEMENTS ILLUSTRATED**

To illustrate the translation process, assume that on January 2, 2015, P Company, a U.S.-based company, acquired for 2,000,000 francs an 80% interest in SFr Company, a Swiss company. SFr maintains its books in francs, and they are in conformity with GAAP in the United States. The translation process will be illustrated under two different assumptions: (1) the Swiss franc is the functional currency, and (2) the U.S. dollar is the functional currency.

Exchange rates for the franc for the 2015 fiscal year are as follows:\*

| <i>Date</i>                     | <i>Spot Rate</i> |
|---------------------------------|------------------|
| January 2 (date of acquisition) | \$.150           |
| September 1                     | .160             |
| December 31                     | .170             |
| Average for the fourth quarter  | .165             |
| Average for the year            | .156             |

\*The exchange rate for Swiss francs is currently around \$0.80.

In translating the income statement accounts, it is assumed that revenues were generated and expenses were incurred evenly during the year. It is also assumed that the company uses the FIFO cost flow assumption, and that the ending inventory was acquired during the last quarter.

Entries made on the books of P Company to account for the investment and the preparation of a consolidated statements workpaper based on the translated account balances are illustrated in the appendix to this chapter which can be found online at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter).

## Functional Currency Is the Local Currency—Current Rate Method

Year-end financial statements at December 31 in francs for the subsidiary and the translation of the account balances into dollars using the current rate method are presented in Illustration 13-4. The translation rules are as follows:

| <b>Functional Currency</b>                                |  | <b>ILLUSTRATION 13-4</b>              |   |
|---|--|---------------------------------------|---|
| Is Local Currency   |  | <b>SFr Company</b>                    |   |
| (Swiss Franc)—Current                                     |  | <b>Workpaper to Translate Account</b> |   |
| Rate Method   |  | <b>Balances of Foreign Subsidy</b>    |   |
|   |  | <b>December 31, 2015</b>              |   |
|   |  | <i>Current Rate Method</i>            |   |
| <i>Combined Statement of Income and Retained Earnings</i> | <i>Adjusted Trial Balance (Francs)</i> | <i>Translation Rate</i>               | <i>Adjusted Trial Balance (Dollars)</i> |
| Sales   | 3,020,000                              | (A) \$.156                            | 471,120                                 |
| Cost of Goods Sold  | 1,850,000                              | (A) .156                              | 288,600                                 |
| Depreciation Expense                                      | 100,000                                | (A) .156                              | 15,600                                  |
| Other Expenses  | 655,000                                | (A) .156                              | 102,180                                 |
| Income Tax Expense  | 82,000                                 | (A) .156                              | 12,792                                  |
| Net Income  | 333,000                                |                                       | 51,948                                  |
| 1/2 Retained Earnings                                     | 480,000                                | (1)                                   | 72,000                                  |
|   | 813,000                                |                                       | 123,948                                 |
| Less: 9/1 Dividends Declared                              | 300,000                                | (H) .16                               | 48,000                                  |
| 12/31 Retained Earnings                                   | 513,000                                |                                       | 75,948                                  |
| <i>Balance Sheet</i>                                      |  |                                       |   |
| Cash  | 930,000                                | (C) .17                               | 158,100                                 |
| Accounts Receivable (net)                                 | 608,000                                | (C) .17                               | 103,360                                 |
| Inventories (FIFO cost)                                   | 830,000                                | (C) .17                               | 141,100                                 |
| Land  | 500,000                                | (C) .17                               | 85,000                                  |
| Buildings (net)   | 650,000                                | (C) .17                               | 110,500                                 |
| Equipment (net)   | 430,000                                | (C) .17                               | 73,100                                  |
| Total   | 3,948,000                              |                                       | 671,160                                 |
| Accounts Payable  | 640,000                                | (C) .17                               | 108,800                                 |
| Short-Term Notes Payable                                  | 635,000                                | (C) .17                               | 107,950                                 |
| Bonds Payable   | 900,000                                | (C) .17                               | 153,000                                 |
| Common Stock  | 960,000                                | (H) .15                               | 144,000                                 |
| Additional Paid-in Capital                                | 300,000                                | (H) .15                               | 45,000                                  |
| Retained Earnings   | 513,000                                |                                       | 75,948                                  |
| Total   | 3,948,000                              |                                       | 634,698                                 |
| Cumulative Translation Adjustment—                        |  | (B/A)                                 |   |
| Credit Balance*   |  |                                       | 36,462                                  |
| Total   |  |                                       | 671,160                                 |

\* Include as a component of stockholders' equity

(1) Retained earnings in dollars on January 2.

(A) Average exchange rate used to approximate the rate on the date these elements were recognized.

(H) Historical exchange rate.

(C) Current exchange rate.

(B/A) Balancing amount.

1. All assets and liabilities are translated from the local currency into the reporting currency using the current exchange rate (i.e., the spot rate on the balance sheet date).
2. Paid-in capital accounts are translated using the historical rate, but the date to which the historical rate pertains depends on whether the acquisition was accounted for as a

purchase or a pooling of interests. In a *purchase transaction*, the accounts are translated using the historical rate on the date the acquisition of the equity interest occurred. In the case of a *pooling of interests*, these accounts are translated using the historical rate(s) that existed on the date(s) that the foreign entity's capital transaction(s) occurred.

3. Components of the ending retained earnings are translated as follows:
  - a. The beginning retained earnings balance is set equal to the ending balance of last year. In this case, since this is the first year of acquisition, the balance is set equal to the January 2 balance of \$72,000 (480,000 francs  $\times$  \$.15).
  - b. As a component of equity, dividends are translated into dollars using the exchange rate in effect when the dividend was declared.
  - c. Net income or loss is carried forward from the translated income statement as discussed later.
  - d. The cumulative translation adjustment is a balancing amount in the balance sheet. (The adjustment is discussed in more detail in the next section.)
4. Revenue and expense accounts (including cost of goods sold and depreciation), gains, and losses are translated using the exchange rate when the elements were recognized during the period. Because separate translation of numerous transactions is usually impractical, the use of an appropriate average to translate revenue and expense accounts is permitted.

**An Analysis of the Translation Adjustment** When some accounts in a trial balance are translated using one rate and other accounts are translated using a different rate, an inequality will result between the total of the debit account balances and the total of the credit account balances. For example, in Illustration 13-4 the 608,000 francs debit balance in the accounts receivable account is translated to \$103,360 using the current exchange rate of \$.17, and the 608,000 franc credit included in the sales account balance is translated to \$94,848 (608,000 francs  $\times$  \$.156) using the average exchange rate for the period. On these transactions there is a translation adjustment credit of \$8,512, since the accounts receivable could be converted into \$103,360 at the balance sheet date, as opposed to \$94,848 at the time of the sale. A translation adjustment will also result when items that are translated at the current rate are included in two successive trial balances and the exchange rate changes.

In Illustration 13-4 the translation adjustment is a balancing amount that reconciles the total debit balances with the total credit balances after the individual accounts have been translated and is reported as a component of stockholders' equity. The translation adjustment for the period results from an entity's accounting exposure to exchange risk, which in an accounting sense is related to the set of accounts that are translated at the current rate. Fluctuations in the exchange rate have no effect on the translated amount of an account translated at a historical rate on two balance sheets.

The translation adjustment under the current rate method may be verified by a direct computation as in Illustration 13-5. Since all assets and liabilities are translated at the current rate under the current rate method, only net assets (assets minus liabilities) are exposed to currency fluctuations and thus result in a translation gain or loss. This net investment view of the firm recognizes that functional currency assets produce revenues in a foreign currency and can be an effective hedge of liabilities that require payment in the same foreign currency. Thus, equal amounts of functional currency assets and liabilities hedge one another and only net assets are exposed to exchange risk. Most firms will be in a net asset position, which results in a transaction gain (loss), when the direct exchange rate increases (decreases). Note that the steps shown in Illustration 13-5 provided a check for the current period change in the cumulative translation adjustment. To reconcile with the amount reported in the stockholders' equity section of the balance sheet, it is necessary to add (subtract) the cumulative translation adjustment reported in the prior period. To the extent that the adjustment is sometimes a gain and sometimes a loss, the cumulative amount may remain near zero. On the other hand, a series of adjustments in the same direction may result in a relatively large credit (debit) balance. Credit balances may be viewed as net cumulative gains, while debit balances reflect net cumulative losses.

**LO 7** The functional currency is the local currency.

## ILLUSTRATION 13-5

**Verification of the Translation Adjustment**  
**Current Rate Method Functional Currency—Swiss Franc**

|  | <i>Francs</i>    | <i>Translation<br/>Rate</i> | <i>Reporting<br/>Currency<br/>(Dollars)</i> |
|--|------------------|-----------------------------|---|
| 1/2 Exposed net asset position   | 1,740,000*       | \$.15                       | 261,000                                     |
| Adjustments for changes in net asset position during year                      |                  |                             |   |
| Net income for year  | 333,000          | .156                        | 51,948                                      |
| Dividends declared   | (300,000)        | .16                         | (48,000)                                    |
| Net asset position translated using rate in effect at date of each transaction |                  |                             | 264,948                                     |
| 12/31 Exposed net asset position   | <u>1,773,000</u> | .17                         | <u>301,410</u>                              |
| Change in cumulative translation adjustment during year—net increase           |                  |                             | 36,462                                      |
| 1/2 Cumulative translation adjustment <sup>†</sup>                             |                  |                             | <u>—0—</u>                                  |
| 12/31 Cumulative translation adjustment  |                  |                             | <u>36,462</u>                               |

\* A condensed balance sheet for SFr Company on January 2, 2015 was as follows:

|                    | <i>Francs</i>    |                            | <i>Francs</i>    |
|--------------------|------------------|----------------------------|------------------|
| Monetary Assets    | 1,100,000        | Monetary Liabilities       | 1,800,000        |
| Nonmonetary Assets |                  | Common Stock               | 960,000          |
| Inventory          | 760,000          | Additional Paid-in Capital | 300,000          |
| Fixed Assets       | 1,680,000        | Retained Earnings          | 480,000          |
| Total              | <u>3,540,000</u> | Total                      | <u>3,540,000</u> |

1/2 Net assets = 3,540,000 francs – 1,800,000 francs = 1,740,000 francs.  
The balance on acquisition date is zero.

The first column in Illustration 13-5 reconciles the net asset position at the beginning of the year to the net asset position at the end of the year. Note that only the transactions that affected stockholders' equity will cause a change in the net asset position. The Swiss francs balances in column 1 are translated into dollars using different exchange rates as follows. The beginning exposed net asset position is translated using the exchange rate in effect at the beginning of the period. The increases and decreases in the net asset position are translated using the exchange rate at the date the transactions were assumed to occur. The ending exposed net asset position is translated using the current exchange rate.

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The functional currency of the Company's Chinese subsidiaries is the Chinese Yuan Renminbi. Translation gains of \$9,274,169 and \$8,127,749 at December 31, 2010 and 2009, respectively are classified as an item of other comprehensive income in the stockholders' equity section of the consolidated balance sheet. During the year ended December 31, 2010 and 2009 other comprehensive income in the consolidated statements of operations and other comprehensive income included translation gains (loss) of \$1,146,420 and \$10,745, respectively.<sup>9</sup>

**Interpretation of Results** In the preceding illustration, the current rate method was used to translate the foreign currency financial statements when the francs, as opposed to the dollar, was identified as the functional currency. As noted earlier, one of the objectives of translation is to retain in the translated statements the financial results and relationships of the financial statements as measured in the functional currency. With respect to financial results, a net income is reported in both the functional currency statements and the

<sup>9</sup> Bodisen Biotech, Inc. 10-K, April 15, 2011.

**RELATED CONCEPTS**

In FASB Concept No. 3, *comprehensive income* is defined as the change in equity during a period from transactions with nonowners. Because a change in the exchange rate does not affect the net cash flows generated by the foreign operations (when the functional currency is not the U.S. dollar), the translation adjustment is reported separately from income; it is reported as a component of other comprehensive income.

**Lo 9** Comprehensive income and foreign currency translation.

translated statements. A few selected financial ratios are computed here to show that the current rate method retains the financial relationships:

|                         | <i>Swiss Francs</i>                    | <i>Dollars</i>                     |
|-------------------------|--|------------------------------------|
| Current ratio           | $\frac{2,368,000}{1,275,000} = 1.86$   | $\frac{402,560}{216,750} = 1.86$   |
| Debt to equity          | $\frac{2,175,000}{1,773,000} = 1.23$   | $\frac{369,750}{301,410} = 1.23$   |
| Gross profit percentage | $\frac{1,170,000}{3,020,000} = 38.7\%$ | $\frac{182,520}{471,120} = 38.7\%$ |
| Net income to sales     | $\frac{333,000}{3,020,000} = 11.0\%$   | $\frac{51,948}{471,120} = 11.0\%$  |

Another objective of translation is to provide information that is generally compatible with the expected economic effects of a change in exchange rates. In the illustration, the exchange rate increased from \$.15 to \$.17 during the period, a favorable change for a U.S. parent company holding an investment in an exposed net asset position.

Translation of the foreign currency financial statements using the current rate approach resulted in a \$36,462 increase in stockholders' equity.

## Statement of Comprehensive Income and Statement of Shareholders' Equity

Opinions remain divided as to the appropriateness of excluding currency translation adjustments from net income, as currently done under the "current" method. These adjustments represent one of several items of concern to the FASB because of their frequency of occurrence and relative importance, coupled with their exclusion from reported earnings. The FASB labeled such items as "other comprehensive income." In the early 1980s, the FASB defined comprehensive income as including *all* changes in equity during a period except those resulting from investments by owners and distributions to owners. Thus, comprehensive income consists of net income plus other items such as unrealized gains (losses) on available-for-sale securities and certain pension costs related to minimum pension liability that are excluded from net income under current GAAP. More recently, the FASB added the requirement that a statement of comprehensive income must be included in a complete set of financial statements.

In Illustration 13-6, we show the statement of comprehensive income and the reconciliation of changes in all shareholders' equity accounts for the year 2015 for SFr Company in dollars. Of course, these amounts would be added to the parent's balances for preparation of a consolidated statement of comprehensive income (and a consolidated statement of shareholders' equity).

## Functional Currency Is the U.S. Dollar—Temporal Method

**Lo 8** The functional currency is the U.S. dollar.

The temporal method is used to remeasure the accounts of a foreign entity when the entity operates in a highly inflationary economy or its books are maintained in a currency other than its functional currency. The objective of the remeasurement process is to produce the same results as if the transactions of the foreign entity had been recorded initially in its functional currency. To accomplish this, the historical exchange rate is used to translate accounts carried at historical cost, while the current exchange rate is used to translate other accounts. The remeasurement process is as follows:

1. Monetary assets and liabilities (for example, cash, receivables, and most liabilities) that are expressed in the balance sheet at current values are translated using the current

## ILLUSTRATION 13-6

| Functional Currency             | SFr Company                    |  |  |                 |  |
|---------------------------------|--------------------------------|--|--|-----------------|--|
| Is Local Currency               | Comprehensive Income Statement |  |  |                 |  |
| (Franc)—Current                 | for the Year Ended             |  |  |                 |  |
| Rate Method                     | December 31, 2015              |  |  |                 |  |
| Net income                      |                                |  |  | \$51,948        |  |
| Other comprehensive income:     |                                |  |  |                 |  |
| Currency translation adjustment |                                |  |  | <u>36,462</u>   |  |
| Comprehensive income            |                                |  |  | <u>\$88,410</u> |  |

| SFr Company                          |                     |                                       |                              |   |                  |
|--------------------------------------|---------------------|---------------------------------------|------------------------------|---|------------------|
| Statement of Shareholders' Equity    |                     |                                       |                              |   |                  |
| for the Year Ended December 31, 2015 |                     |                                       |                              |   |                  |
|                                      | <i>Common Stock</i> | <i>Additional<br/>Paid-in Capital</i> | <i>Retained<br/>Earnings</i> | <i>Accumulated Other<br/>Comprehensive<br/>Income</i> | <i>Total</i>     |
| Balance, 1/2/15                      | \$144,000           | \$45,000                              | \$72,000                     | 0   | \$261,000        |
| Comprehensive income:                |                     |                                       |                              |   |                  |
| Net income                           |                     |                                       | 51,948                       |   | 51,948           |
| Other comprehensive income:          |                     |                                       |                              |   |                  |
| Currency translation adjustment      |                     |                                       |                              | 36,462  | <u>36,462</u>    |
| <i>Total comprehensive income</i>    |                     |                                       |                              |   | <u>88,410</u>    |
| Dividends declared                   |                     |                                       | <u>(48,000)</u>              |   | <u>(48,000)</u>  |
| Balance, 12/31/15                    | <u>\$144,000</u>    | <u>\$45,000</u>                       | <u>\$75,948</u>              | <u>\$36,462</u>                                       | <u>\$301,410</u> |

rate. (An asset or a liability is monetary if it represents a claim to a fixed amount of dollars. All other assets and liabilities are nonmonetary.)

2. Nonmonetary assets and liabilities carried at past exchange prices (historical cost) are translated at historical exchange rates, which results in translating these amounts to the equivalent number of dollars on the date the transaction took place.
3. Nonmonetary assets and liabilities carried at current or future exchange prices (for example, marketable securities or inventory carried at replacement cost) are translated at the current exchange rate.
4. Paid-in capital accounts are translated using the historical exchange rate at the date of acquisition, or at the date the original capital transaction(s) occurred if subsequent to acquisition.
5. The components that make up the ending retained earnings balance are translated as follows:
  - a. The beginning balance is set equal to the ending balance of the last period.
  - b. Dividends are translated at the rate existing on the date of the declaration.
  - c. Net income or loss is carried forward from the translated income statement.
6. Revenues and expenses related to assets and liabilities translated at historical rates (primarily inventory cost and depreciation) are translated at the respective historical rates used to translate the related asset or liability.
7. Other revenue and expense accounts are translated in a manner that produces approximately the same results as if the individual transactions were translated at the rate in effect when the transaction occurred; generally a weighted average rate is used for all transactions for simplicity's sake.
8. The translation gain or loss is reported in the income statement.

**ILLUSTRATION 13-7****Nonmonetary Items Remeasured Using the Historical Rate****Balance Sheet Items**

Equity securities carried at cost (use current rate for those carried at fair value)  
 Inventories carried at cost (use current rate for those carried at fair value)  
 Prepaid expenses such as insurance, advertising, and rent  
 Property, plant, and equipment  
 Accumulated depreciation on property, plant, and equipment  
 Patents, trademarks, licenses, and formulas  
 Goodwill  
 Other intangible assets  
 Deferred charges and credits, except deferred income taxes and policy acquisition costs for life insurance companies  
 Common stock  
 Preferred stock carried at issuance price

**Income Statement Items**

Cost of goods sold  
 Depreciation of property, plant, and equipment  
 Amortization of intangible items such as patents, licenses, etc.  
 Amortization of policy acquisition costs for life insurance companies.

Source: FASB ASC para. 830-10-45-15.

A list of some common nonmonetary items that should be remeasured using the historical rate is presented in Illustration 13-7. Remeasurement of the nonmonetary accounts using historical exchange rates normally requires that the foreign entity maintain detailed records identifying the purchase date and the exchange rate.

The December 31 trial balance of SFr Company in francs and the remeasurement of the accounts using the temporal method are shown in Illustration 13-8. The first step is to translate the individual accounts, except for the ending retained earnings balance of 513,000 francs, using the appropriate exchange rate. The ending retained earnings balance of \$76,660 is computed as a balancing amount required to equate the firm's liabilities and stockholders' equity with the total assets. Next, the ending retained earnings is carried to the combined statement of income and retained earnings where the translation loss of \$11,918 is the balancing amount in the combined statement.

**An Analysis of the Translation Gain or Loss** The translation loss in the temporal method of translation is derived by a direct calculation in Illustration 13-9. Procedurally, the approach is based on the same underlying concept as that used to verify the translation adjustment reported when the current rate method was used. That is, the translation loss is related to those accounts translated at the current exchange rate. However, in applying the temporal method, in general, monetary items only are translated at the current rate while most nonmonetary items are translated at historical rates. Accordingly, the dollar value of monetary items is affected by variations in the exchange rate, giving rise to a gain or loss. On the other hand, nonmonetary items will not result in a gain or loss because each item is translated in successive balance sheets using its respective historical exchange rate. As a result, as long as these items are reported in the balance sheet, they will retain their original translated dollar amounts (less accumulated amortization), even though the exchange rate may have changed.

A translation loss results from application of the temporal method, as opposed to the credit translation adjustment calculated on the exposed assets using the current rate method, because SFr Company maintained a net monetary liability position throughout the year. An increasing exchange rate will produce a translation loss on an exposed net monetary liability position.



| Functional Currency                                       |                                 | ILLUSTRATION 13-8              |                                  |                                |
|---|---------------------------------|--------------------------------|----------------------------------|--------------------------------|
| Is U.S. Dollar—   |                                 | SFr Company                    |                                  |                                |
| Temporal Method   |                                 | Workpaper to Translate Account |                                  |                                |
|   |                                 | Balances of Foreign Subsidiary |                                  |                                |
|   |                                 | December 31, 2015              |                                  |                                |
|   |                                 | Temporal Method                |                                  |                                |
|   | Adjusted Trial Balance (Francs) | Exchange Rate                  | Adjusted Trial Balance (Dollars) |                                |
| <b>Balance Sheet</b>                                      |                                 |                                |                                  |                                |
| Cash  | 930,000                         | (C) .17                        | 158,100                          |                                |
| Accounts Receivable (net)                                 | 608,000                         | (C) .17                        | 103,360                          |                                |
| Inventories (FIFO cost)                                   | 830,000                         | Sch. 1                         | 136,950                          |                                |
| Land  | 500,000                         | (H) .15                        | 75,000                           |                                |
| Buildings (net)   | 650,000                         | (H) .15                        | 97,500                           |                                |
| Equipment (net)   | 430,000                         | (H) .15                        | 64,500                           |                                |
| Total   | <u>3,948,000</u>                |                                | <u>635,410</u>                   |                                |
| Accounts Payable  | 640,000                         | (C) .17                        | 108,800                          |                                |
| Short-Term Notes Payable                                  | 635,000                         | (C) .17                        | 107,950                          |                                |
| Bonds Payable   | 900,000                         | (C) .17                        | 153,000                          |                                |
| Common Stock  | 960,000                         | (H) .15                        | 144,000                          |                                |
| Additional Paid-in Capital                                | 300,000                         | (H) .15                        | 45,000                           |                                |
| Retained Earnings   | 513,000                         | (B/A)                          | 76,660                           |                                |
| Total   | <u>3,948,000</u>                |                                | <u>635,410</u>                   |                                |
| <b>Combined Statement of Income and Retained Earnings</b> |                                 |                                |                                  |                                |
| Sales   | 3,020,000                       | (A) .156                       | 471,120                          | ① Carry down retained earnings |
| Cost of Goods Sold  | 1,850,000                       | Sch. 1                         | 276,570                          |                                |
| Depreciation Expense                                      | 100,000                         | (H) .15                        | 15,000                           |                                |
| Other Expenses  | 655,000                         | (A) .156                       | 102,180                          |                                |
| Income Tax Expense  | 82,000                          | (A) .156                       | 12,792                           |                                |
| Translation (Remeasurement) Loss                          | —                               | (B/A)                          | 11,918                           |                                |
| Net Income  | 333,000                         |                                | 52,660                           |                                |
| 1/2 Retained Earnings                                     | 480,000                         | (1)                            | 72,000                           |                                |
| Less: 9/1 Dividends Declared                              | 300,000                         | (H) .16                        | 48,000                           |                                |
| 12/31 Retained Earnings                                   | <u>513,000</u>                  |                                | <u>76,660</u>                    |                                |

(1) Retained earnings in dollars on January 2.

(A) Average exchange rate used to approximate the rate on the date these elements were recognized.

(H) Historical exchange rate.

(C) Current exchange rate.

(B/A) Balancing amount.

### Schedule 1

Translation of cost of goods sold

|                               | Francs           | Exchange Rate | Dollars        |
|-------------------------------|------------------|---------------|----------------|
| Beginning inventory (assumed) | 760,000          | .15           | 114,000        |
| Purchases (assumed)           | 1,920,000        | .156          | 299,520        |
|                               | 2,680,000        |               | 413,520        |
| Less: Ending inventory        | 830,000          | .165          | 136,950        |
| Cost of goods sold            | <u>1,850,000</u> |               | <u>276,570</u> |

Steps to determine translation (remeasurement) gain or loss using "plug" technique:

① Carry down retained earnings.

② Complete income statement down to translation gain or loss.

③ Beginning with ending retained earnings, work back to net income.

|                          |   |           |   |                       |   |            |
|--------------------------|---|-----------|---|-----------------------|---|------------|
| Ending Retained Earnings | + | Dividends | − | 1/2 Retained Earnings | = | Net Income |
| \$76,660                 | + | \$48,000  | − | \$72,000              | = | \$52,660   |

④ Compute translation gain or loss in dollars:

$$\begin{aligned} \text{Translation gain (loss)} &= \text{Net Income} - (\text{Sales} - \text{Expenses}) \\ &= \$52,660 - (\$471,120 - \$406,542) = (\$11,918) \end{aligned}$$

**ILLUSTRATION 13-9****Verification of the Translation (Remeasurement)****Loss****Temporal Method****Functional Currency—U.S. Dollar**

|   | <i>Francs</i>              | <i>Exchange<br/>Rate</i> | <i>Reporting<br/>Currency<br/>(U.S. Dollar)</i> |
|---|----------------------------|--------------------------|---|
| 1/2 Exposed net monetary liability position   | 700,000*                   | \$.15                    | 105,000   |
| Adjustments for changes in net monetary position during the year:                           |                            |                          |   |
| Less: Increase in cash and receivables from sales   | (3,020,000)                | .156                     | (471,120)                                       |
| Add: Decrease in monetary assets or increase in monetary liabilities:                       |                            |                          |   |
| Purchases   | 1,920,000                  | .156                     | 299,520   |
| Other expenses  | 655,000                    | .156                     | 102,180   |
| Income taxes  | 82,000                     | .156                     | 12,792  |
| Dividends declared  | <u>300,000</u>             | .16                      | <u>48,000</u>                                   |
| Net monetary liability position translated using rate in effect at date of each transaction |                            |                          | 96,372  |
| 12/31 Exposed net monetary liability position   | <u>637,000<sup>†</sup></u> | .17                      | <u>108,290</u>                                  |
| Translation (remeasurement) gain (loss)   |                            |                          | <u>(11,918)</u>                                 |

\*The January 2, 2015, condensed balance sheet is given in Illustration 13-5.

|                                 | <i>Francs</i>    |
|---------------------------------|------------------|
| Monetary liabilities            | 1,800,000        |
| Less: Monetary assets           | <u>1,100,000</u> |
| Net monetary liability position | <u>700,000</u>   |

<sup>†</sup>See Illustration 13-8.

|  | <i>Francs</i>    |
|--|------------------|
| Monetary liabilities (640,000 + 635,000 + 900,000) | 2,175,000        |
| Less: Monetary assets (930,000 + 608,000)          | <u>1,538,000</u> |
| Net monetary liability position                    | <u>637,000</u>   |

**Comparison of the Two Methods**

In translating the balance sheet, the differences and similarities between the temporal and current rate methods are highlighted in the following schedule:

|  | <i>Balance Sheet Translation<br/>Rates</i> |                            |
|--|--|----------------------------|
|  | <i>Current Rate<br/>Method</i>             | <i>Temporal<br/>Method</i> |
| Monetary asset                               | Current                                    | Current                    |
| Nonmonetary asset carried at historical cost | Current                                    | Historical                 |
| Nonmonetary asset carried at market value    | Current                                    | Current                    |
| Monetary liability                           | Current                                    | Current                    |
| Nonmonetary liability                        | Current                                    | Historical                 |

The two methods differ primarily in terms of the appropriate rate to use for nonmonetary items carried at historical cost. In the income statement, a net income of \$51,948 resulted when the Swiss franc was the functional currency (Illustration 13-4), whereas a net income of \$52,660 was reported when the U.S. dollar was the functional currency (Illustration 13-8). There are two reasons for this difference. First, when the foreign currency is strengthening against the dollar, cost of goods sold and depreciation expense are usually

**IN  
THE  
NEWS** Foreign currency translation had a negative impact of \$0.01 and \$0.05 on diluted earnings per share for the quarter and year ended December 31, 2013, respectively.<sup>10</sup>

<sup>10</sup> McDonalds 10-K 12/31/2013.

greater when the current rate method of translation is used. Second, a translation loss of \$11,918 is reported in the dollar functional currency income statement, whereas a credit adjustment of \$36,462 is reported in stockholders' equity in the franc functional currency statement.

## 13.8 FINANCIAL STATEMENT DISCLOSURE

Companies are required to disclose certain items, as follows:

1. The aggregate translation gain or loss included in the determination of net income for the period, including gains or losses related to forward contracts, should be disclosed in either the financial statements or notes thereto.
2. An analysis of the cumulative translation adjustment equity account should be provided in a separate statement or note or as part of a statement of changes in equity. The analysis should include:
  - a. The beginning and ending cumulative translation adjustment amounts.
  - b. The aggregate adjustment for the period resulting from the translation of foreign currency statements and gains and losses from certain hedging activities and inter-company long-term investment transactions.
  - c. The amount of income taxes for the period allocated to the cumulative translation adjustment equity account.
  - d. The amounts transferred from the cumulative translation adjustment equity account and included in the determination of net income for the period as a result of the sale of part or all of an investment in a foreign entity.
3. Exchange rate changes that occur after the balance sheet date and their effect on unsettled foreign currency transactions, if significant.

**Lo10** Required disclosures.

### RELATED CONCEPTS

This presentation is believed to improve the *comparability* of financial statements because all entities will present the components of comprehensive income in a similar manner.

U.S. companies must also comply with the provisions of the Foreign Corrupt Practices Act (FCPA). The FCPA was enacted in 1977 in response to disclosures by more than 400 U.S. corporations of questionable or improper payments made to foreign officials to elicit their support for business arrangements with the U.S. firms. An extensive investigation by the SEC revealed that in a significant number of cases, the foreign payments had been made to appear in the corporate records as a normal operating expense and that inadequate documentation precluded the verification of the purpose of the payment.

The FCPA contains two major sections: an antibribery section and an accounting standards section. The antibribery provision makes it a criminal offense to offer a bribe to a foreign government official or foreign political official. The accounting standards section of the Act is intended to help prevent the concealment of foreign corrupt payments.

In February 1978 the SEC issued *Accounting Series Release No. 242*, which emphasized the importance of the provisions of the Act and the need to comply with its requirements. In the release the SEC stated that although the Act imposed new requirements with respect to the maintenance of internal accounting controls and outlawed certain foreign corrupt practices, it did not alter the existing obligation to adequately disclose questionable and illegal corporate payments and practices. The SEC went on to state that “registrants have a continuing obligation to disclose all material information and all information necessary to prevent other disclosures made from being misleading with respect to such transactions.”

In one of the current joint projects of the FASB and the IASB, the Boards are proposing a single statement of comprehensive income (in place of the current alternatives for presenting comprehensive income—in the statement of owners' equity, in a statement separate from the income statement, or as part of the income statement). Further, the Boards propose that an entity should present foreign currency transaction gains and losses, including the components of any net gain or loss arising on remeasurement

into the functional currency, in the same section and category as the assets and liabilities that give rise to the gains or losses. Also see Chapter 11 for an expanded discussion of the proposed changes in financial statement presentation.

**TEST YOUR KNOWLEDGE****13.3**

**NOTE:** Solutions to *Test Your Knowledge* questions are found at the end of each chapter before the end-of-chapter questions.

**Multiple Choice**

1. Under the current method of currency translation, which of the following balance sheet accounts is translated at historical exchange rates?
  - a. Cash
  - b. Accounts Receivable
  - c. Bonds Payable
  - d. Common Stock

---

## 13.9 HISTORICAL DEVELOPMENTS OF ACCOUNTING STANDARDS

The expansion of international business has been of particular concern to accountants because of developments in the worldwide monetary system during the 1970s. These developments, coupled with the existence of a number of acceptable methods of translating foreign financial statements and reporting gains or losses on foreign currency fluctuations, led the FASB to place the topic on its agenda in 1973. The result was the issuance in October 1975 of *Statement of Financial Accounting Standards No. 8*, “Accounting for the Translation of Foreign Currency Transactions and Foreign Currency Financial Statements.”

One objective of *Statement No. 8* was to provide uniform accounting standards for the translation of foreign financial statements. A second objective was to fill the gap in authoritative literature on accounting for transactions with foreign companies. The *Statement* was not well received; it proved to be one of the most controversial statements issued by the FASB. Major criticism of the statement focused on the following points:

1. Reporting translation gains and losses in current income often resulted in unnecessary fluctuations in reported income.
2. Translation required by the statement sometimes resulted in reporting a loss when the economic effects of a rate change were expected to be favorable, and a gain when the economic effects were expected to be unfavorable.
3. Certain effective hedges of foreign exchange risk were ignored.

Concerned with the increasing criticism leveled against *Statement No. 8*, the Board added to its agenda a project to reconsider it in January 1979. As a result of this project, an exposure draft entitled “Foreign Currency Translation” was issued in August 1980. On the basis of more than 360 comment letters and views expressed in a public hearing, the Board issued a revised exposure draft. These series of developments culminated in the issuance of *SFAS No. 52*, which was discussed in this and the previous chapter. Although few would contend that the accounting as prescribed under *SFAS No. 52* is flawless, it has met with generally less criticism than *SFAS No. 8*.

Because of the euro, there are fewer instances where it is necessary to use both remeasurement and translation for a single subsidiary (i.e., the approach used when the functional currency is the currency of a third country). Currently, at least 12 European nations are using the euro—Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, and Spain. However, euros are accepted in England, Sweden, and Denmark. Figure 13-10 lists the spot rates for the euro against 35 other currencies.

## ILLUSTRATION 13-10

## Spot Rates Quoted Against the Euro on April 14, 2014

|                   |        |                       |          |
|-------------------|--------|-----------------------|----------|
| U.S. dollar       | 1.3826 | Brasilian real        | 3.0683   |
| Japanese yen      | 142.03 | Canadian dollar       | 1.5167   |
| Bulgarian lev     | 1.9558 | Chinese yuan renminbi | 8.652    |
| Czech koruna      | 27.434 | Hong Kong dollar      | 10.7196  |
| Danish krone      | 7.4646 | Indonesian rupiah     | 15967.87 |
| Pound sterling    | 0.8222 | Israeli shekel        | 4.8028   |
| Hungarian forint  | 309.18 | Indian rupee          | 83.5436  |
| Lithuanian litas  | 3.4528 | South Korean won      | 1423.99  |
| Polish zloty      | 4.1994 | Mexican peso          | 18.0903  |
| New Romanian leu  | 4.4497 | Malaysian ringgit     | 4.5059   |
| Swedish krona     | 9.0555 | New Zealand dollar    | 1.6191   |
| Swiss franc       | 1.22   | Philippine peso       | 61.448   |
| Norwegian krone   | 8.281  | Singapore dollar      | 1.7368   |
| Croatian kuna     | 7.609  | Thai baht             | 44.643   |
| Russian rouble    | 49.157 | South African rand    | 14.6271  |
| Turkish lira      | 2.9321 |                       |          |
| Australian dollar | 1.4916 |                       |          |

Source: European Central Bank

## SUMMARY

- 1 Distinguish between the current exchange rate and the historical exchange rate.** The current exchange rate is the spot rate in effect at the end of the accounting period (i.e., the balance sheet date). The historical exchange rate is the spot rate in effect on the date a transaction takes place.
- 2 Understand the objectives of financial statement translation.** The objectives are to provide information that is compatible with the exposed economic effects of an exchange rate change on a firm's cash flows and equity, and to reflect in the consolidated statements the financial results and relationships of the individual entities as measured in their functional currencies in conformity with U.S. GAAP.
- 3 Identify the functional currency of a foreign entity.** The functional currency is the currency of the primary economic environment in which the foreign entity conducts its operations and generates and expends its cash.
- 4 Compare the two methods used to convert the financial statements of a foreign entity into U.S. dollars.** Under the **current method**, all assets and liabilities are translated using the current exchange rate on the balance sheet date. For income statement accounts (revenues and expenses), a weighted-average exchange rate is used to approximate the results that would be obtained from translation of each transaction. Under the **temporal method**, monetary assets and liabilities are translated at the current exchange rate. Assets and liabilities carried at historical cost are translated at historical exchange rates. Assets and liabilities carried at current values (such as inventory carried at market under the lower of cost or market rule) are translated at the current exchange rate. Revenues and expenses that relate to assets and liabilities translated at historical rates (such as depreciation expense, amortization expense, and the cost of sales) are translated at the historical rates used for the related assets and liabilities. Other revenues and expenses are converted using a weighted-average rate.
- 5 Distinguish between the circumstances under which each of the two methods is appropriate under current GAAP.** The temporal method (also referred to as remeasurement) is appropriate when the functional currency is the U.S. dollar or when the foreign environment is highly inflationary. The current method (also referred to as translation) is appropriate when the functional currency is the local currency. If the functional currency is the currency of a third country, it is necessary to remeasure the accounts *first* into the functional currency using the temporal method and *then* to translate the accounts into U.S. dollars (the reporting currency) using the current method.
- 6 Explain the factors involved in translating the statements of a foreign entity operating in a highly inflationary economy.** The currency of a country experiencing high inflation will weaken substantially against the currency of a more stable economy. Thus, using the current rate method to translate inventories and fixed assets of foreign operations in highly inflationary economies often results in a substantial reduction in the translated amounts. Because the currency of the country has lost its utility as a store of value and cannot be a functional measuring unit, the Board prescribed that the financial statements be remeasured as if the functional currency were the reporting currency (U.S. dollar).
- 7 Translate the statements of a foreign entity when the functional currency is the local currency.** The accounts are translated into dollars using the current rate method. The resulting translation adjustment is recorded as a separate component of stockholders equity.
- 8 Translate the statements of a foreign entity when the functional currency is the U.S. dollar.** When the foreign entity does not maintain its records in its functional currency, the accounts are remeasured into the functional currency (dollars) using the temporal method. The resulting translation adjustment is reported in the current period's income statement.

**9** *Understand the concept of comprehensive income in the context of foreign currency translation.* The currency translation adjustment under the “current” method represents one of several items of concern to the FASB because of their frequency of occurrence and relative importance, coupled with their exclusion from reported earnings. These items are, however, included in comprehensive income, defined as *all* changes in equity during a period except those resulting from investments by owners and distributions to owners. A statement of

comprehensive income must be included in a complete set of financial statements.

**10** *Identify the disclosure requirements for firms with foreign entities.* Companies must disclose: (1) the aggregate translation gain or loss included in earnings for the period, including gains or losses related to forward contracts; (2) an analysis of the cumulative translation adjustment equity account; and (3) the effect of any significant exchange rate changes that occur after the balance sheet date.

Appendix 13A, “Accounting for a Foreign Affiliate and Preparation of Consolidated Statements Workpaper Illustrated,” is available online at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter).

### TEST YOUR KNOWLEDGE SOLUTIONS

**13.1** 1. c 2. d    **13.2** 1. c    **13.3** 1. d

### QUESTIONS

(The letter A or B after a question, exercise, or problem refers to the Appendix which can be found at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter))

- LO 2** 1. What requirements must be satisfied if a foreign subsidiary is to be consolidated?
- LO 3** 2. What is meant by an entity’s functional currency and what are the economic indicators identified by the FASB to provide guidance in selecting the functional currency?
- LO 5** 3. The \_\_\_\_\_ is the functional currency of a foreign subsidiary with operations that are relatively self-contained and integrated within the country in which it is located. In such cases, the \_\_\_\_\_ method of translation would be used to translate the accounts into dollars.
- LO 5** 4. The \_\_\_\_\_ is the functional currency of a foreign subsidiary that is a direct and integral component or extension of a U.S. parent company. In such cases, the \_\_\_\_\_ method of translation is used to translate (remeasure) the accounts into dollars.
- LO 6** 5. Which method of translation is used to convert the financial statements when a foreign subsidiary operates in a highly inflationary economy?
- LO 4** 6. Define remeasurement.
- LO 4** 7. Under the current rate method, how are assets and liabilities that are stated in a foreign currency translated?
- LO 4** 8. Under the current rate method, describe how the various balance sheet accounts are translated (including the equity accounts) and how this translation affects the computation of various ratios (such as debt to equity or the current ratio). In particular, discuss whether or not the ratios will change when computed in local currencies and

compared to their calculations (after translation) using the parent’s currency.

9. What is the objective of the temporal method of translation? **LO 4**
10. Assuming that the temporal method is used, how are revenue and expense items in foreign currency financial statements converted? **LO 4**
11. A translation adjustment results from the process of translating financial statements of a foreign subsidiary from its functional currency into dollars. Where is the translation adjustment reported in the financial statements if the current rate method is used to translate the accounts? **LO 7**

### Business Ethics

The Shady Tree Company is preparing to announce their quarterly earnings numbers. The company expects to beat the analysts’ forecast of earnings by at least 5 cents a share. In anticipation of the increase in stock value and before the release of the earnings numbers, the company issued stock options to the top executives in the firm, with the option price equal to today’s market price.

1. This type of executive stock option is often referred to as “spring-loading.” Do you think this practice should be allowed? Does it provide information about the integrity of the firm or is this just good business practice?
2. Do you think this practice violates the insider trading rules?

## ANALYZING FINANCIAL STATEMENTS

### AFS13-1 Foreign Currency Translation

Red Hat, Inc. reported comprehensive income from 2008 to 2010 as follows (\$ thousands):

|   | <u>2008</u>     | <u>2009</u>     | <u>2010</u>      |
|---|-----------------|-----------------|------------------|
| Net income  | \$78,721        | \$87,253        | \$107,278        |
| Unrealized loss on available-for-sale investments | (272)           | (988)           | (2,266)          |
| Foreign currency translation                      | 8,609           | (8,283)         | (309)            |
| Comprehensive income                              | <u>\$87,058</u> | <u>\$77,982</u> | <u>\$104,403</u> |

#### Required:

- A. Assuming that Red Hat has not purchased or sold any available-for-sale securities, what has happened to the value of the available-for-sale investments from 2008 to 2010? Is this change in value reported on the income statement?
- B. Which method does Red Hat use to translate foreign subsidiaries? Why?
- A. Explain the change in the translation adjustment from 2008 to 2010.

### AFS13-2 Foreign Currency Translation

MF Global Holdings Ltd. reported items relating to foreign currency translation in several places in its 2011 10-K report. Included in general and other expenses on the 2011, 2010, and 2009 income statements respectively were translation gains or losses of \$441, (\$15,635), and \$12,614, respectively (\$ in thousands).

Also, the firm reported comprehensive income as follows:

| <b>Comprehensive Income (\$ in thousands)</b> | <u>2011</u>       | <u>2010</u>        | <u>2009</u>       |
|---|-------------------|--------------------|-------------------|
| Net loss                                      | \$(78,815)        | \$(135,278)        | \$(48,082)        |
| Other comprehensive income adjustments:       |                   |                    |                   |
| Foreign currency translation adjustment       | 9,056             | 22,528             | (27,667)          |
| Minimum pension liability adjustment          | 963               | (2,763)            | (3,324)           |
| Comprehensive loss                            | <u>\$(68,796)</u> | <u>\$(115,513)</u> | <u>\$(79,073)</u> |

#### Required:

- A. Why does MF Global Holdings show a translation adjustment on the income statement and also on the statement of comprehensive income?
- B. Can you explain the change in the translation adjustment from 2009 to 2010 on the statement of comprehensive income?

### AFS13-3 Functional Currency

On May 24, 2011, Invitel Holdings announced its financial results for the quarter ended March 31, 2011. The results reflect the consolidated financial results of Magyar Telecom B.V. and its subsidiaries. The reporting currency is the euro; however, the functional currency is the Hungarian forint (the currency of the primary economic environment in which the Company operates). When comparing the financial results for the quarter ended March 31, 2011, to the financial results for the quarter ended March 31, 2010, the reported results in euros have been affected by the difference between the average HUF/EUR exchange rates. The Hungarian forint depreciated against the euro by 1% with an average HUF/EUR exchange rate of 272.48 during the quarter ended March 31, 2011, compared to the average HUF/EUR exchange rate of 268.57 during the quarter ended March 31, 2010.

#### Required:

Explain how the change in the exchange rate will affect Invitel's consolidated financial statements.

### AFS13-4 Functional Currency

Ivanhoe Energy, a Canadian company, incurs net foreign exchange adjustments in 2010. The U.S. dollar is the functional currency. In 2010, the Canadian dollar continued to strengthen relative to the U.S. dollar. Ivanhoe Energy raised \$150 million in Canadian dollars in a private placement in the

first quarter of 2010. In addition, Ivanhoe has \$40 million in debt maintained in Canadian dollars. While the company uses Canadian GAAP, it provides an income statement using U.S. GAAP. The following partial income statement using U.S. GAAP is available:

| <b>Income Statement (U.S. GAAP)</b>   |                              |                              |
|---------------------------------------|------------------------------|------------------------------|
| <i>Revenue</i>                        | <u>2010</u>                  | <u>2009</u>                  |
| Oil                                   | \$21,720                     | \$24,968                     |
| Gain (loss) on derivative instruments | 15,017                       | (7,841)                      |
| Interest                              | <u>208</u>                   | <u>25</u>                    |
| Total Revenue                         | 36,945                       | 17,152                       |
| <br><i>Expenses</i>                   |                              |                              |
| Operating                             | 9,503                        | 10,191                       |
| General and administrative            | 26,260                       | 21,693                       |
| Business and technology development   | 10,615                       | 9,651                        |
| Depletion and depreciation            | 5,103                        | 9,294                        |
| Foreign exchange                      | (3,290)                      | 5,066                        |
| Interest and financing                | 24                           | 856                          |
| Impairment of intangible assets       | <u>          </u>            | <u>923</u>                   |
| Total Expenses                        | <u>48,215</u>                | <u>57,674</u>                |
| <br>Loss from continuing operations   | <br><u><u>\$(11,270)</u></u> | <br><u><u>\$(40,522)</u></u> |

**Required:**

- A. Which method does Ivanhoe use to translate the financial statements? Explain your answer.
- B. Explain how the change in the exchange rate is consistent with numbers reported on the income statement.

**EXERCISES**

**EXERCISE 13-1 Identifying the Exchange Rate LO 5**

Accounts are listed below for a foreign subsidiary that maintains its books in its local currency. The equity interest in the subsidiary was acquired in a purchase transaction. In the space provided, indicate the exchange rate that would be used to translate the accounts into dollars assuming that the functional currency was identified (a) as the U.S. dollar and (b) as the foreign entity’s local currency. Use the following letters to identify the exchange rate:

- H—historical exchange rate
- C—current exchange rate
- A—average exchange rate for the current period

| <i>Account</i>                            | <i>Exchange Rate if the Functional Currency Is:</i> |                       |
|---|---|-----------------------|
|   | <u>U.S. Dollar</u>                                  | <u>Local Currency</u> |
| Cash                                      | _____   | _____                 |
| Accounts receivable                       | _____   | _____                 |
| Inventory carried at cost                 | _____   | _____                 |
| Inventory carried at market               | _____   | _____                 |
| Prepaid rent                              | _____   | _____                 |
| Property, plant, and equipment            | _____   | _____                 |
| Goodwill                                  | _____   | _____                 |
| Accounts payable                          | _____   | _____                 |
| Bonds payable                             | _____   | _____                 |
| Unamortized premium on bonds payable      | _____   | _____                 |
| Preferred stock carried at issuance price | _____   | _____                 |
| Common stock                              | _____   | _____                 |
| Sales                                     | _____   | _____                 |
| Cost of goods sold                        | _____   | _____                 |
| Depreciation expense                      | _____   | _____                 |



**EXERCISE 13-2 Multiple Choice LO3 LO5 LO7 LO8**

Select the best answer for each of the following items:

- Golf Company acquired 80% of the outstanding stock of Ping Company, a foreign company, in an acquisition accounted for as a purchase transaction. In preparing consolidated statements, the paid-in capital of Ping Company should be translated into dollars at the
  - Current exchange rate in effect at the balance sheet date.
  - Exchange rate in effect at the date the capital transactions of the subsidiary took place.
  - Exchange rate in effect at the date Golf Company purchased the Ping Company stock.
  - Exchange rate effective when Ping Company was organized.
- The account balances of a foreign entity are required by *SFAS No. 52* to be measured using that entity's functional currency. The functional currency of an entity is defined as
  - The currency in which the entity's transactions are recorded.
  - The currency of the primary economic environment in which the entity operates.
  - The U.S. dollar.
  - The local currency of the country in which the entity is physically located.
- When translating foreign currency financial statements for an entity whose functional currency is the local currency of the country in which it is physically located, which of the following accounts is translated using current exchange rates?

|     | <i>Bonds Payable</i> | <i>Inventories<br/>Carried at Market</i> |
|-----|----------------------|--|
| (a) | No                   | No                                       |
| (b) | Yes                  | No                                       |
| (c) | No                   | Yes                                      |
| (d) | Yes                  | Yes                                      |

- A translation adjustment (or translation gain) that is a consequence of translation of a functional currency that is different from the reporting currency should be
  - Deferred and amortized over a period not to exceed 40 years.
  - Deferred until a subsequent year when a loss occurs and offset it against that loss.
  - Included as a separate item in the equity section of the balance sheet.
  - Included in net income in the period in which it occurs.
- A wholly owned foreign subsidiary of Import Corporation has certain expense accounts for the year ended December 31, 2014, stated in local currency units (LCU) as follows:

|  | <i>LCU</i> |
|--|------------|
| Amortization of patent (patent was acquired January 1, 2012) | 40,000     |
| Provision for doubtful accounts                              | 40,000     |
| Rent   | 120,000    |

The exchange rates at various dates are as follows:

|  | <i>Dollar Equivalent<br/>of 1 LCU</i> |
|--|---------------------------------------|
| December 31, 2014                            | \$.20                                 |
| Average for the year ended December 31, 2014 | .24                                   |
| January 1, 2012                              | .25                                   |

The subsidiary's operations were an extension of the parent company's operations. What total dollar amount should be included in Import's income statement to reflect the foregoing expenses for the year ended December 31, 2014?

- \$48,000.
- \$40,000.
- \$48,400.
- \$42,000.

(AICPA adapted)

**EXERCISE 13-3 Multiple Choice LO3 LO4 LO5 LO7 LO8**

Select the best answer choice for each of the following items.

1. Perez Company's operations are unrelated to the operations of its subsidiary. Certain balance sheet accounts of the foreign subsidiary at December 31, 2014, have been translated into U.S. dollars as follows:

|                                | <i>Translated at:</i> |                         |
|--------------------------------|-----------------------|-------------------------|
|                                | <i>Current Rates</i>  | <i>Historical Rates</i> |
| Accounts receivable, current   | \$200,000             | \$220,000               |
| Accounts receivable, long-term | 130,000               | 140,000                 |
| Prepaid insurance              | 50,000                | 55,000                  |
| Goodwill                       | 100,000               | 110,000                 |

If the accounting is in accordance with *SFAS No. 52*, what total should be included in Perez's balance sheet at December 31, 2014, for the foregoing items?

- (a) \$480,000.  
 (b) \$490,000.  
 (c) \$495,000.  
 (d) \$580,000.
2. When the functional currency of a foreign operation is the U.S. dollar, translation gains and losses resulting from translating (remeasuring) foreign currency financial statements into U.S. dollars should be included as
- (a) An extraordinary item in the income statement for the period in which the rate changes.  
 (b) An ordinary item in the income statement for losses but deferred for gains in accordance with the conservatism convention.  
 (c) An ordinary item in the income statement for the period in which the rate changes.  
 (d) A deferred item in the balance sheet.
3. Pal Company is translating account balances of its foreign subsidiary into dollars for its December 31, 2014, balance sheet and its 2014 income statement. The functional currency was identified as the local currency of the foreign subsidiary. The average exchange rate for 2014 should be used to translate
- (a) Retained earnings at January 1, 2014.  
 (b) Equipment purchased in 2014.  
 (c) Sales for 2014.  
 (d) Cash at December 31, 2014.
4. One of the first steps in translating the financial statements of a foreign subsidiary is the identification of the functional currency of that entity. Which of the following indicates that the functional currency is the local currency of the foreign entity?
- (a) There is a high volume of intercompany transactions.  
 (b) Financing is primarily denominated in the local currency.  
 (c) Sales are mostly in the United States, or sales contracts are denominated in dollars.  
 (d) Sales prices are primarily responsive in the short term to exchange rate changes.
5. When the foreign operations are conducted in a highly inflationary economy, at what translation rates should the goodwill and accounts receivable accounts in foreign statements be translated into U.S. dollars?

|     | <i>Goodwill</i> | <i>Accounts Receivable</i> |
|-----|-----------------|----------------------------|
| (a) | Current         | Average for year           |
| (b) | Historical      | Current                    |
| (c) | Historical      | Historical                 |
| (d) | Current         | Current                    |

(AICPA adapted)

**EXERCISE 13-4 Foreign Currency Translation—Current Rate Method LO7**

On January 1, 2014, Trenten Systems, a U.S.-based company, purchased a controlling interest in Grant Management Consultants located in Zurich, Switzerland. The acquisition was treated as a purchase transaction. The 2014 financial statements stated in Swiss francs are given below.

**GRANT MANAGEMENT CONSULTANTS**  
**Comparative Balance Sheets**  
**January 1 and December 31, 2014**

|                                    | <i>Jan. 1</i> | <i>Dec. 31</i> |
|------------------------------------|---------------|----------------|
| Cash and Receivables               | 20,000        | 55,000         |
| Net Property, Plant, and Equipment | 40,000        | 37,000         |
| Totals                             | <u>60,000</u> | <u>92,000</u>  |
|                                    |               |                |
| Accounts and Notes Payable         | 30,000        | 32,000         |
| Common Stock                       | 20,000        | 20,000         |
| Retained Earnings                  | 10,000        | 40,000         |
| Totals                             | <u>60,000</u> | <u>92,000</u>  |

**GRANT MANAGEMENT CONSULTANTS**  
**Consolidated Income and Retained Earnings Statement**  
**for the Year Ended December 31, 2014**

|   |               |
|---|---------------|
| Revenues  | 75,000        |
| Operating Expenses including Depreciation of 3,000 francs | 30,000        |
| Net Income  | <u>45,000</u> |
| Dividends Declared and Paid                               | <u>15,000</u> |
| Increase in Retained Earnings                             | <u>30,000</u> |

Direct exchange rates for Swiss franc are:

|                                       | <i>Dollars per Franc</i> |
|---------------------------------------|--------------------------|
| January 1, 2014                       | \$.5987                  |
| December 31, 2014                     | .5321                    |
| Average for 2014                      | .5654                    |
| Dividend declaration and payment date | .5810                    |

**Required:**

- A. Translate the year-end balance sheet and income statement of the foreign subsidiary using the current rate method of translation.
- B. Prepare a schedule to verify the translation adjustment.

**EXERCISE 13-5 Foreign Currency Remeasurement—Temporal Method LO 8**

Use the information provided in Exercise 13-4.

**Required:**

- A. Convert (remeasure) the financial statements of the foreign subsidiary using the temporal method of translation.
- B. Prepare a schedule to verify the translation gain or loss.

**EXERCISE 13-6 Local Currency Is a Foreign (Non-U.S.) Currency LO 7**

Refer to Exercise 13-4. Using the same information, assume that the Brazilian real is identified as the functional currency of the subsidiary.

**Required:**

- A. Remeasure the account balances that are expressed in Swiss francs into Brazilian reals, Direct exchange rates for the real are:

|                           | <i>Real per Franc</i> |
|---------------------------|-----------------------|
| Beginning of current year | 1.3940                |
| End of current year       | 1.2899                |
| Average for current year  | 1.3445                |
| Dividend payment date     | 1.2438                |

- B. Translate the remeasured accounts that are now stated in Reals into dollars using the current rate method. Direct exchange rates for the real are:

|                           | <i>Dollars per Real</i> |
|---------------------------|-------------------------|
| Beginning of current year | \$.4891                 |
| End of current year       | .4630                   |
| Average for current year  | .4751                   |
| Dividend payment date     | .4740                   |

### EXERCISE 13-7 Current Rate Method LO 7

Dorsey Corporation purchased 90% of the common stock of Lansing Company on January 1, 2008. The cost of the investment was equal to the book value interest acquired. Lansing Company operates two retail stores and an exporting business in London that specializes in buying and selling British tweeds. The subsidiary provided the following financial statements in pounds to the parent company:

#### LANSING COMPANY Consolidated Income and Retained Earnings Statement for the Year Ended December 31, 2014

|  |                  |
|--|------------------|
| Sales  | 2,900,000        |
| Cost of Goods Sold                             | (1,400,000)      |
| Depreciation Expense                           | (300,000)        |
| Other Expenses                                 | (400,000)        |
| Net Income                                     | 800,000          |
| 1/1 Retained Earnings                          | 900,000          |
|  | 1,700,000        |
| Less: Dividends Declared and Paid, December 31 | (325,000)        |
| 12/31 Retained Earnings                        | <u>1,375,000</u> |

#### LANSING COMPANY Balance Sheet December 31, 2014

|                                |                  |
|--------------------------------|------------------|
| Cash and Receivables           | 1,275,000        |
| Merchandise Inventory          | 490,000          |
| Property, Plant, and Equipment | 3,450,000        |
| Total                          | <u>5,215,000</u> |
| Current Liabilities            | 640,000          |
| Long-Term Notes Payable        | 1,200,000        |
| Capital Stock                  | 2,000,000        |
| Retained Earnings              | 1,375,000        |
| Total                          | <u>5,215,000</u> |

Lansing Company was incorporated on January 1, 2006, at which time all the property, plant, and equipment was purchased. The long-term notes were issued to partially finance the purchase of the fixed assets.

Direct exchange rates for the British pound are as follows:

|                                   |          |
|-----------------------------------|----------|
| January 1, 2006                   | \$1.8996 |
| January 1, 2008                   | 1.8365   |
| Average for the last quarter 2013 | 1.5300   |
| January 1, 2014                   | 1.4919   |
| December 31, 2014                 | 1.4730   |
| Average for 2014                  | 1.4788   |
| Average for August–December 2014  | 1.4950   |

The January 1, 2014, retained earnings balance of Lansing in dollars was \$1,593,408, and the cumulative translation adjustment was a debit balance of \$939,898. The beginning inventory of £420,000 was acquired during the last quarter of 2013 and the ending inventory was acquired during the last five months of 2014. Sales were made and purchases and other expenses were incurred evenly during the year.

#### Required:

Translate the December 31, 2014, account balances of Lansing Company into dollars assuming that the pound is the functional currency of Lansing Company.

**EXERCISE 13-8 Temporal Method (Remeasurement) LO 8**

Refer to the data provided in Exercise 13-7 for Dorsey Corporation and Lansing Company.

**Required:**

Translate (remeasure) the account balances of Lansing into dollars assuming that the dollar is the functional currency of Lansing Company. The beginning retained earnings balance of Lansing Company in dollars was \$1,791,324.

**EXERCISE 13-9 Translation Assuming Various Functional Currencies LO 7 LO 8**

Slocome Travel owns a travel agency that operates in London. Account balances in pounds for the subsidiary are summarized below:

|  | 2014             |                    |
|--|------------------|--------------------|
|  | <i>January 1</i> | <i>December 31</i> |
| Cash and Receivables                       | 32,000           | 35,000             |
| Office Supplies                            | 1,500            | 900                |
| Land, Building, and Equipment              | 70,000           | 65,000             |
| Accounts Payable                           | (15,500)         | (6,900)            |
| Long-Term Note Payable                     | (25,000)         | (15,000)           |
| Common Stock                               | (40,000)         | (40,000)           |
| Retained Earnings                          | (23,000)         | (23,000)           |
| Dividends—Declared and Paid on December 31 | —                | 4,000              |
| Revenues                                   | —                | (40,000)           |
| Operating Expenses                         | —                | 20,000             |
| Totals                                     | <u>—0—</u>       | <u>—0—</u>         |

Exchange rates for 2014 were as follows:

|                  |          |
|------------------|----------|
| January 1        | \$1.5403 |
| December 31      | 1.5961   |
| Average for year | 1.5532   |

The subsidiary did not make any purchases of office supplies or plant assets during the year. Revenues were earned and operating expenses, other than depreciation and supplies used, were incurred evenly throughout the year.

**Required:**

- A. Prepare a schedule to compute the translation adjustment for the year, assuming the foreign entity's functional currency is the pound.
- B. Prepare a schedule to compute the translation gain or loss, assuming the foreign entity's functional currency is the U.S. dollar.
- C. Explain why your results differ under the two methods.

**EXERCISE 13-10A Consolidated Workpaper (See Appendix 13A online at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter))**

A U.S. company owns an 80% interest in a company located on Mars. Martian currency is called the Martian Credit. During the year the parent company sold inventory that had cost \$24,000 to the subsidiary on account for \$30,000 when the exchange rate was \$.5192. The subsidiary still held one-half of the inventory and had not paid the parent company for the purchase at the end of the fiscal period. The unsettled account is denominated in dollars. The exchange rate at the fiscal year-end was \$.4994.

**Required:**

- A. (1) Compute the amounts that would be reported for the inventory and accounts payable in the subsidiary's translated balance sheet. The entity's functional currency is the Martian Credit.
  - (2) Compute the subsidiary's transaction gain or loss on the accounts payable denominated in dollars.
  - (3) How is the transaction gain or loss reported in the foreign entity's financial statements?
- B. Compute the amount of the intercompany profit to be eliminated in the consolidated statements workpaper prepared for the current year.
- C. (1) Assuming that the transaction had been denominated in 50,204 Martian Credits rather than dollars, compute the transaction gain or loss that would be reported by the parent company.
  - (2) How is the gain or loss reported in the consolidated financial statements?
  - (3) How would your answer differ if the loan to the foreign subsidiary was considered to be of a long-term investment nature?

**ASC Exercises:** For all ASC exercises indicate as part of your answer: the Codification topic, subtopic, section, and/or paragraph upon which your answer is based (unless otherwise specified). All ASC questions require access to the FASB Codification.

**ASC13-1** **Presentation** The Statement of Comprehensive Income was required by FASB in *SFAS Statement No. 130*; describe the formats that are acceptable to display the information in the statement.

**ASC13-2** **Disclosure** One of the items reported as part of comprehensive income relates to foreign currency translation gains or losses. Describe the circumstances under which such gains/losses appear only in comprehensive income and not in net income. List examples of other items that are appropriately reported as components of “other comprehensive income.”

**ASC13-3** **Presentation** For purposes of topic 830, what is a highly inflationary economy and how is a highly inflationary economy determined?

**ASC13-4** **Cross-reference** The rules providing guidance on foreign currency translation can be found in *FASB Statement No. 52*. Where is this information located in the Codification? List all the topics and subtopics in the codification (i.e., ASC XXX-XX). (*Hint:* There are three main topics.)

**ASC13-5** **Presentation** Can a gain or loss from a translation of foreign currencies due to a major devaluation in currency be treated as an extraordinary item?

## PROBLEMS

### PROBLEM 13-1 Translation—Local Currency Is the Functional Currency **LO 7**

On January 1, 2014, a U.S. company purchased 100% of the outstanding stock of Ventana Grains, a company located in Latz City, New Zealand. Ventana Grains was organized on January 1, 2000. All the property, plant, and equipment held on January 1, 2014, was acquired when the company was organized. The business combination was accounted for as a purchase transaction. The 2014 financial statements for Ventana Grains, prepared in its local currency, the New Zealand dollar, are given here.

#### VENTANA GRAINS Comparative Balance Sheets January 1 and December 31, 2014

|  | <i>Jan. 1</i> | <i>Dec. 31</i> |
|--|---------------|----------------|
| Cash and Receivables   | 500,000       | 880,000        |
| Inventories  | 600,000       | 500,000        |
| Land   | 400,000       | 400,000        |
| Buildings (net)  | 650,000       | 605,000        |
| Equipment (net)  | 465,000       | 470,000        |
| Totals   | 2,615,000     | 2,855,000      |
| Short-Term Accounts and Notes  | 295,000       | 210,000        |
| Long-Term Notes (600,000 issued<br>September 1, 2006, 80,000 issued<br>July 1, 2014) | 600,000       | 680,000        |
| Common Stock   | 800,000       | 800,000        |
| Additional Paid-in Capital   | 200,000       | 200,000        |
| Retained Earnings  | 720,000       | 965,000        |
| Total  | 2,615,000     | 2,855,000      |

**VENTANA GRAINS**  
**Consolidated Income and Retained Earnings Statement**  
**for the Year Ended December 31, 2014**

|                           |           |           |
|---------------------------|-----------|-----------|
| Revenues                  |           | 3,225,000 |
| Cost of Goods Sold:       |           |           |
| Beginning Inventory       | 600,000   |           |
| Purchases                 | 2,100,000 |           |
| Goods Available for Sale  | 2,700,000 |           |
| Less: Ending Inventory    | 500,000   |           |
| Cost of Goods Sold        |           | 2,200,000 |
| Gross Profit on Sales     |           | 1,025,000 |
| Depreciation Expense      | 140,000   |           |
| Other Expenses            | 540,000   | 680,000   |
| Net Income                |           | 345,000   |
| Jan. 1 Retained Earnings  |           | 720,000   |
| Total                     |           | 1,065,000 |
| Less: Dividends Paid      |           | 100,000   |
| Dec. 31 Retained Earnings |           | 965,000   |

The account balances are computed in conformity with U.S. generally accepted accounting standards. Other information is as follows:

1. Direct exchange rates for the New Zealand dollar on various dates were:

| <i>Date</i>                              | <i>Exchange Rate</i> |
|--|----------------------|
| January 1, 2000                          | \$.8011              |
| September 1, 2010                        | .5813                |
| January 1, 2014                          | .7924                |
| July 1, 2014                             | .7412                |
| December 31, 2014                        | .7298                |
| Average for 2014                         | .7480                |
| Average for the last four months of 2014 | .7476                |

2. Ventana Grains purchased additional equipment for 100,000 New Zealand dollars on July 1, 2014, by issuing a note for 80,000 New Zealand dollars and paying the balance in cash.
3. Sales were made and purchases and "Other Expenses" were incurred evenly throughout the year.
4. Depreciation for the period in New Zealand dollars was computed as follows:

|                                     |  |        |
|-------------------------------------|--|--------|
| Building                            |  | 45,000 |
| Equipment—Purchased before 1/1/2014 |  | 85,000 |
| Equipment—Purchased July 1, 2014    |  | 10,000 |

5. The inventory is valued on a FIFO basis. The beginning inventory was acquired when the exchange rate was \$.7480. The ending inventory was acquired during the last four months of 2014.
6. Dividends of 50,000 New Zealand dollars were paid on July 1 and December 31.

**Required:**

- A. Translate the financial statements into dollars assuming that the local currency of the foreign subsidiary was identified as its functional currency.
- B. Prepare a schedule to verify the translation adjustment determined in requirement A. Describe how the translation adjustment would be reported in the financial statements.

**PROBLEM 13-2 Remeasurement—U.S. Dollar Is the Functional Currency LO 8**

Refer to the information given in Problem 13-1.

**Required:**

- A. Remeasure the financial statements into dollars assuming that the U.S. dollar was identified as the functional currency of the foreign subsidiary.
- B. Prepare a schedule to verify the translation gain or loss determined in requirement A. Describe how the translation gain or loss would be reported in the financial statements.

**PROBLEM 13-3 Translation—Local Currency Is the Functional Currency LO 7**

(This problem is a continuation of the illustration presented in the chapter.)

On January 2, 2014, P Company, a U.S.-based company, acquired for 2,000,000 francs an 80% interest in SFr Company, a Swiss company. On January 2, 2014, SFr Company reported a retained earnings balance of 480,000 francs. SFr's books are maintained in francs and are in conformity with U.S. generally accepted accounting principles. Trial balances of the two companies as of December 31, 2015, are presented here:

| <i>Debits</i>              | <i>P Company<br/>(Dollars)</i> | <i>SFr Company<br/>(Francs)</i> |
|----------------------------|--------------------------------|---------------------------------|
| Cash                       | 500,200                        | 962,500                         |
| Accounts Receivable        | 516,400                        | 660,000                         |
| Inventories (FIFO cost)    | 627,800                        | 1,037,500                       |
| Investment in SFr Company  | 300,000                        | —                               |
| Land                       | 450,000                        | 500,000                         |
| Buildings (net)            | 610,000                        | 550,000                         |
| Equipment (net)            | 290,000                        | 405,000                         |
| Dividends Declared         | 200,000                        | 375,000                         |
| Cost of Goods Sold         | 2,720,000                      | 2,312,500                       |
| Depreciation Expense       | 210,000                        | 125,000                         |
| Other Expense              | 914,000                        | 818,750                         |
| Income Tax Expense         | 100,000                        | 102,500                         |
| Totals                     | <u>7,438,400</u>               | <u>7,848,750</u>                |
|                            |                                |                                 |
| <i>Credits</i>             | <i>P Company<br/>(Dollars)</i> | <i>SFr Company<br/>(Francs)</i> |
| Accounts Payable           | 540,000                        | 800,000                         |
| Short-term Notes Payable   | 300,000                        | 650,750                         |
| Bonds Payable              | 700,000                        | 850,000                         |
| Common Stock               | 800,000                        | 960,000                         |
| Additional Paid-in Capital | 300,000                        | 300,000                         |
| Retained Earnings, 1/1     | 544,400                        | 513,000                         |
| Sales                      | 4,200,000                      | 3,775,000                       |
| Dividend Income            | 54,000                         | —                               |
| Totals                     | <u>7,438,400</u>               | <u>7,848,750</u>                |

Other information related to the subsidiary follows:

1. Beginning inventory of 830,000 francs was acquired when the exchange rate was \$.165.
2. Purchases made uniformly throughout 2015 were 2,520,000 francs.
3. The franc is identified as the subsidiary's functional currency.
4. The subsidiary's beginning (1/1/15) retained earnings and cumulative translation adjustment (credit) in dollars were \$75,948 and \$36,462, respectively.
5. All plant assets were acquired before the parent obtained a controlling interest in the subsidiary.
6. Sales are made and all expenses are incurred uniformly throughout the year.
7. The ending inventory was acquired during the last quarter.
8. The subsidiary declared and paid dividends of 375,000 francs on September 2.
9. The following direct exchange rate quotations were available:

|                                   |       |
|-----------------------------------|-------|
| Date of subsidiary acquisition    | \$.15 |
| Average for 2014                  | .156  |
| January 1, 2015                   | .17   |
| September 2, 2015                 | .18   |
| December 31, 2015                 | .19   |
| Average for the 4th quarter, 2015 | .185  |
| Average for 2015                  | .176  |

**Required:**

- A. Prepare a translated balance sheet and combined statement of income and retained earnings for the subsidiary.
- B. Prepare a schedule to verify the translation adjustment.



- C. Compute the following ratios based on the franc and the U.S. dollar financial statements.
- (1) Current ratio.
  - (2) Debt to equity.
  - (3) Gross profit percentage.
  - (4) Net income to sales.

**PROBLEM 13-4 Remeasurement—U.S. Dollar Is the Functional Currency LO 8**

Use the information provided in Problem 13-3 for P Company and SFr Company.

**Required:**

- A. Convert the accounts of the foreign subsidiary, assuming that the U.S. dollar is the functional currency of both companies. For this problem assume that the subsidiary's beginning (1/1/15) retained earnings balance in the translated balance sheet is \$76,660.
- B. Prepare a schedule to verify the translation gain or loss, assuming a 637,000 franc net exposed liability position at the beginning of the year.

**PROBLEM 13-5 Temporal Method LO 8**

Pasquale Company is a manufacturer of oil drilling equipment located in Canada. The company is 90% owned by a U.S. parent company. The accounting department of Pasquale Company accumulated the following 2014 information for the company's auditor.

*Equipment:*

1. The equipment account contained the following items:

| <i>Description</i> | <i>Cost<br/>(Can. \$)</i> | <i>Useful<br/>Life</i> | <i>Acquisition Date</i> | <i>Exchange Rate on<br/>Acquisition Date</i> |
|--------------------|---------------------------|------------------------|-------------------------|--|
| Drill press        | 30,000                    | 5 years                | July 15, 2010           | \$.8430                                      |
| Stamping press     | 80,000                    | 4 years                | January 2, 2012         | .7360  |
| Fork lift          | 42,000                    | 6 years                | September 1, 2013       | .6998  |

2. Pasquale Company depreciates assets by the straight-line method and assumes a zero residual value.
3. Its policy is to take a full year's depreciation on all depreciable assets acquired before July 1 and no depreciation on all depreciable assets required after July 1.

*Inventory:*

1. The beginning inventory of 60,000 Canadian dollars was acquired during the last quarter of 2013.
2. Inventory purchases of 400,000 Canadian dollars were made uniformly during the year.
3. The ending inventory of 60,000 Canadian dollars was acquired during November and December, 2014.

*Marketable Securities:*

1. Marketable securities, carried at cost, were acquired for 30,000 Canadian dollars when the direct exchange rate was \$.9320.

*Direct Exchange Rates:*

Average for the last quarter of 2013, \$.7322  
 January 1, 2014, \$.7080  
 Average for November and December, 2014, \$.6845  
 Average for 2014, \$.7140  
 December 31, 2014, \$.6960

**Required:**

- A. Compute the account balances that would be reported for equipment, inventory, and marketable securities in the December 31, 2014, balance sheet expressed in U.S. dollars, assuming that the temporal method was used to translate the accounts.
- B. Compute the depreciation expense and cost of goods sold for 2014 in U.S. dollars, assuming that the temporal method was used to translate the accounts.
- C. Repeat requirements A and B, assuming that the current rate method was used to translate the accounts.
- D. Contrast the effects on income from using the current rate method and the temporal method to translate cost of goods sold and depreciation expense. Explain why net income is increased or decreased when the accounts were translated using the current rate method.

**PROBLEM 13-6A Cost Method Workpaper—Current Rate Method (See Appendix 13A online at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter)) LO 7**

For this problem, refer to the information provided in Problem 13-3 for P Company and SFr Company. Ignore deferred income taxes in the assignment of the difference between implied and book value.

**Required:**

- A. If you have not already done so, prepare a workpaper to translate the trial balance of the subsidiary into dollars using the current rate method.
- B. Prepare the journal entries made on the books of P Company during 2015 to account for its investment in SFr Company. P Company uses the cost method to record its investment in SFr Company. At the date of acquisition, the 760,000 franc difference between implied and book value interest acquired was allocated as follows:

| <i>Asset</i> | <i>Francs</i>  | <i>Translation Rate</i> | <i>Dollars</i> |
|--------------|----------------|-------------------------|----------------|
| Land         | 385,000        | \$.15                   | 57,750         |
| Building     | 375,000        | .15                     | 56,250         |
| Total        | <u>760,000</u> |                         | <u>114,000</u> |

The building is depreciated over a 10-year remaining life using the straight-line method of amortization.

- C. Prepare a consolidated statement's workpaper at December 31, 2015.

**PROBLEM 13-7A Cost Method Workpaper—Temporal Method (See Appendix 13A online at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter)) LO 8**



COMPREHENSIVE

P Company holds an 80% interest in SFr Company, a Swiss company. A trial balance for P Company and SFr Company at December 31, 2015, and other data are given in Problems 13-3 and 13-4. Ignore deferred income taxes in the assignment of the difference between implied and book value.

**Required:**

- A. If you have not already done so (Problem 13-4), prepare a workpaper to translate the trial balance of the subsidiary into dollars using the temporal method of translation. The subsidiary's beginning retained earnings balance in the translated balance sheet is \$76,660.
- B. Prepare the journal entries made on the books of P Company during 2015 to account for the investment in SFr Company. P Company uses the cost method to record its investment in SFr Company. At the date of acquisition, the 760,000 franc difference between implied and book value interest acquired was allocated as follows:

| <i>Asset</i> | <i>Francs</i>  | <i>Translation Rate</i> | <i>Dollars</i> |
|--------------|----------------|-------------------------|----------------|
| Land         | 385,000        | \$.15                   | 57,750         |
| Building     | 375,000        | .15                     | 56,250         |
| Total        | <u>760,000</u> |                         | <u>114,000</u> |

The building is depreciated over a 10-year remaining life using the straight-line method of amortization.

- C. Prepare a consolidated statements workpaper at December 31, 2015.

**PROBLEM 13-8A Cost Method Workpaper—Local Currency Is the Functional Currency (See Appendix 13A online at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter)) LO 7**



COMPREHENSIVE

Babbit, Inc., a multinational corporation based in the United States, owns an 80% interest in Nakima Company, which is located in Sydney, Australia. The acquisition occurred on January 1, 2014. The difference between the implied value of 810,625 Australian dollars and the book value of Nakima equity was attributed to specific assets of Nakima Company as follows:

|  | <i>100% Difference between MV and BV<br/>(Australian Dollars)</i> |
|--|---|
| Equipment that has a 5-year remaining life                                     | 73,875  |
| Land   | 54,063  |
| Inventories—Nakima uses the FIFO cost flow assumption in pricing its inventory | 27,187  |
| Amount attributed to patents (10 year remaining life)                          | 150,000   |
| Total difference in Australian dollars   | <u>305,125</u>  |

Ignore deferred income taxes in the assignment of the difference between implied and book value. The adjusted trial balances for the two companies on December 31, 2014 are presented here:

| <i>Debits</i>                | <i>Babbit Inc.</i><br><i>(U.S. Dollars)</i> | <i>Nakima Company</i><br><i>(Australian Dollars)</i> |
|------------------------------|---|--|
| Cash                         | 65,885                                      | 95,250   |
| Accounts Receivable          | 150,116                                     | 106,250  |
| 12/31 Inventory              | 115,000                                     | 83,250   |
| Investment in Nakima Company | 514,585                                     | —0—  |
| Land                         | 59,400                                      | 187,500  |
| Buildings and Equipment      | 200,000                                     | 250,000  |
| Cost of Goods Sold           | 425,000                                     | 121,500  |
| Other Expenses               | 75,000                                      | 51,750   |
| Dividends Declared           | 50,000                                      | 31,250   |
| Totals                       | <u>1,654,986</u>                            | <u>926,750</u>                                       |
| <i>Credits</i>               |   |  |
| Accumulated Depreciation     | 125,000                                     | 93,750   |
| Accounts Payable             | 14,750                                      | 62,500   |
| Notes Payable                | 25,000                                      | 15,000   |
| Capital Stock                | 600,000                                     | 340,500  |
| 1/1 Retained Earnings        | 325,000                                     | 165,000  |
| Sales                        | 545,475                                     | 250,000  |
| Dividend Income              | 19,761                                      | —0—  |
| Totals                       | <u>1,654,986</u>                            | <u>926,750</u>                                       |

*Additional Information:*

1. Sales, purchases, and other expenses were incurred evenly during the year.
2. Dividends of 15,625 Australian dollars were paid on April 30 and October 31.
3. The accounts are presented in conformity with U.S. generally accepted accounting principles.
4. Direct rates of exchange.

|                  |         |
|------------------|---------|
| 1/1/14           | \$.7935 |
| 4/30/14          | .7899   |
| 10/31/14         | .7910   |
| 12/31/14         | .7575   |
| Average for 2014 | .7962   |

5. The Australian dollar is identified as the functional currency of Nakima Company.

**Required:**

- A. Prepare a workpaper to translate the trial balance of the subsidiary into U.S. dollars.
- B. Prepare a schedule to verify the translation adjustment.
- C. Prepare journal entries on the books of the parent company to record the purchase of the 80% interest in the subsidiary and to apply the cost method of accounting.
- D. Prepare a consolidated statements workpaper at December 31, 2014. Journal entries made in requirement C that are not reflected in the trial balance of Babbit, Inc. are to be made as adjusting entries in the elimination columns of the workpaper.

**PROBLEM 13-9 Local Currency Is the Functional Currency, Equity Method for Investment LO 7**

On January 2, 2014, P Company, a U.S.-based company, acquired for 2,000,000 francs an 80% interest in SFr Company. On January 2, 2014, SFr Company reported a retained earnings balance of 480,000 francs. SFr's books

are maintained in francs and are in conformity with U.S. generally accepted accounting principles. Trial balances of the two companies as of December 31, 2015, are presented below.

| <i>Debits</i>              | <i>P Company</i><br><i>(Dollars)</i> | <i>SFr Company</i><br><i>(Francs)</i> |
|----------------------------|--------------------------------------|---------------------------------------|
| Cash                       | 500,200                              | 962,500                               |
| Accounts Receivable        | 516,400                              | 660,000                               |
| Inventories (FIFO cost)    | 627,800                              | 1,037,500                             |
| Investment in SFr Company  | 297,806                              | —                                     |
| Land                       | 450,000                              | 500,000                               |
| Buildings (net)            | 610,000                              | 550,000                               |
| Equipment (net)            | 290,000                              | 405,000                               |
| Dividends Declared         | 200,000                              | 375,000                               |
| Cost of Goods Sold         | 2,720,000                            | 2,312,500                             |
| Depreciation Expense       | 210,000                              | 125,000                               |
| Other Expense              | 914,000                              | 818,750                               |
| Income Tax Expense         | 100,000                              | 102,500                               |
| Totals                     | <u>\$7,436,206</u>                   | <u>7,848,750</u>                      |
| <i>Credits</i>             |                                      |                                       |
| Accounts Payable           | 540,000                              | 800,000                               |
| Short-Term Notes Payable   | 300,000                              | 650,750                               |
| Bonds Payable              | 700,000                              | 850,000                               |
| Common Stock               | 800,000                              | 960,000                               |
| Additional Paid-in Capital | 300,000                              | 300,000                               |
| Retained Earnings, 1/1     | 542,878                              | 513,000                               |
| Sales                      | 4,200,000                            | 3,775,000                             |
| Equity Income              | 53,328                               | —                                     |
| Totals                     | <u>\$7,436,206</u>                   | <u>7,848,750</u>                      |

Other information related to the subsidiary follows:

1. Beginning inventory of 830,000 francs was acquired when the exchange rate was \$.165.
2. Purchases made uniformly throughout 2015 were 2,520,000 francs.
3. The franc is identified as the subsidiary's functional currency.
4. The subsidiary's beginning (1/1/15) retained earnings and cumulative translation adjustment (credit) in dollars were \$75,948 and \$36,462, respectively.
5. All plant assets were acquired before the parent obtained a controlling interest in the subsidiary.
6. Sales are made and all expenses are incurred uniformly throughout the year.
7. The ending inventory was acquired during the last quarter.
8. The subsidiary declared and paid dividends of 375,000 francs on September 2.
9. The following direct exchange rate quotations were available:

|                                      |       |
|--------------------------------------|-------|
| Date of subsidiary acquisition       | \$.15 |
| Average for 2014                     | .156  |
| January 1, 2015                      | .17   |
| September 2, 2015                    | .18   |
| December 31, 2015                    | .19   |
| Average for the fourth quarter, 2015 | .185  |
| Average for 2015                     | .176  |

**Required:**

- A. Prepare a translated balance sheet and combined statement of income and retained earnings for the subsidiary.
- B. Prepare a schedule to verify the translation adjustment.
- C. Compute the following ratios based on the franc and the U.S. dollar financial statements:
  - (1) Current ratio.
  - (2) Debt to equity.
  - (3) Gross profit percentage.
  - (4) Net income to sales.

**PROBLEM 13-10 U.S. Dollar Is the Functional Currency, Equity Method for Investment LO 8**

Use the information provided in Problem 13-9 for P Company and SFr Company.

**Required:**

- Convert the accounts of the foreign subsidiary, assuming that the U.S. dollar is the functional currency of both companies. For this problem assume that the subsidiary's beginning (1/1/15) retained earnings balance in the translated balance sheet is \$76,660.
- Prepare a schedule to verify the translation gain or loss, assuming a 637,000 franc net exposed liability position at the beginning of the year.

**PROBLEM 13-11A Complete Equity Workpaper—Current Rate Method (See Appendix 13A online at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter)) LO 7**

COMPREHENSIVE

For this problem, refer to the information provided in Problem 13-9 for P Company and SFr Company. Ignore deferred income taxes in the allocation of the difference between implied and book value.

**Required:**

- If you have not already done so, prepare a workpaper to translate the trial balance of the subsidiary into dollars using the current rate method.
- Prepare the journal entries made on the books of P Company during 2015 to account for its investment in SFr Company. P Company uses the complete equity method to record its investment in SFr Company. At the date of acquisition, the 760,000 franc difference between implied and book value interest acquired was allocated as follows:

| <i>Asset</i> | <i>Francs</i>  | <i>Translation<br/>Rate</i> | <i>Dollars</i> |
|--------------|----------------|-----------------------------|----------------|
| Land         | 385,000        | \$.15                       | 57,750         |
| Building     | 375,000        | .15                         | 56,250         |
| Total        | <u>760,000</u> |                             | <u>114,000</u> |

The building is depreciated over a 10-year remaining life using the straight-line method of amortization.

- Prepare a consolidated statements workpaper at December 31, 2015.

**PROBLEM 13-12A Complete Equity Workpaper—Temporal Method (See Appendix 13A online at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter))**

COMPREHENSIVE

P Company holds an 80% interest in SFr Company, a Swiss company. A trial balance for P Company and SFr Company at December 31, 2015, and other data are given in Problems 13-9 and 13-10. The following numbers should change, however, from the amounts stated in Problem 13-9: In the P Company trial balance as of December 31, 2015, Investment in SFr Company is 307,256; Retained Earnings, 1/1 is 543,628; and Equity Income is 62,028. Ignore deferred income taxes in the allocation of the difference between implied and book value.

**Required:**

- If you have not already done so (Problem 13-10), prepare a workpaper to translate the trial balance of the subsidiary into dollars using the temporal method of translation. The subsidiary's beginning retained earnings balance in the translated balance sheet is \$76,660.
- Prepare the journal entries made on the books of P Company during 2015 to account for the investment in SFr Company. P Company uses the complete equity method to record its investment in SFr Company. At the date of acquisition, the 760,000 franc difference between implied and book value interest acquired was allocated as follows:

| <i>Asset</i> | <i>Francs</i>  | <i>Translation<br/>Rate</i> | <i>Dollars</i> |
|--------------|----------------|-----------------------------|----------------|
| Land         | 385,000        | \$.15                       | 57,750         |
| Building     | 375,000        | .15                         | 56,250         |
| Total        | <u>760,000</u> |                             | <u>114,000</u> |

The building is depreciated over a 10-year remaining life using the straight-line method of amortization.

- Prepare a consolidated statements workpaper at December 31, 2015.

# Chapter 13

## APPENDIX 13A – ACCOUNTING FOR A FOREIGN AFFILIATE AND PREPARATION OF CONSOLIDATED STATEMENTS WORKPAPER ILLUSTRATED (ONLINE)

To illustrate the accounting for a foreign affiliate and the preparation of a consolidated statements workpaper, the illustration of the 80% interest in SFr Company will be continued. Since SFr Company maintains its books in francs, the trial balance in dollars is based on the translated balances contained in Illustrations 13-1 and 13-4.

### DATE OF ACQUISITION

Recall that on January 2, 2015, P Company acquired for 2,000,000 francs an 80% interest in SFr Company. The direct exchange rate for francs on January 2, 2015, was \$.15. Thus it would have taken \$300,000 (2,000,000 francs  $\times$  \$.15) to buy the 2,000,000 francs needed for the purchase price. The entry to record the acquisition is

|                           |         |         |
|---------------------------|---------|---------|
| Investment in SFr Company | 300,000 |         |
| Cash                      |         | 300,000 |

On the date of acquisition, since the business combination must be accounted for using the purchase method of accounting (cash was used to acquire the voting stock), assets, liabilities, and stockholders' equity accounts are translated from francs into dollars using the spot rate of \$.15. Any difference between implied and book value interest acquired is allocated to individual assets and liabilities of a foreign subsidiary using essentially the same approach as that illustrated in Chapter 5. On January 2, SFr Company reported common stock of 960,000 francs, additional paid-in capital of 300,000 francs, and retained earnings of 480,000 francs for a net asset balance of 1,740,000 francs. The difference between implied and book value in francs and dollars is allocated to land and buildings in Illustration 13-11. When an acquisition qualifies as a purchase transaction, all

### ILLUSTRATION 13-11

#### Allocation of Difference between Implied and Book Value

|   | Francs      | Translation Rate | Dollars    |
|---|-------------|------------------|------------|
| Implied value (2,000,000/80%)                               | 2,500,000** | .15              | 375,000    |
| Book value of SFr equity                                    | 1,740,000   | .15              | 261,000    |
| Difference between implied and book value interest acquired | 760,000     |                  | 114,000    |
| Allocated to:   |             |                  |            |
| Land  | (385,000)*  | .15              | (57,750)   |
| Buildings—10 year-remaining life                            | (375,000)*  | .15              | (56,250)   |
| Unallocated balance   | <u>—0—</u>  |                  | <u>—0—</u> |

\* Amounts are assumed.

\*\* NCI = 2,500,000  $\times$  20% = 500,000 at acquisition.

Translated NCI at acquisition is \$75,000 (or 500,000  $\times$  .15).

accounts of the subsidiary are translated at the date of acquisition using the then-current exchange rate whether the current rate method or the temporal method is used in the translation process. Thus, the computation of the difference and its allocation is the same for both methods.

## ACCOUNTING FOR AN INVESTMENT IN A FOREIGN AFFILIATE—AFTER ACQUISITION

After the initial entry to record the purchase of the equity interest in SFr Company, P Company will make a book entry to record the declaration and receipt of cash dividends. P Company accounts for its investment by the cost method. In this case, SFr Company declared and paid a 300,000 franc dividend on September 1 when the direct exchange rate was \$.16. The book entry to record the dividend receipt is:

|  |        |        |
|--|--------|--------|
| Cash   | 38,400 |        |
| Dividend Income                                    |        | 38,400 |
| 300,000 francs × \$.16 = \$48,000 × .80 = \$38,400 |        |        |

Before consolidated financial statements are prepared, the subsidiary's financial statements must be translated into dollars using either the current rate method (Illustration 13-4) or the temporal method (Illustration 13-8). A workpaper to consolidate P Company and SFr Company is presented in Illustration 13-12 assuming that the current rate method was appropriate for translating the subsidiary's accounts (i.e., the functional currency of the subsidiary was its local currency). Workpaper entries in general journal form are given here:

| <b>Consolidated Statements Workpaper Entries—December 31, 2015</b> |  |         |         |
|--|--|---------|---------|
| (1)  | Dividend Income  | 38,400  |         |
|  | Dividends Declared—SFr Company   |         | 38,400  |
|  | To eliminate intercompany dividends.   |         |         |
| (2)  | Beginning Retained Earnings—SFr Company  | 72,000  |         |
|  | Common Stock—SFr Company   | 144,000 |         |
|  | Additional Paid-in Capital—SFr Company   | 45,000  |         |
|  | Difference between Implied and Book Value  | 114,000 |         |
|  | Investment in SFr Company  |         | 300,000 |
|  | NCI in equity  |         | 75,000  |
|  | To eliminate the investment account.   |         |         |
| (3)  | Cumulative Translation Adjustment—SFr Company  | 29,170  |         |
|  | Cumulative Translation Adjustment—P Company  |         | 29,170  |
|  | To recognize P Company's interest in the increase in stockholders' equity resulting from a change in exchange rates. |         |         |
| (4)  | Depreciation Expense   | 5,850   |         |
|  | Land   | 65,450  |         |
|  | Buildings  | 57,375  |         |
|  | Cumulative Translation Adjustment—P Company  |         | 14,675  |
|  | Difference between Implied and Book Value  |         | 114,000 |
|  | To allocate the difference between implied and book value and to recognize the related translation adjustment.       |         |         |

The major differences between the foregoing entries for the current rate method and those prepared in Chapter 5 are as follows:

- Using the current rate method to translate the accounts of the subsidiary resulted in a cumulative translation adjustment of \$36,462. The \$36,462 increases stockholders' equity and translated net assets of the subsidiary. Since this amount is not reported in the income statement, a workpaper entry [entry (3)] is made to recognize the parent's interest therein ( $\$36,462 \times .80 = \$29,170$ ). The remaining portion ( $\$36,462 \times .20 = \$7,292$ ) is extended to the noncontrolling interest column.

| <b>Cost Method</b>                          |                  | <b>ILLUSTRATION 13-12</b>                   |                     |                |                       |                     |
|---|------------------|---|---------------------|----------------|-----------------------|---------------------|
| 80% Owned Foreign Subsidiary                |                  | <b>Consolidated Statements Workpaper</b>    |                     |                |                       |                     |
| Current Rate Method                         |                  | <b>P Company and Foreign Subsidiary</b>     |                     |                |                       |                     |
| of Translation                              |                  | <b>for the Year Ended December 31, 2015</b> |                     |                |                       |                     |
| Year of Acquisition                         |                  |   |                     |                |                       |                     |
|   | <i>P</i>         | <i>SFr</i>                                  | <i>Eliminations</i> |                | <i>Noncontrolling</i> | <i>Consolidated</i> |
| <i>Income Statement</i>                     | <i>Company</i>   | <i>Company</i>                              | <i>Dr.</i>          | <i>Cr.</i>     | <i>Interest</i>       | <i>Balances</i>     |
| Sales and Other Revenue                     | 4,200,000        | 471,120                                     |                     |                |                       | 4,671,120           |
| Dividend Income                             | 38,400           |   | (1)                 | 38,400         |                       | —                   |
| Total Revenues                              | <u>4,238,400</u> | <u>471,120</u>                              |                     |                |                       | <u>4,671,120</u>    |
| Cost of Goods Sold                          | 2,720,000        | 288,600                                     |                     |                |                       | 3,008,600           |
| Depreciation Expense                        | 210,000          | 15,600                                      | (4)                 | 5,850          |                       | 231,450             |
| Other Expenses                              | 914,000          | 102,180                                     |                     |                |                       | 1,016,180           |
| Income Tax Expense                          | 100,000          | 12,792                                      |                     |                |                       | 112,792             |
| Total Cost and Expense                      | <u>3,944,000</u> | <u>419,172</u>                              |                     |                |                       | <u>4,369,022</u>    |
| Net/Consolidated Income                     | 294,400          | 51,948                                      |                     |                |                       | 302,098             |
| Noncontrolling Interest in Net Income       |                  |   |                     |                | 9,220*                | (9,220)             |
| Net Income to Retained Earnings             | <u>294,400</u>   | <u>51,948</u>                               | 44,250              | <u>—</u>       | 9,220                 | <u>292,878</u>      |
| <i>Retained Earnings Statement</i>          |                  |   |                     |                |                       |                     |
| 1/2 Retained Earnings                       |                  |   |                     |                |                       |                     |
| P Company                                   | 450,000          |   |                     |                |                       | 450,000             |
| SFr Company                                 |                  | 72,000                                      | (2)                 | 72,000         |                       |                     |
| Net Income from above                       | 294,400          | 51,948                                      | 44,250              |                | 9,220                 | 292,878             |
| Dividends Declared                          |                  |   |                     |                |                       |                     |
| P Company                                   | (200,000)        |   |                     |                |                       | (200,000)           |
| SFr Company                                 |                  | (48,000)                                    |                     | (1)            | 38,400                | (9,600)             |
| 12/31 Retained Earnings to Balance Sheet    | <u>544,400</u>   | <u>75,948</u>                               | 116,250             | <u>38,400</u>  | (380)                 | <u>542,878</u>      |
| <i>Balance Sheet</i>                        |                  |   |                     |                |                       |                     |
| Current Assets                              | 1,324,400        | 402,560                                     |                     |                |                       | 1,726,960           |
| Investment in SFr Company                   | 300,000          |   |                     | (2)            | 300,000               | —                   |
| Land  | 450,000          | 85,000                                      | (4)                 | 65,450         |                       | 600,450             |
| Buildings (net)                             | 720,000          | 110,500                                     | (4)                 | 57,375         |                       | 887,875             |
| Equipment (net)                             | 390,000          | 73,100                                      |                     |                |                       | 463,100             |
| Difference between IV and BV                | —                |   | (2)                 | 114,000        | (4)                   | 114,000             |
| Total Assets                                | <u>3,184,400</u> | <u>671,160</u>                              |                     |                |                       | <u>3,678,385</u>    |
| Current Liabilities                         | 840,000          | 216,750                                     |                     |                |                       | 1,056,750           |
| Bonds Payable                               | 700,000          | 153,000                                     |                     |                |                       | 853,000             |
| Common Stock                                |                  |   |                     |                |                       |                     |
| P Company                                   | 800,000          |   |                     |                |                       | 800,000             |
| SFr Company                                 |                  | 144,000                                     | (2)                 | 144,000        |                       |                     |
| Additional Paid in Capital                  |                  |   |                     |                |                       |                     |
| P Company                                   | 300,000          |   |                     |                |                       | 300,000             |
| SFr Company                                 |                  | 45,000                                      | (2)                 | 45,000         |                       |                     |
| Cumulative Translation adjustment:          |                  |   |                     |                | (3) 29,170            |                     |
| P Company                                   | —                |   |                     |                | (4) 14,675            |                     |
| SFr Company                                 |                  | 36,462                                      | (3)                 | 29,170         |                       | 7,292               |
| Retained Earnings from above                | 544,400          | 75,948                                      | 116,250             | 38,400         | (380)                 | 542,878             |
| 1/2 Noncontrolling Interest in Net Assets   |                  |   |                     | (2)            | 75,000                | 75,000              |
| 12/31 Noncontrolling Interest in Net Assets |                  |   |                     |                | <u>81,912</u>         | <u>81,912</u>       |
| Total Liabilities and Owners' Equity        | <u>3,184,400</u> | <u>671,160</u>                              | <u>571,245</u>      | <u>571,245</u> |                       | <u>3,678,385</u>    |

\*  $(\$51,948 - 5,850) \times .20 = \$9,220$ .

(1) To eliminate intercompany dividends.

(2) To eliminate the investment account and create noncontrolling interest account.

(3) To recognize interest in cumulative translation adjustment.

(4) To assign difference between implied and book value.



**ILLUSTRATION 13-13****Verification of Cumulative Translation Adjustment**

|  | <i>Francs</i>   | <i>Translation<br/>Rate</i> | <i>Dollars</i> |
|--|-----------------|-----------------------------|----------------|
| Undervalued net assets at beginning of year                                  | 760,000         | \$.15                       | 114,000        |
| Amortization this period   | <u>(37,500)</u> | .156                        | <u>(5,850)</u> |
| Net asset position translated using rate in effect<br>at date of transaction |                 |                             | 108,150        |
| Unamortized balance at end of year*  | <u>722,500</u>  | .17                         | <u>122,825</u> |
| Current year change in cumulative translation adjustment                     |                 |                             | <u>14,675</u>  |
|  | <i>Francs</i>   |                             | <i>Dollars</i> |
| * Land   | 385,000         | .17                         | 65,450         |
| Buildings less depreciation  | <u>337,500</u>  | .17                         | <u>57,375</u>  |
| Total  | <u>722,500</u>  |                             | <u>122,825</u> |

2. The difference between implied and book value at the date of acquisition was allocated to specific assets and translated into dollars using the exchange rate in effect on the purchase date. The amounts allocated to land and buildings at the end of the year are not the same amounts reported on the computation and allocation scheduled created on the date of acquisition. On the date of acquisition, these items were translated using the spot rate on that date (0.15). At the end of the year, they are translated using the exchange rate at the end of the year (0.17). Also, because depreciation expense is translated using the average exchange rate for the year of 0.156, there will be a translation adjustment of \$14,675 needed to balance journal entry (4).

**Subsequent to the Year of Acquisition**

In years after the year of acquisition, an entry to establish reciprocity is made based on the undistributed net income. In this case the entry for the next year is:

|                                       |                 |       |
|---------------------------------------|-----------------|-------|
| Investment in SFr Company             | 3,158           |       |
| Beginning Retained Earnings—P Company |                 | 3,158 |
| Retained Earnings—12/31/2015          | \$75,948        |       |
| Retained Earnings—Date of acquisition | <u>72,000</u>   |       |
| Undistributed net income              | <u>\$ 3,948</u> |       |
| $\$3,948 \times .80 = \$3,158$        |                 |       |

The other workpaper entries are similar to those illustrated before.

**CONSOLIDATION WHEN THE TEMPORAL METHOD OF TRANSLATION IS USED**

In completing the remeasurement process using the temporal method, a consolidated statements workpaper would be similar to the one previously illustrated for the current rate method. The major differences between the workpapers are as follows:

1. Under the temporal method, the translation gain or loss is included in the subsidiary's income statement and becomes a part of its ending retained earnings balance. The controlling interest in the gain or loss is recognized as part of consolidated net income in the current period. In subsequent periods the gain or loss is included in consolidated retained earnings as part of the reciprocity entry. Thus, a separate entry is not needed to recognize the parent's share of the translation gain or loss such as was done in entry (3) when the current rate method of translation was used.

- The unamortized portion of the difference assigned to land and buildings and the amortization for the current period retain their historical dollar values since such non-monetary assets are translated using historical rates.

## REMEASUREMENT AND TRANSLATION OF FOREIGN CURRENCY TRANSACTIONS

A foreign currency transaction is one that is denominated in a currency other than the entity's functional currency.<sup>11</sup> As discussed in Chapter 12, at the transaction date, the current exchange rate is used to measure and record a foreign currency transaction in the functional currency of the recording entity. At subsequent balance sheet dates, recorded balances that are denominated in a currency other than the functional currency are adjusted to the functional currency using the current exchange rate. Any transaction gain or loss resulting from this procedure is recognized currently in income. Although a thorough discussion and illustration of the effects on the financial statements of affiliated companies and on consolidated statements is beyond the scope of this text, two examples are presented to illustrate the procedures.

Assume that a Swiss subsidiary has a \$100,000 loan payable to a U.S. bank. The loan is denominated in dollars and the franc is the functional currency of the subsidiary. Thus, this is a foreign currency transaction to the subsidiary but not to the U.S. bank. The current exchange rate was \$.20 on the transaction date and \$.16 on the balance sheet date. The subsidiary would compute a gain or loss as follows at the balance sheet date:

|                                     | <i>Francs</i>             |
|-------------------------------------|---------------------------|
| Transaction date                    | \$100,000 ÷ .20 = 500,000 |
| Balance sheet date                  | \$100,000 ÷ .16 = 625,000 |
| Transaction loss reported in income | <u>125,000</u>            |

The U.S. bank would not record a gain or loss on its books because the payable is denominated in dollars.

Before consolidation, the accounts of the subsidiary are translated into dollars (the reporting currency) using the current rate method. In this illustration the payable of 625,000 francs as measured in the functional currency is translated to \$100,000 (625,000 francs × \$.16) to reflect the dollar denominated amount of the loan. In the income statement, the transaction loss of 125,000 francs is translated using the average exchange rate. When the current rate method is used, the adjustment resulting from translating the accounts into dollars is made to stockholders' equity.

If, in the foregoing illustration, the loan were denominated in francs (the functional currency of the subsidiary), the transaction would not be a foreign currency transaction to the subsidiary. The loan is a foreign currency transaction, however, to the U.S. bank. The bank will measure the 500,000 franc receivable into dollars at the transaction and balance sheet dates using the current rate. A transaction loss is computed at the balance sheet date as follows:

|                                     |                                    |
|-------------------------------------|------------------------------------|
| Transaction date                    | 500,000 francs × \$.20 = \$100,000 |
| Balance sheet date                  | 500,000 francs × \$.16 = \$ 80,000 |
| Transaction loss reported in income | <u>\$ 20,000</u>                   |

In the trial balance of the subsidiary, the payable is already measured in francs. Thus, a transaction gain or loss is not recognized currently in income. Note, however, that the payable is a component of the subsidiary's net asset position and will affect the translation gain or loss reported in the stockholders' equity section of the balance sheet when the payable is translated into U.S. dollars for consolidation purposes.

<sup>11</sup>FASB ASC section 830–20–20.

If the dollar is identified as the foreign entity's functional currency, then a dollar-denominated transaction is not a foreign currency transaction to either party. In the dollar trial balance of the subsidiary, the payable is restated to \$100,000 at both the transaction date and the balance sheet date. Finally, if the functional currency is the dollar and the loan is denominated in francs, it is a foreign currency transaction to both parties, and the 500,000 franc loan is remeasured to \$80,000 at the balance sheet date by both.

## INTERCOMPANY RECEIVABLES AND PAYABLES

FASB ASC paragraph 830–20–35–1 requires that transaction gains and losses on intercompany receivables and payables be recognized in the period that the exchange rate changes. The procedures for doing so are similar to those discussed in the preceding section. However, a company is required to distinguish between transactions that are of a long-term investment nature and other transactions. Intercompany transactions for which settlement is not planned or intended in the foreseeable future are considered a part of the net investment in the foreign entity. Accordingly, transaction gains or losses on the receivable or payable, whether denominated in dollars or in the local currency of the foreign entity, are deferred and accumulated with the translation adjustment in a separate component of stockholders' equity. A transaction gain or loss attributable to other intercompany accounts is reported currently in the determination of net income because it is expected to affect functional currency cash flows.

## ELIMINATION OF INTERCOMPANY PROFIT

Profits and losses attributable to intercompany sales or transfers are eliminated on the basis of the exchange rate at the date of each sale or transfer. Here again, the use of averages or reasonable approximations of specific rates in effect on the due date of each transaction is permitted. To illustrate, the following assumptions are made:

1. Exchange rates: date of sale, \$.14; balance sheet date, \$.17.
2. The intercompany sale and profit in dollars and francs is:

|                                   | <i>Dollars</i> | <i>Francs</i> |
|-----------------------------------|----------------|---------------|
| Sales price to foreign subsidiary | 14,000         | 100,000       |
| Cost to parent company            | <u>10,500</u>  | <u>75,000</u> |
| Intercompany profit               | <u>3,500</u>   | <u>25,000</u> |

3. None of the inventory was sold by the subsidiary during the current period.
4. The franc is the functional currency of the foreign entity.

At year-end, the inventory balance of 100,000 francs is translated to \$17,000 using the current rate at the balance sheet date. In the consolidated balance sheet, the intercompany profit of \$3,500 is eliminated from the inventory, which results in a carrying value for the inventory of \$13,500. As shown below, this process includes \$750 in the inventory carrying value that is related to the effect of the exchange rate change on the intercompany profit element.

|                                    | <i>Francs</i>  | <i>Translation Rate</i> | <i>Dollars</i> |
|------------------------------------|----------------|-------------------------|----------------|
| Inventory cost                     | 75,000         | .17                     | 12,750         |
| Intercompany profit                | 25,000         | (.17 – .14)             | 750            |
| Carrying value of ending inventory | <u>100,000</u> |                         | <u>13,500</u>  |

The Board reasoned that intercompany profit occurs at the date of sale and that is the amount that should be eliminated. The \$750 results from a subsequent change in the exchange rate, an event considered independent from the sale.

## LIQUIDATION OF A FOREIGN INVESTMENT

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Upon the sale of part or all of an investment in a foreign entity, a pro-rata share of the amount included in the accumulated translation adjustment equity account associated with that foreign investment is removed and reported as part of the gain or loss from the disposition of the investment. For example, if a company disposed of 50% of its interest in a foreign entity, 50% of the related accumulated translation adjustment would be removed from stockholders' equity and recognized in measuring the gain or loss on the sale.

## Chapter 13 – Review Questions

The review questions accompanying this course are designed to assist you in achieving the course learning objectives. The review section is not graded; do not submit it in place of your qualified assessment. While completing the review questions, it may be helpful to study any unfamiliar terms in the glossary in addition to course content. After completing the review questions, proceed to the review question answers and rationales.

86. Under the current method of translation:
- The income statement is translated at the rate in effect when the transaction took place.
  - Monetary assets and liabilities are translated at current exchange rates and assets and liabilities that are carried at historic cost are translated using the historical exchange rate.
  - Income statement accounts are translated using the rate in effect on the day that the transaction occurred with the exception of asset-based expense like depreciation which are translated using the historical rate.
  - Actual exchange rates on the day that the transaction occurred must be used and the use of averages is no longer allowed.
87. The subsidiary would need to remeasure its financial statements when:
- The local environment is highly inflationary.
  - The foreign subsidiary maintains their books in the functional currency.
  - The functional currency is not the U.S. dollar.
  - The foreign subsidiary does not maintain its records in their functional currency.
88. Translation adjustment would be recorded in stockholder's equity when:
- There is high inflation.
  - The functional currency is not the local currency and the functional currency is the U.S. dollar.
  - The functional currency is the local currency.
  - The functional currency is not the local currency and the functional currency is not the U.S. dollar.

89. Which of the following is the appropriate treatment of intercompany payables and receivables when the subsidiary is a foreign company?
- a. The company must distinguish between transactions that are long-term investment in nature and those that are not.
  - b. All intercompany receivables/payables are translated at current rates with the gain or loss being recognized in income.
  - c. Whether short-term or longer term in nature, the receivables/payables are translated at the net balance on the balance sheet date.
  - d. There is no impact since it is an intercompany transaction.

## **Chapter 14 – Reporting for Segments and for Interim Financial Periods**

### **Learning Objectives**

After completing this section of the course, you will be able to:

- Define an operating segment and a reportable segment, noting the required information and disclosures related to each.
- Cite the issues around aggregated and disaggregated financial data as well as the basic requirements for public companies in reporting segmental data.
- Note the components of disclosure.
- Recognize differences between GAAP and IFRS for segment reporting.
- Identify requirements for reporting interim data and cite some of the problems and the authoritative positions related to them.

# REPORTING FOR SEGMENTS AND FOR INTERIM FINANCIAL PERIODS

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## CHAPTER CONTENTS

- 14.1 NEED FOR DISAGGREGATED FINANCIAL DATA
- 14.2 STANDARDS OF FINANCIAL ACCOUNTING AND REPORTING
- 14.3 INTERNATIONAL ACCOUNTING STANDARDS BOARD (IASB) POSITION ON SEGMENT REPORTING
- 14.4 INTERIM FINANCIAL REPORTING

### IN THE NEWS

Given the current economic uncertainties, investors want answers to some old-fashioned, fundamental questions: What is the business today, and how did it perform this year? Where is the cash, and where are the profits? What drives the value of the company, what risks affect its businesses, and how flexibly can the company respond to change?

We think registrants can best answer these questions if they start with good disclosure responsive to *FASB Statement No. 131* about operating segments and major lines of products and services, and then build upon that framework to discuss the important risks affecting those businesses. Because Regulation S-K Items 101 (Description of Business) and 303 (MD&A) build upon segment disclosures, a registrant's comprehensive identification of operating segments and product and service lines is a critical part of every SEC filing.

The staff also has focused on the *Statement 131* [ASC 280] disclosures because, frankly, we are concerned that too many companies have not responded adequately to *Statement 131*'s mandate to present separately financial information for those business components that are regularly reviewed by the chief operating decision maker. It's difficult to believe that chief operating decision makers review as little disaggregated information as some company's segment disclosure would have us believe.<sup>1</sup>

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<sup>1</sup> Excerpts from a speech by Robert A. Bayless, Chief Accountant, Division of Corporation Finance, U.S. Securities & Exchange Commission, "Debits and Credits in the New Economy," Meeting of the Silicon Valley Chapter of Financial Executives International, San Jose, California, September 18, 2001.



In previous chapters we have dealt with the process of aggregating the financial data relating to the activities of an affiliated group of companies. Investors and lenders holding equity or creditor interests are aware of the importance of consolidated statements in reporting the financial position and results of operations of a group of companies under common control. At the same time, investors, creditors, and other users of financial statements also need disaggregated data that provide information about the various segments of an enterprise or affiliated group of companies.

## 14.1 NEED FOR DISAGGREGATED FINANCIAL DATA

**LO 1** The need for disaggregated financial data.

Research studies conducted by various organizations such as the Financial Executives Research Foundation, the Financial Analysts Federation, and the National Association of Accountants concluded that financial statement users want disaggregated information to aid them in evaluating prospective investments. If return on investment is computed on the basis of expected cash flows, the evaluation of risk requires an assessment of the uncertainty surrounding both the timing and the amount of these expected cash flows. Major uncertainty results from (1) factors unique to individual companies, (2) factors related to the industries and geographical areas in which those companies operate, and (3) related national and international economic and political factors.

Users need financial statement information to determine conditions, trends, and ratios that assist in predicting cash flows of firms. These factors are often compared with those of other firms, as well as with industry-wide data, and general national and international economic information is considered in making an overall evaluation of the risk involved. When a firm engages in activities in several industries or geographic areas, analysis and the process used to predict future cash flows become more complex. Different industries or geographic areas may have different rates of profitability, opportunities for growth, and types of risk. Thus, most users agree that, although consolidated financial information is important, it is more useful if supplemented with disaggregated information to assist in analyzing the uncertainties surrounding the timing and amounts of expected cash flows.

## 14.2 STANDARDS OF FINANCIAL ACCOUNTING AND REPORTING

For a long time, FASB has indicated a belief in the benefits of disclosing segmental data. Several standards requiring segment disclosures have been issued and revised over time starting with *SFAS No. 14* in 1976. *SFAS No. 14* was amended by *SFAS No. 21* in 1978 and ultimately replaced with the current standard (*SFAS No. 131*), which is included in FASB ASC topic 280 (Segment Reporting). Segmental disclosures have limitations as well as strengths. The primary benefit is the unveiling of information that has been merged and possibly buried in the consolidated data. For example, specific information about a declining or growing product line or unstable geographic area may be useful in projecting future cash flows or in assessing risk. The arguments *against* segmental disclosures include the following:

### RELATED CONCEPTS

The FASB felt that the industry approach previously required in *SFAS No. 14* did not provide the needed information required by users. Defining segments based on the enterprise's internal organization better defines the risks and opportunities that management deems important, and thus better meets the criterion of *usefulness*.

- Segmental information may be misleading or meaningless due to inherent accounting classification and allocation problems, to lack of user knowledge, or to variation in the measurement techniques applied by different companies.
- Disclosures to competing firms, labor unions, and so on could have adverse effects and could discourage management from taking on desirable but risky projects in order to avoid the disclosures.
- Users are already bombarded with an excessive amount of accounting detail, and segmental disclosures merely add to the burden.

Nonetheless, most people believe the advantages outweigh the disadvantages. In addition, the increased pace of merger activity and the increase in foreign operations have led to greater importance being attached to segmental disclosures. Thus, the FASB requires all public companies to report information about the revenues earned in different countries

**LO 2** Basic disclosure requirements.**IN  
THE  
NEWS**

Cracker Barrel reports only one segment despite having a retail store connected to the restaurants. One owner argues: "In the final analysis, you are either not properly measuring the restaurant and retail businesses, and thus you are not properly managing them, or you are measuring/ managing them properly but failing to report both operating segments to your owners."<sup>2</sup>

and their assets, about major customers, and about revenues for each product and service, even when *some* of the information is not used by the firm in its operating decisions.

**In general, the FASB implemented a management approach, focusing on the way in which management organizes segments internally to make operating decisions and to assess performance.** The objective of this approach is to facilitate consistency between internal and external reporting. Information may be segmented by product or service, by geographic area, by customer type, or by legal entity. For each operating segment, firms must report segmental profit or loss, certain items of revenue and expense, segmental assets, and other items.

Current GAAP do not limit segmental reporting to financial data only. It also requires a discussion of the firm's rationale or method for categorizing its operations into segments, as well as any difference in measurement techniques between periods being reported or between the segment and the entire entity. If statements are presented for more than one period, the required information must be presented for each period. The information required should be a disaggregation of **consolidated financial information** where the firm has consolidated subsidiaries, and a disaggregation of the individual firm data if it has no consolidated subsidiaries.

We next define some terms that have been given specific connotations for purposes of segmental reporting. The terms and their definitions are as follows:

- a. **Operating segment.** A component of an enterprise that may earn revenues and incur expenses, about which separate financial information is evaluated regularly by the chief operating decision maker in deciding how to allocate resources and in assessing performance.
- b. **Reportable segment.** A segment considered to be significant to an enterprise's operations; specifically, one that has passed one of three 10% tests or has been identified as being reportable through other criteria (aggregation, for example).
- c. **Chief operating decision maker.** A person whose general function (not specific title) is to allocate resources to, and assess the performance of, the segments of an enterprise.
- d. **Segment revenue.** The revenue from sales to unaffiliated customers and from intersegment sales or transfers.
- e. **Segment operating profit or loss.** All of a segment's revenue minus all operating expenses, including any allocated revenues or expenses (e.g., common costs).
- f. **Segment assets.** Those tangible and intangible assets directly associated with, or used by, a segment, including any allocated portion of assets used jointly by more than one segment. If portions of assets are allocated internally and used by the chief operating decision maker, then those amounts should be allocated on a reasonable basis and disclosed for external reporting purposes as well.
- g. **Corporate assets.** Assets maintained for general corporate purposes and not used in the operations of any segment.
- h. **General corporate expense.** An expense incurred for the benefit of the corporation as a whole, which cannot be reasonably allocated to any segment.
- i. **Transfer pricing.** The pricing of products or services between operating segments or geographic areas.

Two of the most difficult tasks in applying the segment disclosure requirements are those of determining (1) an appropriate basis for the allocation of common costs and (2) appropriate operating segments.

**LO 4** Reportable segments.**RELATED CONCEPTS**

Providing segment data based on the enterprise's internal organization may make the segment data less comparable between similar firms if each firm is organized differently. *Relevance*, however, remains the overriding concern rather than comparability in this setting.

<sup>2</sup> "Top Investor laments Cracker Barrel's 'low road in accounting disclosure,'" Geert De Lombaerde, nashvillepost.com, 8/25/2011.

## Determining Operating Segments

### LO 3 Determine an operating segment.

*Operating segments* of the firm are determined using a modified management approach. An operating segment is a component that exhibits all of the following characteristics:

- It engages in business activities that may earn revenues and incur expenses (including transactions with other components of the entity).
- The entity's chief operating decision maker (may be one individual or a group of executives) regularly reviews the component's operating results to assess its performance and make decisions about resources to be allocated to it.
- Discrete financial information is available.

Disclosures are required for each operating segment, subject to the quantitative thresholds and aggregation criteria presented next. Because the aggregation can occur before performing the quantitative tests, we present those criteria first.

**Aggregation Criteria** An entity is permitted (but not required) to aggregate operating segments that have similar economic characteristics if the segments are also similar in *all* the following areas:

- The nature of their products or services.
- The nature of the production processes.
- The types or class of customers.
- The methods used to distribute products or provide services.
- The nature of the regulatory environment (banking, for example).<sup>3</sup>

Operating segments are considered to be similar if their future prospects are expected to be essentially the same. Thus, the similarity of the economic characteristics is evaluated based on *future prospects* and not based simply on current indicators. In other words, even if the segments do not currently have similar gross margins and sales trends, when the economic characteristics and the other five criteria are met and the segments are expected to have similar long-term average gross margins and sales trends, the two segments may be aggregated.

Likewise, if segments are not expected to have similar future economic characteristics, but in the current year have similar gross margins or sales trends, the segments should not be aggregated for the current-year segment disclosures.

**Quantitative Thresholds** Each operating segment that is significant to the enterprise as a whole must be identified as a *reportable* segment. A segment is considered to be significant if it meets *one or more* of the following tests, the tests being applied separately for each fiscal year for which financial statements are prepared:

- Its combined external and internal revenue is **10% or more** of the combined external and internal revenue of all reportable segments.
- The absolute amount of its reported profit or loss is **10% or more** of the *greater* absolute amount of:
  - The combined reported profit of all operating segments not reporting a loss
  - The combined reported loss of all operating segments that reported a loss
- Its assets are **10% or more** of the combined assets of all operating segments.

Entities are permitted to present operating segments separately that fall below the quantitative thresholds, or such operating segments may be combined with other segments not meeting the quantitative thresholds if the segments share a *majority* of the aggregation criteria.

An example of the application of these tests for Papco, Inc. is presented in Illustration 14-1. In this example the information of Papco is segmented by its products.

### RELATED CONCEPTS

The FASB rejected the requirement that a secondary definition of segments be disclosed if the internal organization is not segmented by products and services or geography. This requirement was rejected because of the cost of providing this alternative information (*cost-benefit considerations*).

<sup>3</sup> See FASB ASC paragraph 280-10-50-11 for more details on the regulatory environment.

**ILLUSTRATION 14-1**
**Significance Tests**  
**Year Ended December 31, 2014**  
**(Thousands of Dollars)**  
**Papco, Inc.**

| <i>Revenue Test</i>             | <i>Segments</i> |                 |                 |                  |                |                 |
|---------------------------------|-----------------|-----------------|-----------------|------------------|----------------|-----------------|
|                                 | <i>Lumber</i>   | <i>Paper</i>    | <i>Printing</i> | <i>Furniture</i> | <i>Leather</i> | <i>Combined</i> |
| Sales to Unaffiliated Customers | \$16,000        | \$ 3,000        | \$2,000         | \$1,500          | \$1,000        | \$23,500        |
| Intersegment Sales              | 5,000           | 2,000           | 500             | 500              | —0—            | 8,000           |
| Total Revenue                   | <u>\$21,000</u> | <u>\$ 5,000</u> | <u>\$2,500</u>  | <u>\$2,000</u>   | <u>\$1,000</u> | <u>\$31,500</u> |
| Percentage of Total Revenue     | 67%             | 16%             | 8%              | 6%               | 3%             | 100%            |

The lumber and paper segments are reportable segments under the revenue test because their total revenues are at least 10% of combined total revenue of \$31,500, whereas the other segments are not reportable segments under this test.

**Operating Profit Test**

|                         |          |        |         |        |          |          |
|-------------------------|----------|--------|---------|--------|----------|----------|
| Operating Profit (Loss) | \$ 2,500 | \$ 600 | \$(300) | \$ 150 | \$ (100) | \$ 2,850 |
| Percentage of \$3,250*  | 77%      | 18%    | 9%      | 5%     | 3%       |          |

The lumber and paper segments are reportable segments under the operating profit test because the absolute amounts of their operating profit or loss are each **at least 10% of the greater of** (1) the combined profit of all segments that did not incur a loss\* (\$2,500 + \$600 + \$150 = \$3,250), or (2) the combined loss of all segments that incurred a loss (\$300 + \$100 = \$400). The other segments are not reportable segments under this test.

**Assets Test**

|                            |          |          |         |         |         |          |
|----------------------------|----------|----------|---------|---------|---------|----------|
| Segment Assets             | \$25,000 | \$12,000 | \$8,000 | \$3,000 | \$4,000 | \$52,000 |
| Percentage of Total Assets | 48%      | 23%      | 15%     | 6%      | 8%      | 100%     |

The lumber, paper, and printing segments are reportable segments because their assets are at least 10% of combined identifiable assets of \$52,000. The furniture and leather segments are not reportable segments under this test.

**Reportable Segments (still subject to the 75% Combined Revenue Test)**

- 1) Lumber (met all three tests above)
- 2) Paper (met all three tests above)
- 3) Printing (met the asset test above)

**75% Combined Revenue Test**

|                                 |              |              |             |         |         |          |
|---------------------------------|--------------|--------------|-------------|---------|---------|----------|
| Sales to Unaffiliated Customers | \$16,000     | \$ 3,000     | \$2,000     | \$1,500 | \$1,000 | \$23,500 |
| Percentage of Total Sales       | <b>68.1%</b> | <b>12.8%</b> | <b>8.5%</b> | 6.4%    | 4.3%    | 100.0%   |
| Combined Percentage             | 89.4%        |              |             |         |         |          |

The three reportable segments have combined revenue in excess of 75% of total unaffiliated revenue; therefore, no additional segments need be identified. The furniture and leather segments would be combined when reported.

The results of the tests should be evaluated from the standpoint of **comparability**. Thus, a segment that has been significant in the past and is expected to be significant in the future should be treated as a reportable segment even though it fails to meet a test in the current year. Further, if the structure of the organization changes so that the reportable segments are redefined, the information presented from prior periods should be **restated** so that it is comparable with the current structure (if practical). In such cases, the firm should explicitly disclose the fact that the earlier periods have been restated and why. Also, if a particular segment that was previously not considered significant becomes significant in the current period, then segmental data should be presented for that segment for the prior periods as well as the current one.

## Seventy-Five Percent Combined Revenue Test

In addition to the tests described above, the reportable segments taken together must represent a substantial portion of the firm's total operations. To determine whether a substantial portion of a firm's operations are explained by its segment information, **the combined revenue from sales to unaffiliated customers of all reportable segments must constitute at least 75% of the combined revenue from sales to unaffiliated customers of all operating segments**. If the 75% test is not satisfied, additional segments must be identified until the

test is met. The test is applied separately for each fiscal period for which financial statements are prepared.

Application of this 75% test to the situation presented in Illustration 14-1 produces the following:

$$\frac{\text{Combined Sales to } \textit{unaffiliated} \text{ customers by the lumber, paper, and printing segments}}{\text{Combined Sales to } \textit{unaffiliated} \text{ customers by all segments}} = \frac{\$16,000 + \$3,000 + \$2,000}{\$23,5000} = 89.4\%$$

Thus, the 75% test is met, and the lumber, paper, and printing segments will be reported individually and the furniture and leather segments combined into one unit. If the 75% test had not been met, one or more of the segments that did not qualify as reportable segments under the previous tests would have to be included as reportable segments.

The FASB standard implies that the number of reportable segments should probably not exceed 10 segments. If the number does exceed 10, then the entity should revisit the aggregation criteria. (See Illustration 14-2)

**Lo 5** Reportable segment information to be presented.

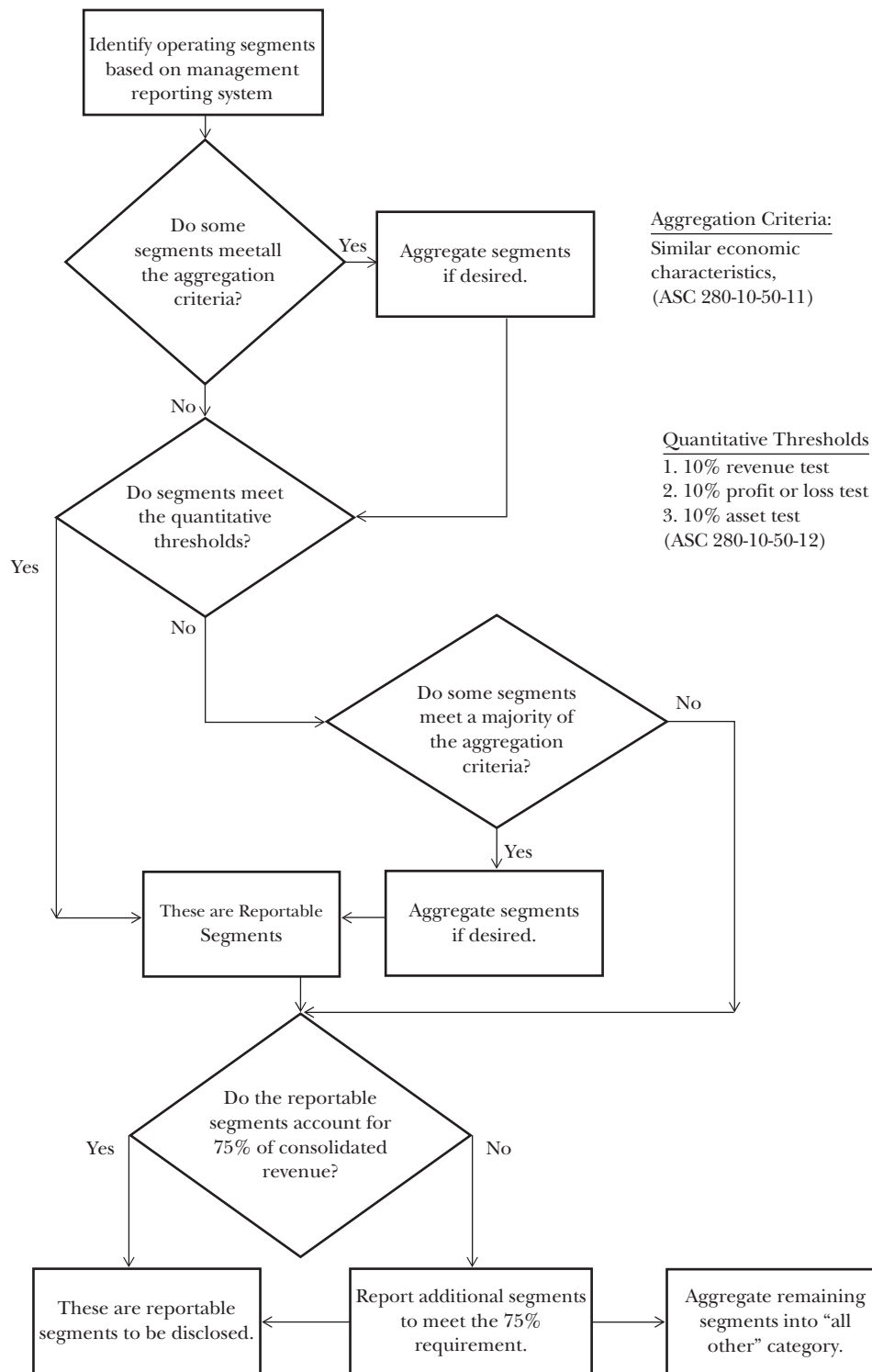
**Information to Be Presented** The following types of information must be presented for each of a firm's reportable segments, and in the aggregate for the segments that are not separately reported.

- **General information.** FASB ASC paragraph 280-10-50-21 requires an explanation of how management identified its reportable segments, as well as whether any segments have been aggregated. A description is also required of the types of products or services from which each segment obtains its revenues.
- **Information about segment operating profit or loss.** Rather than specifying a strict definition of profit or loss for segmental purposes, the standard designates that a management approach focusing on internal decision making be used to determine the measurement of segmental profit or loss. Thus, the following items are disclosed only *if* they are included in the measures reviewed by the chief operating decision maker:
  - a. Revenues from external customers
  - b. Revenues from other segments
  - c. Interest revenue and expense
  - d. Depreciation, depletion and amortization expense
  - e. Income tax expense
  - f. Equity income from investments
  - g. Extraordinary items or other unusual items
  - h. Other significant noncash items

The absence of specific rules in calculating segment profit or loss leaves room for possible departures from GAAP as applied at the consolidated level. For example, pension expense may not be allocated to segments if not reviewed by the decision maker for that segment. The possibility of departures from GAAP for segmental disclosures is addressed further in a later section of this chapter, in comparison to recommended international standards.

- **Information about segment assets.** Firms are required to disclose those assets that are evaluated by the chief operating decision maker for the segment, including the following information *if* such information is reviewed by the officer: expenditures for most long-lived assets and the carrying basis of "influential" investments, or those measured using the equity method. If the asset information is not disclosed, that fact and the reason should be stated.
- **Information about the bases for measurement.** Differences in measurement between segments and the consolidated entity must be disclosed for: income before tax, discontinued

ILLUSTRATION 14-2



operations, extraordinary items, and for segment profit or loss. Similarly, differences in measurement between segment assets and the consolidated assets must be disclosed, if any. For example, information on how jointly used assets are allocated to segments may be needed to understand the segment information. The basis should be disclosed for any transactions between segments, and any asymmetrical allocations to segments should be explained. Finally, any changes from the measurement methods used in prior periods must be disclosed, and their effects on segment profit or loss.

## RELATED CONCEPTS

*Verifiability* is a component of reliability. Segment data do not have the same degree of verifiability as other financial data. The tradeoff for lessened verifiability is the relevance of the segment data for users' decisions.

- **Reconciliation of segment amounts and consolidated amounts for revenue, profit or loss, assets, and other significant items.** Differences occur for a variety of reasons, including the following: Some segments not meeting the quantitative thresholds are presented as “all other.” Some items are not allocated to segments if there is no reasonable basis for doing so, or because the information is not used by the chief operating decision maker. Transactions between segments may give rise to “intersegment” revenue, profit, or loss amounts that are eliminated from the consolidated totals. Because the focus in segmental reporting is a management approach, it may result in different accounting methods from those used for external reporting for the consolidated entity. A reconciliation of such items must be presented in sufficient detail to explain the differences. It should include:
  - Revenue to revenue reported in the consolidated income statement.
  - Operating profit or loss to pretax income from continuing operations in the consolidated income statement.
  - Segment assets to consolidated total assets.

Illustration 14-6, presented later in this chapter, illustrates a reconciliation of the above items.

- **Interim disclosures.** Unlike the previous standard on segmental reporting, current standards require that segmental disclosures be included in interim reports.<sup>4</sup> The extent of the disclosures depends on whether the firm presents a complete set of financial statements for the interim period, or condensed financial statements. If the firm presents a complete set of statements, the interim disclosures are the same as presented above for reportable segments. If condensed statements are presented for interim periods, they should include the following for each reportable segment: revenues, including intersegment sales; profit or loss; disclosures of any changes in measurement bases for segmentation or components of profit or loss since the most recent annual report; any material changes in assets since the most recent annual report; and a reconciliation of income from continuing operations for the consolidated entity and for the total of the reportable segments.
- **Enterprisewide Disclosures.** Because of the choice allowed in designating reportable segments, a given firm may report its segmental information based on products or services, geographic areas, and so on. Thus other information about the bases not chosen is not provided as part of the above disclosures. Current GAAP require that such information be presented if practicable. If not practicable, the reason for not including the disclosures should be stated. These additional disclosures are made on an enterprisewide basis rather than a segmental basis and are required only for annual reporting. They are required even if a firm has only a single reportable segment. They include:
  - Product or service disclosures:** revenues from external customers for each *product or service* or group of products or services, on the same basis as the general-purpose financial statements. This disclosure is not required if the reportable segments are structured around products or services.
  - Geographic area disclosures:** revenues from external customers and long-lived assets for the firm's country of domicile and for all the other countries in total, also on the same basis as the general-purpose financial statements; *and* revenues from external customers and long-lived assets for *each foreign country or group of foreign countries*, if material, along with the basis for allocating revenues (location of customer, where shipped, etc.). These disclosures are generally not required if the company's reportable segments have been organized around *geographic area*. (See FASB ASC paragraph 280-10-50-41.)

<sup>4</sup> FASB ASC paragraph 280-10-50-32.

—**Major customer disclosures:** information about **major customers** for each customer representing **10% or more** of total enterprise revenues, including the amount of revenues and the segment(s) to which the revenue is traceable. A group of customers under common control is treated as a single customer, as are the various agencies of a government. (See FASB ASC paragraph 280-10-50-42.)

**Methods of Presentation** Information about the reportable segments of a firm may be included in its financial statements in any of the following ways:

- Within the body of the financial statements, with appropriate explanatory disclosures in the footnotes to the financial statements.
- Entirely in the footnotes to the financial statements.
- In a separate schedule that is included as an integral part of the financial statements.

Financial information such as revenue, operating profit or loss, and identifiable assets must be presented in dollar amounts; related percentages may be shown if desired.

As an illustration of segment reporting, assume the segment data presented in Illustration 14-1. In addition, assume that the consolidated income statements and balance sheets for 2013 and 2014 for Papco, Inc. are as shown in Illustration 14-3. Disclosure of

### ILLUSTRATION 14-3

| <b>Papco Inc.</b>                            |                               |               |
|--|-------------------------------|---------------|
| <b>Consolidated Income Statement</b>         |                               |               |
| <b>(Thousands of Dollars)</b>                |                               |               |
|  | <i>Year Ended December 31</i> |               |
|  | <i>2014</i>                   | <i>2013</i>   |
| Sales  | \$23,500                      | \$22,100      |
| Cost of Goods Sold                           | 16,400                        | 15,300        |
| Selling, General, and Administrative Expense | 4,530                         | 4,380         |
| Interest Expense                             | 600                           | 570           |
| Total Cost and Expense                       | <u>21,530</u>                 | <u>20,250</u> |
| Operating Income                             | 1,970                         | 1,850         |
| Equity in Income of B Company                | 150                           | 120           |
| Income before Income Taxes                   | 2,120                         | 1,970         |
| Income Taxes                                 | 1,020                         | 980           |
| Net Income                                   | <u>\$ 1,100</u>               | <u>\$ 990</u> |

| <b>Papco Inc.</b>   |                    |                 |
|---|--------------------|-----------------|
| <b>Consolidated Balance Sheet</b>   |                    |                 |
| <b>(Thousands of Dollars)</b>   |                    |                 |
|   | <i>December 31</i> |                 |
|   | <i>2014</i>        | <i>2013</i>     |
| Cash  | \$1,870            | \$1,785         |
| Receivables   | 2,640              | 2,860           |
| Inventories   | 6,400              | 6,345           |
| Investment in B Company   | 700                | 600             |
| Plant and Equipment (net of accumulated depreciation<br>of \$17,500 in 2014 and \$16,200 in 2013) | 41,500             | 40,400          |
| Other Assets  | 690                | 970             |
| Total Assets  | <u>\$53,800</u>    | <u>\$52,960</u> |
| Current Liabilities   | \$2,400            | \$2,320         |
| Bonds Payable   | 12,000             | 12,000          |
| Common Stock, \$50 par value  | 30,000             | 30,000          |
| Additional Paid-in Capital  | 3,000              | 3,000           |
| Retained Earnings   | 6,400              | 5,640           |
| Total Liabilities and Stockholders' Equity  | <u>\$53,800</u>    | <u>\$52,960</u> |



## ILLUSTRATION 14-4

| <b>Papco Inc.</b>                               |               |              |                 |              |              |
|---|---------------|--------------|-----------------|--------------|--------------|
| <b>Segmental Disclosures by Product/Service</b> |               |              |                 |              |              |
| <b>(Thousands of Dollars)</b>                   |               |              |                 |              |              |
| <i>Year Ended December 31, 2014</i>             | <i>Lumber</i> | <i>Paper</i> | <i>Printing</i> | <i>Other</i> | <i>Total</i> |
| Revenues from external customers                | \$16,000      | \$ 3,000     | \$2,000         | \$2,500      | \$23,500     |
| Intersegment revenues                           | 5,000         | 2,000        | 500             | 500          | 8,000        |
| Depreciation and amortization                   | 640           | 290          | 190             | 100          | 1,220        |
| Interest expense                                | 200           | 100          | 80              | 100          | 480          |
| Segment operating profit                        | 2,500         | 600          | (300)           | 50           | 2,850        |
| Segment assets                                  | 25,000        | 12,000       | 8,000           | 7,000        | 52,000       |
| Capital expenditures                            | 1,540         | 420          | 30              | 210          | 2,200        |
| <i>Year Ended December 31, 2013</i>             | <i>Lumber</i> | <i>Paper</i> | <i>Printing</i> | <i>Other</i> | <i>Total</i> |
| Revenues from external customers                | \$15,200      | \$2,800      | \$2,100         | \$2,000      | \$22,100     |
| Intersegment revenues                           | 4,800         | 1,700        | 300             | 460          | 7,260        |
| Depreciation and amortization                   | 600           | 290          | 175             | 125          | 1,190        |
| Interest expense                                | 190           | 90           | 75              | 90           | 445          |
| Segment operating profit                        | 2,460         | 580          | (430)           | 70           | 2,680        |
| Segment assets                                  | 24,460        | 11,500       | 7,900           | 7,520        | 51,380       |
| Capital expenditures                            | 1,280         | 360          | 20              | 240          | 1,900        |

Note A—Product and Service Segments.

The Company operates in three main areas of product/service: lumber products, paper products, and printing. Intersegment sales are made at the same prices as sales to nonaffiliates.

segmental information organized by products/services might take the form of the supporting schedules and footnotes as shown in Illustration 14-4. This illustration also serves to reconcile the segmental data to the totals for the consolidated entity.

## Geographic Areas

### LO 6 Reporting on geographical areas.

As mentioned in the preceding section, entities are required to report revenues from external customers and long-lived assets attributable to their domestic operations and foreign operations. Foreign operations are defined as those located outside the United States (or other “home country”) that produce revenue from sales to unaffiliated customers or from intra-enterprise sales or transfers between countries or geographic areas. Foreign operations do **not**, however, include unconsolidated subsidiaries and investees. If operations are conducted in two or more foreign countries or geographic areas, information must be presented separately for each significant foreign country or geographic area and in the aggregate for all other foreign operations. Where the operations in some foreign countries are grouped into geographic areas, the groupings should be made on the basis of a consideration of (1) proximity, (2) economic affinity, (3) similarities of business environments, and (4) the nature, scale, and degree of interrelationship of the operations in the various countries.

To illustrate, foreign operations information for Papco, Inc. might be presented as shown in Illustration 14-5, assuming that the company conducts operations in the United States, Canada, and Mexico.

## Information about Major Customers

### LO 7 Reporting on major customers.

To provide information about the potential effects of dependency on one or more major customers, if **10% or more** of the revenue of a firm is derived from sales to any *single customer*, that fact and the amount of revenue from each such customer must be disclosed, as stated previously. Also, if **10% or more** of the revenue is derived from sales to the *federal government, a state government, a local government, or a foreign government*, that fact and the amount of revenue must be disclosed. Disclosure should include the amount of sales to each customer and the reportable segment making the sales. Customers’ names, however, need not be disclosed. These disclosures are required even if the firm has only one reportable segment.

**ILLUSTRATION 14-5****Papco Inc. Enterprisewide Disclosures (Thousands of Dollars)***Geographic Information*

| <i>Revenue</i>                       | <i>Year Ended December 31</i> |             |
|--------------------------------------|-------------------------------|-------------|
|                                      | <i>2014</i>                   | <i>2013</i> |
| United States                        | \$18,000                      | \$17,500    |
| Foreign Countries                    |                               |             |
| Canada                               | 4,000                         | 3,500       |
| Mexico                               | 1,500                         | 1,100       |
| Total Revenue from Foreign Countries | 5,500                         | 4,600       |
| Total Consolidated Revenue           | \$23,500                      | \$22,100    |
| <b><i>Long-Lived Assets</i></b>      |                               |             |
| United States                        | \$28,827                      | \$28,180    |
| Foreign Countries                    |                               |             |
| Canada                               | 9,375                         | 9,193       |
| Mexico                               | 4,688                         | 4,597       |
| Total Assets in Foreign Countries    | 14,063                        | 13,790      |
| Total Consolidated Assets            | \$42,890                      | \$41,970    |

***Major Customers***

We do not provide information on major customers because no single external customer represented 10% or more of total revenues.

**Reconciliation**

A reconciliation of major segmental data presented in earlier illustrations and the consolidated data in the income statement for Papco, Inc. is presented in Illustration 14-6.

**ILLUSTRATION 14-6****Papco Inc. Reconciliation of Major Segment Information (Thousands of Dollars)**

| <i>Revenue</i>  | <i>Year Ended December 31</i> |             |
|---|-------------------------------|-------------|
|   | <i>2014</i>                   | <i>2013</i> |
| Total revenue for reportable segments                   | \$28,500                      | \$26,900    |
| Revenue for other segments aggregated                   | 3,000                         | 2,460       |
| Elimination of intersegment revenue                     | (8,000)                       | (7,260)     |
| Total consolidated revenue                              | \$23,500                      | \$22,100    |
| <b><i>Profit and Loss</i></b>                           |                               |             |
| Total profit and loss for reportable segments           | \$ 2,800                      | \$ 2,610    |
| Other profit and loss                                   | 50                            | 70          |
| Elimination of intersegment profits                     | (680)                         | (630)       |
| Unallocated amounts relating to corporate headquarters: |                               |             |
| Interest expense  | (120)                         | (125)       |
| Depreciation  | (80)                          | (75)        |
| Equity in income of B Company                           | 150                           | 120         |
| Income before taxes                                     | \$ 2,120                      | \$ 1,970    |
| <b><i>Assets</i></b>                                    |                               |             |
| Total assets for reportable segments                    | \$ 45,000                     | \$ 43,860   |
| Other assets  | 7,000                         | 7,520       |
| Corporate investment in B Company                       | 700                           | 600         |
| General corporate assets                                | 1,100                         | 980         |
| Total consolidated assets                               | \$ 53,800                     | \$ 52,960   |

**Other Significant Items**

|  |                 |                 |
|--|-----------------|-----------------|
| Reportable segment depreciation and amortization | \$ 1,120        | \$ 1,065        |
| Other depreciation and amortization              | 100             | 125             |
| Adjustment for depreciation on corporate assets  | 80              | 75              |
| Consolidated totals                              | <u>\$ 1,300</u> | <u>\$ 1,265</u> |
| Reportable segment interest expense              | \$ 380          | \$ 355          |
| Other interest expense                           | 100             | 90              |
| Adjustment for interest on corporate borrowing   | 120             | 125             |
| Consolidated totals                              | <u>\$ 600</u>   | <u>\$ 570</u>   |
| Reportable segment interest expense              | \$ 1,990        | \$ 1,660        |
| Other capital expenditures                       | 210             | 240             |
| Adjustment for acquisition of corporate assets   | 200             | 150             |
| Consolidated totals                              | <u>\$ 2,400</u> | <u>\$ 2,050</u> |

### 14.3 INTERNATIONAL ACCOUNTING STANDARDS BOARD (IASB) POSITION ON SEGMENT REPORTING

**LO 8** IAS versus U.S. GAAP.

The International Accounting Standards Board has required segment information since around 1982. In January 2009, **IFRS 8** became effective. In this standard the basic management approach described in U.S. GAAP was adopted both in defining segments and in the information to be disclosed.

#### IFRS

IFRS 8 applies to the separate or individual financial statements of an entity (and to the consolidated financial statements of a group with a parent) whose debt or equity instruments are traded in a public market, or that files its consolidated financial statements with a securities commission or other regulatory organization for the purpose of issuing any class of instruments in a public market.

#### Differences between IFRS 8 and SFAS No. 131

Under IFRS 8, the segments must include intangible assets when disclosing non-current assets attributable to the segment, while under U.S. GAAP, intangible assets are not disclosed. In addition, under IFRS 8, segmental liabilities must be disclosed if such a measure is provided to the chief operating decision maker. Under U.S. GAAP, liabilities are

#### TEST YOUR KNOWLEDGE 14.1

**NOTE:** Solutions to *Test Your Knowledge* questions are found at the end of each chapter before the end-of-chapter questions.

#### Short Answer

Nash Consolidated is involved in four operating segments, A, B, C, and D (there are no intersegment sales). The following information is available.

| Segment | Operating Profit (Loss) | Nonaffiliate Sales | Identifiable Assets |
|---------|-------------------------|--------------------|---------------------|
| A       | (500)                   | 1,600              | 4,000               |
| B       | 100                     | 400                | 600                 |
| C       | 900                     | 2,000              | 5,000               |
| D       | 90                      | 1,000              | 1,000               |

- Using the revenue test, determine which of the operating segments are reportable segments.
- Using the operating profit test, determine which of the operating segments are reportable segments.
- Using the asset test, determine which of the operating segments are reportable segments.
- Using your answer to parts 1 through 3 and using the 75% combined revenue test, determine the number of reportable segments.


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In a document listing reporting deficiencies uncovered during the

peer reviews, the following item was noted: Failure to disclose, in the accountant's or auditor's report, a material departure from professional standards [an example includes the omission of a significant income tax provision on interim financial statements].<sup>5</sup>


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Wal-Mart has three reportable segments: Walmart U.S., Walmart

International, and Sam's Club.<sup>6</sup>

**Lo 9** Current interim reporting requirements.

not disclosed. *FASB* ASC section 280-10-50 requires an entity with a “matrix” form of organization to determine operating segments based on products and services. *IFRS* 8 requires such an entity to determine its operating segments in accordance with the core principle.

## 14.4 INTERIM FINANCIAL REPORTING

In a dynamic business environment, financial information must be available on a timely basis if sound investment decisions are to be made. Although businesses have historically considered the fiscal year to be the primary reporting period, interim financial statements have been presented frequently to provide information concerning financial status and progress for time periods of less than one year. The normal time period for interim reporting is a quarter of a year (such reports are generally called quarterly reports), but other periods such as a month might be used. These interim statements are generally prepared for the most recent interim period, as well as on a cumulative or year-to-date basis; they may consist of statements of financial position, income, and cash flows. The primary focus, however, has been on the presentation of interim income information, and some companies present only interim income statements.

Publicly owned companies are generally required to file some type of quarterly report as part of the agreement with the stock exchanges that list their stock. In addition, the SEC requires accelerated filers (firms with a market value greater than \$75 million) to file Form 10-Q with the Commission within 40 days after the end of each of the first three quarters of the fiscal year (45 days otherwise). The financial information disclosure portion of Form 10-Q requires that condensed financial statements include (1) comparative income statements for the quarter and year-to-date for the current and preceding year, (2) comparative statements of financial position at the end of the most recent quarter for the current and preceding year, and (3) comparative statements of cash flows for the current and preceding year. Most public companies also issue these reports required by the SEC to their stockholders and to other interested parties.

### Problems in Interim Reporting

**Lo 10** Problems in interim reporting.

Although the SEC established disclosure requirements for the financial information included in Form 10-Q, the development of accounting practices to be followed in preparing interim financial reports for external reporting purposes was left to the accounting profession. No official guide or pronouncement on the practices to be used was issued until the Accounting Principles Board issued *Opinion No. 28*, “Interim Financial Reporting,” in May 1973 (now included in *FASB* ASC topic 280, Interim Reporting). Thus, before *APB Opinion No. 28* was issued, the form and content of interim reports and the accounting practices to be used in their preparation were left to the discretion of the reporting companies. In addition, interim reports are essentially unaudited reports. As a result, several problems evolved in the preparation of interim reports.

The seasonal nature of operations in many industries can cause wide fluctuations in revenues, expenses, and net income from one interim period to another. The relatively short time period available to determine interim results and the added cost of determining accurate figures for accruals, deferrals, and inventories encouraged the use of a variety of estimation techniques, some of which proved to be highly inaccurate. In fact, many firms used a wider variety of accounting practices and estimation procedures for interim reports than they did for year-end reports. In addition, two essentially conflicting views of the nature of interim periods exist among accountants. Some accountants hold that each interim period should *stand alone* as a basic accounting period; they conclude, therefore, that the results

<sup>5</sup> www.AICPA.org, 7/7/06.

<sup>6</sup> Wal-Mart 10K, for the year ended January 31, 2014.

of operations for each interim period should be determined in the same manner as if the interim period were an annual period. Under this *discrete* view of an interim period, deferrals, accruals, and estimations at the end of each interim period are determined by following essentially the same principles and judgments that apply to annual periods.

Other accountants view each interim period as essentially an *integral* part of the annual period. Under this view, deferrals, accruals, and estimations at the end of each interim period are affected by judgments made at the interim date as to results of operations for the balance of the annual period. Thus, an expense item that might be considered as falling wholly within an annual accounting period could be allocated among interim periods on the basis of estimated time, sales volume, productive activity, or some other basis.

As a result of the problems just described, some companies issued interim financial statements reporting significant quarterly and year-to-date income for the first three quarters, but full-year statements that reported substantial net losses. The SEC filed complaints against several companies for failure to make adequate adjustments for accruals and deferrals of revenue and expenses on an interim basis and for failing to make appropriate adjustments on an interim basis for amortization, depreciation, and inventory obsolescence. In response to SEC complaints and general pressure from the financial and investing community, the APB issued *APB Opinion No. 28* in May 1973.

## FASB ASC Topic 280, Interim Reporting

The basic objective of the standard was “to clarify the application of accounting principles and reporting practices to interim financial information, including interim financial statements and summarized interim financial data of publicly traded companies issued for external reporting purposes.” The Board also concluded that “*each interim period should be viewed primarily as an integral part of an annual period.*” The Board also took the position that financial statements for each interim period should be based on the same accounting practices that are used for the preparation of annual financial statements. The current standard presents guidelines for the presentation of revenue, costs associated with revenue, all other costs and expenses, and income tax provisions.

**Revenue** Revenue from products sold or services performed should be recognized as earned during an interim period on the same basis as that used for the full year. In addition, business with material seasonal variations should disclose the seasonal nature of their activities.

**Costs Associated with Revenue** Costs and expenses that are associated directly with or allocated to the products sold or to the services rendered for annual reporting purposes should be similarly treated for interim reporting purposes. However, the following are acceptable alternatives for inventory costing:

1. Estimated gross profit rates may be used by some companies to determine the cost of goods sold during interim periods, or they may use methods other than those used for year-end inventories. Companies using these methods should disclose the method used in the interim report and any significant adjustments that result from reconciliations with the annual physical inventory.
2. Companies using the LIFO method may encounter a liquidation of base period inventories at an interim date that is expected to be replaced by the end of the annual period. In these cases, cost of goods sold should be charged with the expected replacement cost of the liquidated LIFO base.
3. Inventory losses from market declines should be recognized in the interim period in which the decline occurs. Subsequent recoveries of these losses in interim periods should be recognized as gains to the extent of losses previously recognized in interim periods of the same fiscal period. However, market declines that are expected to be temporary within the fiscal year need not be recognized.

To illustrate, assume that Drex Company, which uses the FIFO inventory method, had 18,000 units in inventory at the beginning of the year at a FIFO cost per unit of \$6. No purchases were made during the year. Information concerning quarterly sales and end-of-quarter replacement cost follows:

| <i>Quarter</i> | <i>Sales in Units</i> | <i>End-of-Quarter<br/>Units on<br/>Hand</i> | <i>End-of-Quarter<br/>Replacement Cost</i> |
|----------------|-----------------------|---|--|
| 1              | 3,000                 | 15,000                                      | \$6.30                                     |
| 2              | 3,500                 | 11,500                                      | 5.80                                       |
| 3              | 2,500                 | 9,000                                       | 6.10                                       |
| 4              | 5,000                 | 4,000                                       | 5.50                                       |
| Total          | <u>14,000</u>         |   |  |

Assuming that the market decline in the second quarter was not expected to be temporary, cost of sales for the four quarters would be:

| <i>Quarter</i> | <i>Computation of Cost<br/>of Goods Sold</i>   | <i>Cost of Goods Sold</i> |                   |
|----------------|--|---------------------------|-------------------|
|                |  | <i>Quarter</i>            | <i>Cumulative</i> |
| 1              | Sold 3,000 units @ \$6   | \$18,000                  | \$18,000          |
| 2              | Sold 3,500 units @ \$6   | } 23,300                  | 41,300            |
|                | Plus write-down of ending inventory<br>of 11,500 units to market<br>[11,500 × (\$6.00 – \$5.80)] |                           |                   |
| 3              | Sold 2,500 units @ \$5.80  | } 12,700                  | 54,000            |
|                | Less write-down recovery on ending<br>inventory of 9,000 units<br>[9,000 × (\$6.00 – \$5.80)]    |                           |                   |
| 4              | Sold 5,000 units @ \$6   | } 32,000                  | 86,000            |
|                | Plus write-down of ending inventory<br>of 4,000 units to market<br>[(4,000 × (\$6.00 – \$5.50)]  |                           |                   |

Because each interim period is considered an integral part of an annual period, the cumulative cost of goods sold (\$86,000) should equal the amount that would be computed if the lower-of-cost-or-market method were applied on an annual basis. Thus, we can verify as follows:

| <i>Units Sold During Year</i>   |   | <i>FIFO Cost/Unit</i> | <i>Amount</i>   |
|---|---|-----------------------|-----------------|
| 14,000  | × | \$6.00                | \$84,000        |
| Add: Write-down of ending inventory to the<br>lower of cost or market (4,000 × \$.50) |   |                       | <u>2,000</u>    |
| Total cost of goods sold for the year   |   |                       | <u>\$86,000</u> |

This procedure also has the effect of determining the cumulative cost of goods sold at the end of any quarter within the year.

- Companies that use standard cost for determining inventory and product cost should generally follow the procedures in reporting variances that are used for the fiscal year. Purchase price and volume variances that are expected to be absorbed by the end of the annual period should ordinarily be deferred at interim reporting dates. Unplanned purchase price and volume variances, however, should be reported at the end of the interim period by the procedures used at the end of the fiscal year.

**All Other Costs and Expenses** The Board concluded that, in accounting for costs and expenses that are not allocated to products sold or to services rendered, the following standards should apply:

1. Costs and expenses other than product costs should be charged to income in interim periods as incurred, or be allocated among interim periods based on an estimate of time expired, benefit received or activity associated with the periods. Procedures adopted for assigning specific cost and expense items to an interim period should be consistent with the bases followed by the company in reporting results of operations at annual reporting dates. However, when a specific cost or expense item charged to expense for annual reporting purposes benefits more than one interim period, the cost or expense item may be allocated to those interim periods.
2. Some costs and expenses incurred in an interim period cannot be readily identified with the activities or benefits of other interim periods and should be charged to the interim period in which incurred. Disclosure should be made as to the nature and amount of such costs unless items of a comparable nature are included in both the current interim period and in the corresponding interim period of the preceding year.
3. Arbitrary assignment of the amount of such costs to an interim period should not be made.
4. Gains and losses that arise in any interim period similar to those that would not be deferred at year-end should not be deferred to later interim periods within the same fiscal year.

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In a study examining the predictive ability of SFAS No. 131 versus SFAS

No. 14, the predictive ability of the geographic sales reported by SFAS No. 131 exceeds that of SFAS No. 14. In addition, the requirement that companies report revenues for the country of domicile and for each "material" country has enhanced the predictive ability of the segment data.<sup>7</sup>

**Provision for Income Taxes** Accounting for income taxes in interim financial statements can be very complex for a company with such items as operating loss carrybacks or carryforwards, extraordinary gains and losses, capital gains and losses, and other similar items. Our treatment here will cover the basic issue of interim provision of income taxes.

The basic technique for computing income tax provisions for interim financial statements is described in FASB ASC subtopic 740-270 (Income Taxes—Interim Reporting). At the end of each interim period the company should make its best estimate of the effective tax rate expected to be applicable for the full fiscal year. The rate so determined should be used in providing for income taxes on a current year-to-date basis. The effective rate should reflect anticipated tax credits, foreign tax rates, percentage depletion, and other available tax planning alternatives. However, in arriving at this effective tax rate no effect should be included for the tax related to significant unusual or extraordinary items that will be separately reported or reported net of their related tax effect in reports for the interim period or for the fiscal year.

To illustrate the basic procedures, assume that during 2012 Drex Company had actual first-quarter earnings of \$150,000 and expected to have full-year earnings of about \$500,000. On the basis of its full-year earnings projection, Drex Company estimated that its combined state and federal tax rate would be 30%. Assume further that Drex Company estimated that it would have permanent differences between accounting income and taxable income during the year of \$20,000 for penalties for environmental violations and a dividend exclusion of \$50,000. On the basis of this information, Drex Company would compute its estimated effective income tax rate for the year as follows:

|   |                  |
|---|------------------|
| Estimated income before taxes                               | \$500,000        |
| Add: Nondeductible penalties                                | 20,000           |
| Less: Dividends exclusion                                   | (50,000)         |
| Estimated taxable income                                    | <u>\$470,000</u> |
| Estimated combined income tax payable (\$470,000 × 30%)     | <u>\$141,000</u> |
| Estimated effective combined tax rate (\$141,000/\$500,000) | <u>28.2%</u>     |

<sup>7</sup> *Journal of International Accounting Research*, "The Predictive Ability of Geographic Segment Disclosures by U.S. Companies: SFAS No. 131 versus SFAS No. 14," by Bruce Behn, Nancy Nichols, and Donna Street, vol. 1, 2002, pp. 31–44.

This estimated rate is used to determine the income tax provision for the first quarter. Drex Company would, therefore, make the following entry:

|  |        |        |
|--|--------|--------|
| Income Tax Expense ( $\$150,000 \times 28.2\%$ ) | 42,300 |        |
| Income Tax Payable                               |        | 42,300 |

Now assume that during the second quarter of 2012 Drex Company had actual earnings of \$170,000, and that estimated total income for the year is \$600,000. Estimated permanent differences remain the same as projected during the first quarter. Using this new information, Drex Company would again compute an estimated combined federal and state tax rate for the year.

|   |                  |
|---|------------------|
| Estimated income before taxes                                     | \$600,000        |
| Less: Net permanent differences ( $\$50,000 - \$20,000$ )         | <u>(30,000)</u>  |
| Estimated taxable income  | <u>\$570,000</u> |
| Estimated combined income tax payable ( $\$570,000 \times 30\%$ ) | <u>\$171,000</u> |
| Estimated effective combined tax rate ( $\$171,000/\$600,000$ )   | <u>28.5%</u>     |

The new estimated tax rate is used to compute the estimated year-to-date income tax provision, and the provision required for the second quarter as indicated here:

|   |                                   |
|---|-----------------------------------|
| Cumulative income for the first two quarters ( $\$150,000 \times \$170,000$ ) | \$320,000                         |
| Estimated effective tax rate  | <u><math>\times 28.5\%</math></u> |
| Cumulative tax provision needed   | 91,200                            |
| Less: Tax provided in first quarter   | <u>42,300</u>                     |
| Tax provision for second quarter  | <u>\$ 48,900</u>                  |

Drex Company would make the following tax provision entry for the second quarter:

|                    |        |        |
|--------------------|--------|--------|
| Income Tax Expense | 48,900 |        |
| Income Tax Payable |        | 48,900 |

Note that the new estimated effective tax rate is *not* applied retroactively; that is, the first-quarter results are not restated. Tax expense reported in the second quarter interim income statement would be \$48,900, and the year-to-date tax expense and tax payable would be reported in the year-to-date income statement and statement of financial position at \$91,200. The procedures for the third-quarter would duplicate those followed for the second quarter, taking new information and estimates into consideration. It should also be noted that the treatment provided in FASB ASC paragraph 250-10-45-13, and just illustrated, is entirely consistent with the normal treatment afforded a change in estimate under the provisions of FASB ASC paragraph 250-10-45-17; that is, changes in estimates are treated currently and prospectively, not retroactively.

The preceding illustration assumed that there were no temporary differences. If temporary differences existed, they would have no effect on the computation of the combined effective tax rate, but would affect the tax expense and the tax liability recorded. For example, if there were an excess of tax depreciation over book depreciation during the first quarter amounting to \$40,000, the first-quarter tax entry would be modified as follows:

|  |        |        |
|--|--------|--------|
| Income Tax Expense                                       | 42,300 |        |
| Income Tax Payable [ $.282(\$150,000 - \$40,000)$ ]      |        | 31,020 |
| Deferred Income Tax Liability ( $.282 \times \$40,000$ ) |        | 11,280 |

**Interim Operating Losses** When an interim operating loss gives rise to an expected income tax benefit, an asset is created to recognize the benefit. For example, if the loss for the interim or year-to-date period is expected to be offset by operating profit later in the same fiscal period, a tax benefit is traceable to the interim or year-to-date loss. In this case, the asset should be reduced by a valuation allowance if it is “more likely than not” that some or all of the benefit may not be realized. Clearly this criterion is one of the more subjective the FASB has required, and its implementation is thus subject to managerial discretion (and auditor review).



## Accounting Changes in Interim Periods

**Change in Estimate** A change in estimate should be accounted for in the interim period in which the change is made. No restatement of previously reported interim information should be made, but the effect on earnings of a change in estimate made in a current interim period should be reported in the current and subsequent interim periods, if material in relation to any period presented, and should continue to be reported as long as necessary to avoid misleading comparisons.

The standards include all voluntary accounting changes and accounting changes where a new accounting pronouncement does not include specific transition provisions. Current GAAP require retrospective application to financial statements of prior periods where practical. If not practical, the statement requires that the new statement be applied to the earliest period that is practical. If one of the prior year's financial statements being presented cannot be adjusted, an adjustment should be made to the beginning balance of retained earnings and not included in income.

## Minimum Disclosures in Interim Reports

Because the amount of financial information disclosed in interim reports varies widely, the standards established minimum disclosures as follows:

- a. Sales or gross revenues, provision for income taxes, extraordinary items (including related income tax effects), and net income.
- b. Basic and diluted earnings-per-share data for each period presented determined in accordance with the provisions of FASB ASC topic 260 (Earnings per Share).
- c. Seasonal revenue, costs, or expenses.
- d. Significant changes in estimates or provisions for income taxes.
- e. Disposal of a segment of a business and extraordinary, unusual, or infrequently occurring items.
- f. Contingent items.
- g. Changes in accounting principles or estimates.
- h. Significant changes in financial position.

Overall, the APB and FASB have made a significant effort to improve the quality of interim financial reports. However, considerable controversy still exists and appears to center around the APB's assumption that an interim period should be accounted for as an integral part of the annual period.

## International Issues in Interim Reporting

### IFRS

IAS 34, "Interim Financial Reporting," does not state which entities should prepare and publish interim financial statements. The standard determines the minimum content of the interim reports if the entity elects or is required to prepare interim financial statements. IAS 34 generally requires that the interim period be a discrete reporting period.

IAS 34 applies when an entity publishes an interim financial report in accordance with International Financial Reporting Standards (IFRS). An *interim financial report* refers here to a financial report containing either a complete set of financial statements (described in IAS 1, *Presentation of Financial Statements*) or a set of condensed financial statements (described in this Standard) for an interim period; an *interim period* refers to any financial reporting period shorter than a full year. For the sake of timeliness and cost considerations, as well as to avoid repetition of information reported previously, an entity may provide less information at interim dates than in its annual financial statements. This Standard defines the *minimal* content of an interim financial report as containing *condensed financial statements* and *selected explanatory notes*. The purpose of the interim financial report is to

provide an update to the latest complete set of annual financial reports. Accordingly, it focuses on *new* activities, events, and circumstances rather than duplicating information already reported.

The standard is not, however, intended to prohibit or discourage an entity from publishing a complete set of financial statements (as described in IAS 1) in its interim financial report if it chooses to do so. *If such a complete set of financial statements is reported in the interim reports, the form and content of those statements should conform to the requirements of IAS 1.*

An interim financial report should, at a minimum, include:

- (a) Condensed income statement
- (b) Condensed balance sheet
- (c) Condensed statement showing either (i) all changes in equity or (ii) changes in Cquity except for those arising from capital transactions with owners and distributions to owners
- (d) Condensed cash flow statement
- (e) Selected explanatory notes

If an entity chooses to publish condensed financial statements in its interim financial report, those condensed statements must include each of the headings and subtotals that were included in its most recent annual financial statements and the selected explanatory notes as required by this Standard. Furthermore, additional line items or notes should be included if their omission would make the condensed interim financial statements misleading for any reason.

Materiality with respect to measurement, classification, and disclosure should be assessed in relation to the interim period financial data. In making assessments of materiality, it should be recognized that interim measurements may rely on estimates to a larger degree than annual measurements do.

The same accounting policies should be applied in interim financial statements that are used in a firm's annual financial statements, with the possible exception of any accounting policy changes made after the date of the most recent annual financial statements that are to be reflected in the *next* annual financial statements. Thus measurements for interim reporting purposes are made on a year-to-date basis. The measurement procedures for interim reporting are designed to ensure that the resulting information is *reliable* and that all material financial information *relevant* to an understanding of the financial position or performance of the entity is disclosed.

## Differences between IFRS and US GAAP—Interim Reporting

The view of an interim period is conceptually quite different under U.S. GAAP and under IFRS. Under IFRS, the interim period is defined as a discrete reporting period, with certain exceptions. Recall that discrete reporting treats each interim period as a basic accounting period to be evaluated as if it were an annual period. Thus, end of period adjustments and deferrals are determined using the same principles as the annual report. Under U.S. GAAP, an interim period is an integral part of the full year (again, with certain exceptions). Thus, the adjustments and deferrals may be affected by judgment about the expected results for the entire year.

*Disclosures* for changes in accounting policy also differ significantly between U.S. GAAP and current IFRS. IFRS require the disclosure of any differences between accounting policies in the current interim period compared to the most recent annual financial statements as well as, at a minimum, a description of the nature and effect of the change. In contrast, U.S. GAAP require disclosure of any changes in accounting policies in the current interim period in comparison to: (1) the comparable interim period of the previous year, (2) the preceding interim periods in the current year, and (3) the previous annual report.

“The Committee does agree that determination of what needs to be included in the notes to the interim financial statements about unusual events should be based on the stand-alone interim data. However, as users of financial statements, the Committee would find the ‘accordion effect’ associated with the discrete approach both disruptive and confusing . . . the Committee believes the most useful and practical approach to dealing with interim accounting is the integral approach.”<sup>8</sup>

## SUMMARY

- 1 **Understand the need for disaggregated financial data.** To aid in evaluating prospective investments and the risk of those investments, financial statement users must assess the uncertainty surrounding the timing and amounts of expected cash flows. When a firm engages in activities in several industries or geographic areas, analysis and the prediction of future cash flows become more complicated because different segments may have different rates of profitability, growth opportunities, and types of risk.
- 2 **Describe the basic requirements of public companies in reporting segmental data.** FASB requires all public companies to report information about the countries in which they earn revenues and hold assets, about major customers, and about revenues for each product and service, even when *some* of the information is not used by the firm in its operating decisions. In general, FASB implemented a management approach, focusing on the way in which management organizes segments internally to make operating decisions and to assess performance.
- 3 **Determine an operating segment.** Operating segments are determined using a modified management approach. An operating segment is a component of an enterprise that may earn revenues and incur expenses, about which the chief operating decision maker regularly evaluates separate financial information in deciding how to allocate resources and in assessing performance.
- 4 **Define a reportable segment.** A reportable segment is a segment considered to be significant to an enterprise’s operations; specifically, one that has passed one of three 10% tests or has been identified as being reportable through other criteria (aggregation, for example). The three 10% tests relate to combined external and internal revenues, reported profit or loss, and assets.
- 5 **Identify the information to be presented for each reportable segment.** The information presented includes: general information; information about segment operating profit or loss; information about segment assets; information about the bases for measurement; a reconciliation of segment amounts to the consolidated amounts for revenue, profit or loss, assets, and other significant items; interim disclosures; and enterprisewide disclosures regarding products or services, geographic areas, and major customers.
- 6 **Explain when and what types of geographic data must be reported.** Geographic disclosures are required on an enterprisewide basis unless the company’s reportable segments have been defined based on geographic area. When required, firms must report revenues from external customers and long-lived assets attributable to their domestic operations and foreign operations.
- 7 **Explain when information about major customers must be reported.** If 10% or more of the revenue of a firm is derived from sales to any single customer, that fact and the amount of revenue from each such customer must be disclosed. Also, if 10% or more of the revenue is derived from sales to the federal government, a state government, a local government, or a foreign government, that fact and the amount of revenue must be disclosed. These disclosures are required even if the firm has only one reportable segment.
- 8 **Compare the international accounting standards for segmental reporting with the U.S. requirements.** Whereas the U.S. standard focuses on the data reported and used internally by a chief operating decision maker, the IASC states its objective as providing insight into how the diversity of products and services and geographic operations affects an enterprise’s overall risks and returns. The differences between the two standards include segment definition, measurement differences, uniformity across companies, and asymmetry allowed/disallowed in measurement.
- 9 **Describe current requirements for companies to report interim information.** Publicly owned companies are generally required to file some type of quarterly report as part of the agreement with the stock exchanges that list their stock. In addition, the SEC requires public companies to file Form 10-Q with the Commission within 45 days after the end of each of the first three quarters of the fiscal year.
- 10 **Indicate some problems with interim reporting and the authoritative position on the issue.** The seasonal nature of operations in many industries can cause wide fluctuations in revenues, expenses, and net income from one interim period to another. The relatively short time period available to determine interim results and the added cost of determining accurate figures for accruals, deferrals, and inventories encouraged the use of a variety of estimation techniques, some of which proved to be highly inaccurate. Two conflicting views of the nature of interim periods are: each period is *discrete* and should *stand alone* as a basic accounting period; or each interim period is an *integral* part of the annual period. In FASB ASC paragraph 270–10–45–1, the Board supported the integral view.

Appendix 14A, “GE Segmental Disclosures, 2013 Annual Report” is available online at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter).

<sup>8</sup> *Management Accounting*, “Interim Reporting,” vol. 79, February 1998, p. 59.

## TEST YOUR KNOWLEDGE SOLUTIONS

14.1

1. Segments A, C, and D
2. Segments A and C

3. Segments A and C
4. Three (Segments A, C, and D)

## QUESTIONS

- LO 1** 1. For what types of companies would segmented financial reports have the most significance? Why?
- LO 1** 2. Why do financial statement users (financial analysts, for example) need information about segments of a firm?
- LO 3 LO 4** 3. Define the following:
- (a) Operating segment.
  - (b) Reportable segment.
- LO 4** 4. Describe the guidelines to be used in determining (a) what constitutes an operating segment, and (b) whether a specific operating segment is a significant segment.
- LO 5** 5. List the three major types of enterprisewide information disclosures required by *SFAS No. 131* [ASC 280], and explain how the firm's designation of reportable segments affects these disclosures.
- LO 5** 6. What segmental disclosures are required, if any, for interim reports?
- LO 2** 7. What type of disclosure is required of a firm when the major portion of its operations takes place within a single reportable segment?
- LO 5** 8. List the types of information that must be presented for each reportable segment of a company under the rules of *SFAS No. 131* [ASC 280].
- LO 5** 9. Describe the methods that might be used to disclose reportable segment information.
- LO 6** 10. What types of information must be disclosed about foreign operations under *SFAS No. 131* [ASC 280–10–50–40]?
- LO 6** 11. How are foreign operations defined under *SFAS No. 131* [ASC 280]?
- LO 6** 12. If the operations of a firm in some foreign countries are grouped into geographic areas, what factors should be considered in forming the groups?
- LO 7** 13. When must a firm present segmental disclosures for major customers? What is the reason for this requirement?
14. What is the purpose of interim financial reporting? **LO 10**
15. Some accountants hold the view that each interim period should stand alone as a basic accounting period, whereas others view each interim period as essentially an integral part of the annual period. Distinguish between these views. **LO 10**
16. Describe the basic procedure for computing income tax provisions for interim financial statements. **LO 10**
17. Describe how changes in estimates should be treated in interim financial statements. **LO 10**
18. What are the minimum disclosure requirements established ASC 270 for interim financial reports? **LO 9**
19. What is the general rule regarding the treatment of costs and expenses associated directly with revenues for interim reporting purposes? **LO 10**

## Business Ethics

SMC Inc. operates restaurants based on various themes, such as Mex-delight, Chinese for the Buffet, and Steak-it and Eat-it. The Steak-it and Eat-it restaurants have not been performing well recently, but SMC prefers not to disclose these details for fear that competitors might use the information to the detriment of SMC. The restaurants are located in various geographical locations, and management currently measures profits and losses and asset allocation by restaurant concept. However, when preparing the segmental disclosures, the company reports the segment information by geographical location only. The company recently hired you to review the financial statements.

1. What disclosures should the company report for segment purposes?
2. The company's CEO believed that the rules are vague and that the company could easily support its decision to disclose the segment data by geographic regions. What would you recommend to the CEO and how would you approach the issues?

## ANALYZING FINANCIAL STATEMENTS

## AFS14-1 Segmental Disclosures

In the Appendix to this chapter, found online at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter), the partial segmental disclosures for General Electric (GE) are provided.

1. How does GE organize and present its segment data?
2. Compute the following ratios for 2011, 2012, and 2013 for each segment reported.
  - a. Segment profit percentage = (segment profit/segment revenue)
  - b. Segment asset turnover = (segment revenue/segment assets)

3. Compute the growth rate for each segment for revenues and assets from 2008 to 2010. For example, the formula for revenue growth rate is:

$$\text{Growth rate in revenues} = \frac{\text{Revenues for 2013}}{\text{Revenues for 2011}} - 1$$

4. Evaluate each segment's performance using the computations from questions 2 and 3. Which segment performed the best and which segment performed the worst?
5. What percentage of GE's total revenues and assets are based outside the United States? Can you determine from the disclosures whether the trend is toward more or less globalization? Comment on the trend to the extent feasible.

**AFS14-2****Eli Lilly Interim Reports**

On April 18, 2011, Eli Lilly and Co. reported first quarter profits for 2011 of \$0.95 per share. Analysts projected earnings to be \$1.16 or \$1.17 per share. However, Lilly reported non-GAAP earnings per share of \$1.24. Lilly states that non-GAAP results are presented in order to provide additional insights into the underlying trends in the company's business. Lilly's stock price on Friday, April 15, was \$35.99. Early Monday morning, the price fell to \$35.40 (a 1.6% drop), but recovered slightly to close at \$35.60.

**Other Information:**

On January 11, 2011, Lilly announced a strategic alliance with Boehringer Ingelheim to jointly develop and commercialize a portfolio of diabetes compounds currently in mid- and late-stage development. Under the terms of the agreement, Lilly will make a one-time payment to Boehringer Ingelheim of 300 million euros. Lilly expects 2011 earnings dilution of approximately \$0.45 for 2011 earnings and approximately \$0.27 per share for the one-time payment.

One of Lilly's best-selling drugs, Zyprexa, will lose patent protection in October 2011. Another product, Cymbalta, will face generic competition in the next three years.

**Required:**

Read Lilly's first-quarter earnings release (<http://investor.lilly.com/financials.cfm>). (*Note:* Under financial information, click on "quarterly results." Then click on "Lilly Reports First-Quarter 2011 Results.")

1. Using GAAP, examine Lilly's gross margin in dollars and as a percentage of sales for the current quarter versus the previous quarter. Is this a positive trend?
2. Using GAAP and non-GAAP measures, examine Lilly's operating profit in dollars and as a percentage of sales. Which items does Lilly exclude from earnings in computing non-GAAP operating earnings? Do you agree that these items should be excluded in evaluating the earnings of Lilly?
3. Do you think that the analyst's forecast included or excluded these items?
4. How do you explain the drop in Lilly's stock price?
5. The financial report includes a listing of key products and their growth in revenues in 2011, as well as a summary of some of the reasons. The prior year includes a similar listing and summary. Comment on the change from 2010 to 2011 by product, and briefly discuss the underlying factors responsible for the most significant shifts.

**AFS14-3****IBM Segmental Reporting**

On April 19, 2011, IBM announced first-quarter 2011 earnings of \$2.31 per share (compared to earnings of \$1.97 per share in the first quarter of 2010), an increase of 17%. First-quarter net income was \$2.9 billion, compared to \$2.6 billion in the first quarter of 2010, an increase of 10%.

**Required:**

Examine IBM's 8-K (issued on April 19, 2011) announcing earnings for the first quarter of 2011 (<http://www.ibm.com/investor>).

1. Compute the growth in total revenues and the gross margin percentage from the first quarter of 2010 to the first quarter of 2011. Evaluate these numbers.

2. List the geographical areas where IBM generates revenues. Speculate as to the reasons for the relative performance of these geographical areas.
3. List IBM's five reportable segments. Evaluate the operating performance of each segment, and comment on the underlying factors affecting the relative performance of each.

## EXERCISES

### EXERCISE 14-1 Operating Profit Test LO 4

Pong Industries' operations involve four operating segments, A, B, C, and D. During the past year, the operating profit (loss) of each segment was

| <i>Segment</i> | <i>Operating Profit (Loss)</i> |
|----------------|--------------------------------|
| A              | \$(600)                        |
| B              | 100                            |
| C              | 900                            |
| D              | (700)                          |

**Required:**

Applying the operating profit or loss test, determine which of the segments are reportable segments.

### EXERCISE 14-2 Revenue Test LO 4

Mane Company operates in five identifiable segments, V, W, X, Y, and Z. During the past year, sales to unaffiliated customers and intersegment sales for each segment were as follows:

| <i>Segment</i> | <i>Sales to Nonaffiliates</i> | <i>Intersegment Sales</i> | <i>Total Sales</i> |
|----------------|-------------------------------|---------------------------|--------------------|
| V              | \$2,000                       | \$ 400                    | \$2,400            |
| W              | 280                           | 20                        | 300                |
| X              | 100                           | 600                       | 700                |
| Y              | 1,100                         | —0—                       | 1,100              |
| Z              | 350                           | 25                        | 375                |
| Total          | <u>\$3,830</u>                | <u>\$1,045</u>            | <u>\$4,875</u>     |

**Required:**

Applying the revenue test, determine which of the segments are reportable segments.

### EXERCISE 14-3 Significance Tests LO 4

Twodor Company is involved in four separate industries. Selected financial information concerning Twodor's involvement in each of the four industries is presented below:

|                         | <i>Industry Segment</i> |               |               |              | <i>Total</i>   |
|-------------------------|-------------------------|---------------|---------------|--------------|----------------|
|                         | <i>A</i>                | <i>B</i>      | <i>C</i>      | <i>D</i>     |                |
| Sales to nonaffiliates  | \$ 80,000               | \$20,000      | \$24,000      | \$12,200     | \$136,200      |
| Intersegment sales      | <u>130,000</u>          | <u>84,000</u> | <u>12,000</u> | <u>3,800</u> | <u>229,800</u> |
| Total revenue           | 210,000                 | 104,000       | 36,000        | 16,000       | 366,000        |
| Operating profit (loss) | (17,400)                | 12,000        | 1,500         | (600)        | (4,500)        |
| Identifiable assets     | 222,000                 | 110,500       | 28,000        | 26,000       | 386,500        |

**Required:**

Using all tests, determine which of the industry segments are reportable segments and explain how nonreportable segments (if any) should be reported.

### EXERCISE 14-4 Allocating Common Costs to Segments

The following information concerns the operations of Blane Company for the year ended December 31, 2014.

*(In Thousands of Dollars)*

|  | <i>General<br/>Office</i> | <i>Segment<br/>A</i> | <i>Segment<br/>B</i> |
|--|---------------------------|----------------------|----------------------|
| Net sales (operating revenue)  |                           | \$60,000             | \$99,000             |
| Cost of goods sold   |                           | 27,200               | 35,600               |
| Allocable expenses   |                           | 12,600               | 10,800               |
| General corporate expenses   | \$15,000                  |                      |                      |
| Payroll dollars  | 9,200                     | 34,800               | 18,200               |
| Average net book value of tangible capital<br>assets and inventories | 5,200                     | 70,000               | 54,500               |

**Required:**

Determine the operating profit (loss) for each of Blane's two segments for 2014.

**EXERCISE 14-5 Provision for Taxes—Interim LO 10**

LAX Inc. has the following income before income tax and estimated effective annual income tax rates for the first three quarters of 2014.

| <i>Quarter</i> | <i>Income Before<br/>Income Tax<br/>Provision</i> | <i>Estimated Effective<br/>Annual Tax Rate<br/>at End of Quarter</i> |
|----------------|---|--|
| 1st            | \$70,000  | 32%  |
| 2nd            | 50,000  | 32%  |
| 3rd            | 40,600  | 38%  |

**Required:**

What should be LAX's income tax provision in the third-quarter income statement?  
(AICPA adapted)

**EXERCISE 14-6 Amounts on Quarterly Reports LO 10**

The following information is available for Bailey Company for 2014:

- On January 2, 2014, Bailey paid property taxes amounting to \$60,000 on its plant and equipment for the calendar year 2014. In late March 2014 Bailey made major repairs to its machinery amounting to \$66,000. These repairs will benefit the remainder of the calendar year's operations.
- An inventory loss of \$150,000 from market decline occurred in August 2014. Bailey recorded this loss in August 2014 after its June 30 quarterly report was issued. None of this loss had been recovered by the end of 2014.
- At the end of July 2014, Bailey sold some equipment with a book value of \$22,000 for \$32,500.

**Required:**

State the dollar amounts that should appear in Bailey Company's March 31, June 30, September 30, and December 31, 2014, quarterly financial statements to report:

- Property taxes.
- Major repairs to machinery.
- Inventory loss from market decline.
- The gain or loss on sale of equipment.

(AICPA adapted)

**EXERCISE 14-7 Inventory and Quarterly Reports LO 10**

Day Company, which uses the FIFO inventory method, had 254,000 units in inventory at the beginning of the year at a FIFO cost per unit of \$30. No purchases were made during the year. Quarterly sales information and two sets of end-of-quarter replacement cost figures follow:

| <i>Quarter</i> | <i>Unit Sales</i> | <i>End-of-Quarter<br/>Replacement Cost</i> |               |
|----------------|-------------------|--|---------------|
|                |                   | <i>Case A</i>                              | <i>Case B</i> |
| 1              | 100,000           | \$29                                       | \$25          |
| 2              | 30,000            | 22   | 27            |
| 3              | 42,500            | 18   | 19            |
| 4              | 30,500            | 22   | 27            |

The market decline in the first quarter under Case A was expected to be temporary, whereas under Case B the decline was expected to be nontemporary. Declines in other quarters were expected to be permanent.

**Required:**

Determine cost of goods sold for the four quarters under each case and verify the amounts by computing cost of goods sold using the lower-of-cost-or-market method applied on an annual basis.

**EXERCISE 14-8 Provision for Taxes—Quarterly Entries LO 10**

Spur Company's actual earnings for the first two quarters of 2014 and its estimate during each quarter of its annual earnings are:

|  |            |
|--|------------|
| Actual first-quarter earnings              | \$ 400,000 |
| Actual second-quarter earnings             | 510,000    |
| First-quarter estimate of annual earnings  | 1,350,000  |
| Second-quarter estimate of annual earnings | 1,420,000  |

Spur Company estimated its permanent differences between accounting income and taxable income for 2014 as:

|                                   |           |
|-----------------------------------|-----------|
| Environmental violation penalties | \$ 25,000 |
| Dividend income exclusion         | 180,000   |

These estimates did not change during the second quarter. The combined state and federal tax rate for Spur Company for 2014 is 42%.

**Required:**

Prepare journal entries to record Spur Company's provisions for income taxes for each of the first two quarters of 2014.

**EXERCISE 14-9 Multiple Choice LO 4 LO 5 LO 10**

Select the best answer for each of the following.

- Which of the following is *not* a consideration in segment reporting for diversified companies?
  - Consolidation policy.
  - Defining the segments.
  - Transfer pricing.
  - Allocation of joint costs.
- Cream Company operates in three different industries, each of which is appropriately regarded as a reportable segment. Segment No. 1 contributed 60% of Cream Company's total sales. Sales for Segment No. 1 were \$450,000 and traceable costs were \$200,000. Total common costs for Cream were \$300,000. Cream allocates common costs on the basis of the ratio of a segment's sales to total sales, an appropriate method of allocation. What should be the operating profit presented for Segment No. 1 for the year?
  - \$270,000.
  - \$70,000.
  - \$180,000.
  - \$250,000.
- The profitability information that should be reported for each reportable segment of a business enterprise consists of
  - An operating profit or loss figure consisting of segment revenues less traceable costs but *not* allocated common costs.
  - An operating profit or loss figure consisting of segment revenues less allocated common costs but *not* traceable costs.
  - An operating profit or loss figure consisting of segment revenues less traceable costs and allocated common costs.
  - Segment revenues only.



4. In financial reporting for segments of a business enterprise, the operating profit or loss of a segment should include
  - (a) Revenue from other segments.
  - (b) Federal income taxes.
  - (c) Interest expense even though the segment's operations are *not* principally of a financial nature.
  - (d) Any of the above, *if* it is included in the measures reviewed by the chief operating decision maker.
5. A company that uses the LIFO method of inventory pricing finds at an interim reporting date that there has been a partial liquidation of the base period inventory level. The decline is considered temporary and the partial liquidation will be replaced before year-end. The amount shown as inventory at the interim reporting date should
  - (a) Be shown at the actual level, and cost of sales for the interim reporting period should reflect the decrease in the LIFO base period inventory level.
  - (b) *Not* give effect to the LIFO liquidation, and cost of sales for the interim reporting period should reflect the decrease in the LIFO base period inventory level.
  - (c) *Not* give effect to the LIFO liquidation, and cost of sales for the interim reporting period should include the expected cost of replacement of the liquidated LIFO base.
  - (d) Be shown at the actual level, and the decrease in inventory level should *not* be reflected in the cost of sales for the interim reporting period.
6. Which of the following is an inherent difficulty in determination of the results of operations on an interim basis?
  - (a) Costs expended in one interim period may benefit other periods.
  - (b) Depreciation on an interim basis is a partial estimate of the actual annual amount.
  - (c) Cost of sales reflects only the amount of product expense allocable to revenue recognized as of the interim date.
  - (d) Revenues from long-term construction contracts accounted for by the percentage-of-completion method are based on annual completion, and interim estimates may be incorrect.
7. In considering interim financial reporting, how did the Accounting Principles Board conclude that such reporting should be viewed?
  - (a) As useful only if activity is evenly spread throughout the year so that estimates are unnecessary.
  - (b) As a "special" type of reporting that need *not* follow generally accepted accounting principles.
  - (c) As reporting of an integral part of an annual period.
  - (d) As reporting of a basic accounting period.
8. Which of the following methods of inventory valuation is allowable at interim dates but *not* at year-end?
  - (a) Estimated gross profit rates.
  - (b) Retail method.
  - (c) Specific identification.
  - (d) Weighted average. *(AICPA adapted)*

**ASC Exercises:**

For all ASC exercises indicate as part of your answer: the Codification topic, subtopic, section, and paragraph upon which your answer is based (unless otherwise specified). All ASC questions require access to the FASB Codification.

**ASC14-1**

**Presentation** Practices vary in determining costs of inventory. For example, cost of goods produced may be determined based on standard or actual cost, while cost of inventory may be determined on an average, first-in, first-out (FIFO), or last-in, first-out (LIFO) cost basis. While entities generally use the same inventory pricing methods, and make provisions for write-downs to market, at interim dates as at annual inventory dates, does the Codification allow for exceptions at interim reporting dates? What effect might differences in interim reporting have on evaluation methods employed by analysts and other users?

**ASC14-2**

**Presentation** Is a firm required to report a Statement of Comprehensive Income on an interim basis?

- ASC14-3** **Disclosure** A company incurred an extraordinary loss in the second quarter and has prorated this loss over the three remaining quarters in the current fiscal year. Is this appropriate? Why or why not?
- ASC14-4** **Scope** If a non-SEC reporting company decided to issue monthly interim financial statements, would the GAAP Codification apply?
- ASC14-5** **Presentation** Are interim periods considered stand-alone financial statements or are they considered an integral part of the annual financial statements under current GAAP? Do you concur with this position? Why or why not?
- ASC14-6** **Disclosure** If a company does not present a separate fourth-quarter interim report for its income statement, but presents only the annual income statement at that time, are there any additional disclosure requirements? If so, what are they?
- ASC14-7** **General** The guidance for segmental reporting is located in which general topic area (i.e., 100–general principles, 200–presentation, 300–assets, etc.)? List the specific topic number (i.e., ASC XXX).

## PROBLEMS

### PROBLEM 14-1 Significance Tests—Segmental Reporting LO 4

Bacon Industries operates in seven different segments. Information concerning the operations of these segments for the most recent fiscal period follows:

| Operating Segment | Revenue  |              | Operating Profit (Loss) | Identifiable Assets |
|-------------------|----------|--------------|-------------------------|---------------------|
|                   | Total    | Intersegment |                         |                     |
| 1                 | \$ 4,200 | \$ 800       | \$ (600)                | \$ 7,000            |
| 2                 | 6,000    | 1,200        | 2,000                   | 8,800               |
| 3                 | 51,000   | 7,000        | 2,100                   | 35,400              |
| 4                 | 48,000   | —0—          | 8,800                   | 37,600              |
| 5                 | 13,000   | —0—          | 3,200                   | 14,000              |
| 6                 | 64,500   | 3,400        | 4,000                   | 52,000              |
| 7                 | 12,000   | 2,000        | (3,000)                 | 16,400              |

#### Required:

Determine which of the segments must be treated as reportable segments.

### PROBLEM 14-2 Significance Tests—Segmental Reporting LO 4

Pacheco Industries is comprised of four separate profit centers, which are distributed throughout the United States. Relevant data for each profit center are summarized for 2014:

|   | Profit Center (in Thousands) |          |         |         |          |
|---|------------------------------|----------|---------|---------|----------|
|   | A                            | B        | C       | D       | Total    |
| Sales to nonaffiliates                                  | \$3,600                      | \$ 8,700 | \$1,500 | \$1,200 | \$15,000 |
| Intersegment sales                                      | 1,500                        | 2,400    | 300     | 3,000   | 7,200    |
| Operating profit (loss) before joint expense allocation | 840                          | 1,500    | 240     | (60)    | 2,520    |
| Identifiable assets                                     | 7,200                        | 18,000   | 2,400   | 2,400   | 30,000   |
| Labor hours worked                                      | 2,700                        | 5,700    | 1,500   | 2,100   | 12,000   |

You determine that intersegment sales are distributed as follows:

| Seller | Buyer          |                |              |              |                |
|--------|----------------|----------------|--------------|--------------|----------------|
|        | A              | B              | C            | D            | Total          |
| A      | \$—0—          | \$1,200        | \$150        | \$150        | \$1,500        |
| B      | 1,200          | —0—            | 600          | 600          | 2,400          |
| C      | 150            | 150            | —0—          | —0—          | 300            |
| D      | 1,800          | 1,050          | 150          | —0—          | 3,000          |
| Total  | <u>\$3,150</u> | <u>\$2,400</u> | <u>\$900</u> | <u>\$750</u> | <u>\$7,200</u> |

Common costs of \$2,400,000 were incurred during 2014. Management believes that total labor hours worked during the year provides a reasonable basis for allocation of these costs.

In each situation described below, an operating segment is comprised of different combinations of profit centers. Thus, the “AB” operating segment consists of profit centers “A” and “B.” Consider the following five combinations of operating segments:

1. AB, CD
2. AB, C, D
3. A, B, CD
4. A, B, C, D
5. A, BD, C

**Required:**

- A. For each combination listed, determine which operating segments are reportable segments. Apply all required tests and indicate the results of each test separately.
- B. For each combination given, indicate if the reportable segments determined in (A) above collectively represent a “substantial portion” of Pacheco Industries’ total operations, applying the 75% revenue test.

**PROBLEM 14-3 Issues in Segmental Reporting LO 1 LO 4**

Perez Industries, a publicly held corporation, consists of several companies, each of which provides an array of products and services to unaffiliated customers. In your opinion, each of these companies qualifies as a separate operating segment.

The corporation is in the process of completing its first-year financial statements. Although the directors of Perez Industries wish to comply with the provisions of *SFAS No. 131* [ASC 280], they believe that disclosing each individual segment would result in an unwieldy and cumbersome set of financial statements. For this reason, they request that when you prepare these statements, you keep the identified segments to the minimum number that would ensure compliance with *SFAS No. 131* [ASC 280].

**Required:**

- A. To what extent does the management of Perez Industries have a choice in deciding whether an operating segment must be reported?
- B. The directors of Perez Industries presumably feel that too much disclosure of financial information will impair the overall utility of the financial statements. What are the arguments against segmental disclosures? What flexibility, if any, does the FASB allow that could invalidate this criticism? Explain.
- C. Explain the needs for segment reporting. Why do consolidated financial statements fail to meet these needs?
- D. Relate the concept of comparability to the required accounting treatment for intersegment transactions. What arguments would favor *excluding* the effect of intersegment transfers?

**PROBLEM 14-4 Comprehensive Segmental Reporting LO 4 LO 5**

Branson Industries conducts operations in five major industries, A, B, C, D, and E. Financial data relevant to each industry for the year ending December 31, 2014, are as follows:

|                         | (In Thousands)  |                   |                  |                 |                 |
|-------------------------|-----------------|-------------------|------------------|-----------------|-----------------|
|                         | United States   |                   |                  | Canada          |                 |
|                         | A               | B                 | C                | D               | E               |
| Sales                   | \$57,000        | \$120,000         | \$880,000        | \$50,000        | \$ 83,000       |
| Cost of goods sold      | 20,000          | 75,000            | 400,000          | 9,400           | 49,000          |
| Administrative expenses | 18,000          | 26,000            | 152,000          | 12,000          | 8,000           |
| Selling expenses        | 7,000           | 44,000            | 172,000          | 12,600          | 20,000          |
| Total cost and expense  | 45,000          | 145,000           | 724,000          | 34,000          | 77,000          |
| Operating profit        | <u>\$12,000</u> | <u>\$(25,000)</u> | <u>\$156,000</u> | <u>\$16,000</u> | <u>\$ 6,000</u> |
| Identifiable assets     | \$50,000        | \$95,000          | \$600,000        | \$98,000        | \$240,000       |
| Depreciation and        |                 |                   |                  |                 |                 |
| amortization expense    | 6,400           | 10,700            | 76,000           | 12,200          | 26,400          |
| Capital expenditures    | 5,600           | 8,000             | 39,000           | 20,000          | 25,000          |

Included in the sales of segments C and E are intersegment sales of \$120,000 and \$40,000, respectively. Corporate offices have assets of \$95,000 and incurred general corporate expenses of \$76,000. All corporate assets are located in the United States and depreciation on corporate assets was \$10,000. No single customer represents

more than 10% of sales. There is no intercompany inventory in beginning or ending inventory. The intersegment sales are included in the measures reviewed by the chief operating decision maker, as are the capital expenditures and depreciation and amortization.

**Required:**

- A. Which industry segments should be separately reported in the segment report, assuming that Branson defines its operating segments based on major industry (product/services)? Justify your answer.
- B. Prepare a report to disclose required segment information under *SFAS No. 131* [ASC 280]. Include the enterprise-wide disclosures.

**PROBLEM 14-5 Segmental Reconciliation LO4 LO5**

Bismac Industries is a diversified company whose operations are conducted in five product lines, L, M, N, O, and P. Segmentated financial information is to be included with the December 31, 2014 annual report. Financial information pertaining to each segment for 2014 is as follows:

|                         | <i>L</i>        | <i>M</i>          | <i>N</i>         | <i>O</i>        | <i>P</i>        |
|-------------------------|-----------------|-------------------|------------------|-----------------|-----------------|
| Sales                   | \$40,000        | \$ 85,000         | \$600,000        | \$50,000        | \$48,000        |
| Cost of sales           | 15,000          | 45,000            | 275,000          | 22,000          | 29,000          |
| Interest expense        | 4,000           | 11,000            | 50,000           | 4,000           | 1,000           |
| Depreciation expense    | 5,000           | 8,000             | 54,000           | 6,000           | 5,000           |
| Selling expense         | 8,000           | 32,000            | 140,000          | 9,000           | 10,000          |
| Total cost and expense  | <u>32,000</u>   | <u>96,000</u>     | <u>519,000</u>   | <u>41,000</u>   | <u>45,000</u>   |
| Operating profit (loss) | <u>\$ 8,000</u> | <u>\$(11,000)</u> | <u>\$ 81,000</u> | <u>\$ 9,000</u> | <u>\$ 3,000</u> |
| Identifiable assets     | \$30,000        | \$ 48,000         | \$320,000        | \$45,000        | \$95,000        |

**Additional Information:**

1. In addition to the identifiable assets listed, the general corporate office has assets of \$90,000 on December 31, 2014, and incurred unallocated amounts related to corporate headquarters of interest expense \$1,000, depreciation expense \$2,000.
2. Included in the sales of segment P are \$15,000 of sales made to segment N during the year. None of these goods remains in the ending inventory of segment N on December 31, 2014. There were no capital expenditures during the year.
3. No single customer represented more than 10% of sales.

**Required:**

- A. Determine which of the five segments must be treated as reportable segments and indicate the basis for your decision. Assume segments are defined based on product line.
- B. Prepare a financial report by segments that is reconciled to consolidated data.

**PROBLEM 14-6 Quarterly Income Tax Entries LO10**

Actual quarterly earnings and quarterly estimates of annual earnings for Sloan Company for the year ended December 31, 2014 are as follows:

| <i>Quarter</i> | <i>Actual Quarterly Earnings</i> | <i>Quarterly Estimates of Annual Earnings</i> |
|----------------|----------------------------------|---|
| 1              | \$95,000                         | \$400,000                                     |
| 2              | 85,000                           | 370,000                                       |
| 3              | 92,000                           | 370,000                                       |
| 4              | 96,000                           | N/A   |

The combined state and federal tax rate for 2014 is 30%. Sloan Company estimated it would have permanent differences between accounting income and taxable income during 2014. Each quarter's estimate of these annual differences is provided in the following table:

| <i>Estimate at End of Quarter</i> | <i>Estimated Permanent Differences</i> |                           |
|-----------------------------------|--|---------------------------|
|                                   | <i>Penalty for Pollution</i>           | <i>Dividend Exclusion</i> |
| 1                                 | \$14,000                               | \$40,000                  |
| 2                                 | 14,000                                 | 40,000                    |
| 3                                 | 14,000                                 | 50,000                    |

The actual amount of permanent differences for 2014 were environmental penalties, \$14,000 dividend exclusion, \$55,000.

**Required:**

Prepare journal entries to record Sloan Company's 2014 quarterly income tax provisions.

**PROBLEM 14-7 Various Interim Reporting Cases LO 10**

The following statement is an excerpt from ASC 270-10-45-1, 2 [paragraphs 9 and 10 of *APB Opinion No. 28*, "Interim Financial Reporting"]:

"Interim financial information is essential to provide investors and others with timely information as to the progress of the enterprise. The usefulness of such information rests on the relationship that it has to the annual results of operations. Accordingly, the Board has concluded that each interim period should be viewed primarily as an integral part of an annual period.

In general, the results for each interim period should be based on the accounting principles and practices used by an enterprise in the preparation of its latest annual financial statements unless a change in an accounting practice or policy has been adopted in the current year. The Board has concluded, however, that certain accounting principles and practices followed for annual reporting purposes may require modification at interim reporting dates so that the reported results for the interim period may better relate to the results of operations for the annual period."

**Required:**

Listed below are six independent cases on how accounting facts might be reported on an individual company's interim financial reports. For each case, state whether the method proposed to be used for interim reporting would be acceptable under generally accepted accounting principles applicable to interim financial data. Support each answer with a brief explanation.

- A. Reed Company wrote inventory down to reflect lower of cost or market in the first quarter of 2014. At year-end the market value exceeds the original acquisition cost of this inventory. Consequently, management plans to write the inventory back up to its original cost as a year-end adjustment.
- B. Greenfield Company realized a large gain on the sale of investments at the beginning of the second quarter. The company wants to report one-third of the gain in each of the remaining quarters.
- C. Dole Company has estimated its annual audit fee. They plan to prorate this expense equally over all four quarters.
- D. Fur Company was reasonably certain they would have an employee strike in the third quarter. As a result, they shipped heavily during the second quarter but plan to defer the recognition of the sales in excess of the normal sales volume. The deferred sales will be recognized as sales in the third quarter when the strike is in progress. Fur Company management thinks this is more nearly representative of normal second- and third-quarter operations.
- E. Rexx Company takes a physical inventory at year-end for annual financial statement purposes. Inventory and cost of sales reported in the interim quarterly statements are based on estimated gross profit rates, because a physical inventory would result in a cessation of operations. Rexx Company does have reliable perpetual inventory records.
- F. Shelley Company is planning to report one-fourth of its pension expense in each quarter. *(CMA adapted)*

# Chapter 14

## APPENDIX 14A – GE SEGMENTAL DISCLOSURES 2013 ANNUAL REPORT (ONLINE)

### Summary of Operating Segments

|   | <i>General Electric Company and consolidated affiliates</i> |                  |                  |                  |                  |
|---|---|------------------|------------------|------------------|------------------|
| <i>(In millions)</i>  | 2013  | 2012             | 2011             | 2010             | 2009             |
| <b>REVENUES<sup>(a)</sup></b>                                   |   |                  |                  |                  |                  |
| Power & Water   | \$ 24,724   | \$ 28,299        | \$ 25,675        | \$ 24,779        | \$ 27,389        |
| Oil & Gas   | 16,975  | 15,241           | 13,608           | 9,433            | 9,683            |
| Energy Management   | 7,569   | 7,412            | 6,422            | 5,161            | 5,223            |
| Aviation  | 21,911  | 19,994           | 18,859           | 17,619           | 18,728           |
| Healthcare  | 18,200  | 18,290           | 18,083           | 16,897           | 16,015           |
| Transportation  | 5,885   | 5,608            | 4,885            | 3,370            | 3,827            |
| Appliances & Lighting   | 8,338   | 7,967            | 7,693            | 7,957            | 7,816            |
| Total industrial segment revenues                               | 103,602   | 102,811          | 95,225           | 85,216           | 88,681           |
| GE Capital  | 44,067  | 45,364           | 48,324           | 49,163           | 51,065           |
| Total segment revenues  | 147,669   | 148,175          | 143,549          | 134,379          | 139,746          |
| Corporate items and eliminations <sup>(b)</sup>                 | (1,624)   | (1,491)          | 2,993            | 14,496           | 13,940           |
| <b>CONSOLIDATED REVENUES</b>                                    | <b>\$146,045</b>  | <b>\$146,684</b> | <b>\$146,542</b> | <b>\$148,875</b> | <b>\$153,686</b> |
| <b>SEGMENT PROFIT</b>   |   |                  |                  |                  |                  |
| Power & Water   | \$ 4,992  | \$ 5,422         | \$ 5,021         | \$ 5,804         | \$ 5,592         |
| Oil & Gas   | 2,178   | 1,924            | 1,660            | 1,406            | 1,440            |
| Energy Management   | 110   | 131              | 78               | 156              | 144              |
| Aviation  | 4,345   | 3,747            | 3,512            | 3,304            | 3,923            |
| Healthcare  | 3,048   | 2,920            | 2,803            | 2,741            | 2,420            |
| Transportation  | 1,166   | 1,031            | 757              | 315              | 473              |
| Appliances & Lighting   | 381   | 311              | 237              | 404              | 360              |
| Total industrial segment profit                                 | 16,220  | 15,486           | 14,068           | 14,130           | 14,352           |
| GE Capital  | 8,258   | 7,345            | 6,480            | 3,083            | 1,364            |
| Total segment profit  | 24,478  | 22,831           | 20,548           | 17,213           | 15,716           |
| Corporate items and eliminations <sup>(b)</sup>                 | (6,300)   | (4,841)          | (288)            | (1,012)          | (506)            |
| GE interest and other financial charges                         | (1,333)   | (1,353)          | (1,299)          | (1,600)          | (1,478)          |
| GE provision for income taxes                                   | (1,668)   | (2,013)          | (4,839)          | (2,024)          | (2,739)          |
| Earnings from continuing operations attributable to the Company | 15,177  | 14,624           | 14,122           | 12,577           | 10,993           |
| Earnings (loss) from discontinued operations, net of taxes      | (2,120)   | (983)            | 29               | (933)            | 32               |
| <b>CONSOLIDATED NET EARNINGS ATTRIBUTABLE TO THE COMPANY</b>    | <b>\$ 13,057</b>  | <b>\$ 13,641</b> | <b>\$ 14,151</b> | <b>\$ 11,644</b> | <b>\$ 11,025</b> |

(a) Segment revenues include both revenues and other income related to the segment.

(b) Includes the results of NBCU, our formerly consolidated subsidiary, and our former equity method investment in NBCU LLC until we sold it in the first quarter of 2013.

See accompanying notes to consolidated financial statements.

## Note 27.

### Operating Segments

#### *Basis for Presentation*

Our operating businesses are organized based on the nature of markets and customers. Segment accounting policies are the same as described in Note 1. Segment results for our financial services businesses reflect the discrete tax effect of transactions.

Results of our formerly consolidated subsidiary, NBCU, and our equity method investment in NBCU LLC, which we sold in the first quarter of 2013 are reported in the “Corporate items and eliminations” line on the Summary of Operating Segments.

A description of our operating segments as of December 31, 2013, can be found below, and details of segment profit by operating segment can be found in the Summary of Operating Segments table in Management’s Discussion and Analysis of Financial Condition and Results of Operations.

#### *Power & Water*

Power plant products and services, including design, installation, operation and maintenance services are sold into global markets. Gas, steam and aeroderivative turbines, nuclear reactors, generators, combined cycle systems, controls and related services, including total asset optimization solutions, equipment upgrades and long-term maintenance service agreements are sold to power generation and other industrial customers. Renewable energy solutions include wind turbines. Water treatment services and equipment include specialty chemical treatment programs, water purification equipment, mobile treatment systems and desalination processes.

#### *Oil & Gas*

Oil & Gas supplies mission critical equipment for the global oil and gas industry, used in applications spanning the entire value chain from drilling and completion through production, liquefied natural gas (LNG) and pipeline compression, pipeline inspection, and including downstream processing in refineries and petrochemical plants. The business designs and manufactures surface and subsea drilling and production systems, equipment for floating production platforms, industrial power generation and a broad portfolio of auxiliary equipment.

#### *Energy Management*

Energy Management is GE’s electrification business, Global teams design leading technology solutions for the delivery, management, conversion and optimization of electrical power for customers across multiple energy-intensive industries. GE has invested in our Energy Management capabilities, with strategic acquisitions and joint ventures that enable GE to increase its offerings to the utility, industrial, renewables, oil and gas, marine, metals and mining industries. Plant automation hardware, software and embedded computing systems including controllers, embedded systems, advanced software, motion control, operator interfaces and industrial computers are also provided by Energy Management.

#### *Aviation*

Aviation products and services include jet engines, aerospace systems and equipment, replacement parts and repair and maintenance services for all categories of commercial aircraft; for a wide variety of military aircraft, including fighters, bombers, tankers and helicopters; for marine applications; and for executive and regional aircraft. Products and services are sold worldwide to airframe manufacturers, airlines and government agencies.

### *Healthcare*

Healthcare products include diagnostic imaging systems such as Magnetic Resonance (MR), Computed Tomography (CT) and Positron Emission Tomography (PET) scanners, X-ray, nuclear imaging, digital mammography, and Molecular Imaging technologies. Healthcare-manufactured technologies include patient and resident monitoring, diagnostic cardiology, ultrasound, bone densitometry, anesthesiology and oxygen therapy, and neonatal and critical care devices. Related services include equipment monitoring and repair, information technologies and customer productivity services. Products also include diagnostic imaging agents used in medical scanning procedures, drug discovery, biopharmaceutical manufacturing and purification, and tools for protein and cellular analysis for pharmaceutical and academic research, including a pipeline of precision molecular diagnostics in development for neurology, cardiology and oncology applications. Products and services are sold worldwide to hospitals, medical facilities, pharmaceutical and biotechnology companies, and to the life science research market.

### *Transportation*

Transportation is a global technology leader and supplier to the railroad, mining, marine and drilling industries. GE provides freight and passenger locomotives, diesel engines for rail, marine and stationary power applications, railway signaling and communications systems, underground mining equipment, motorized drive systems for mining trucks, information technology solutions, high-quality replacement parts and value added services.

### *Appliances & Lighting*

Products include major appliances and related services for products such as refrigerators, freezers, electric and gas ranges, cooktops, dishwashers, clothes washers and dryers, microwave ovens, room air conditioners, residential water systems for filtration, softening and heating, and hybrid water heaters. These products are distributed both to retail outlets and direct to consumers, mainly for the replacement market, and to building contractors and distributors for new installations. Lighting products include a wide variety of lamps and lighting fixtures, including light-emitting diodes. Products and services are sold in North America and in global markets under various GE and private-label brands.

### *GE Capital*

CLL has particular mid-market expertise, and primarily offers secured commercial loans, equipment financing and other financial services to companies across a wide range of industries including construction, retail, manufacturing, transportation, media, communications, technology and healthcare. Equipment financing activities include industrial, medical, fleet vehicles, corporate aircraft, construction, office imaging and many other equipment types.

Consumer offers a full range of financial products including private-label credit cards; personal loans; bank cards; auto loans and leases; mortgages; debt consolidation; home equity loans; deposit and other savings products; and small and medium enterprise lending on a global basis.

Real Estate offers a comprehensive range of capital and investment solutions and finances, with both equity and loan structures; the acquisition, refinancing and renovation of office buildings, apartment buildings, retail facilities, hotels and industrial properties.

Energy Financial Services offers financial products to the global energy industry including structured equity, debt, leasing, partnership financing, product finance, and broad-based commercial finance.

GECAS, our commercial aircraft financing and leasing business, offers a wide range of aircraft types and financing options, including operating leases and secured debt financing, and also provides productivity solutions including spare engine leasing, airport and airline consulting services, and spare parts financing and management.



## REVENUES

| (In millions)                                   | Total revenues <sup>(a)</sup> |           |           | Intersegment revenues <sup>(b)</sup> |          |         | External revenues |           |           |
|---|-------------------------------|-----------|-----------|--------------------------------------|----------|---------|-------------------|-----------|-----------|
|   | 2013                          | 2012      | 2011      | 2013                                 | 2012     | 2011    | 2013              | 2012      | 2011      |
| Power & Water                                   | \$ 24,724                     | \$ 28,299 | \$ 25,675 | \$ 947                               | \$ 1,119 | \$ 794  | \$ 23,777         | \$ 27,180 | \$ 24,881 |
| Oil & Gas                                       | 16,975                        | 15,241    | 13,608    | 360                                  | 314      | 302     | 16,615            | 14,927    | 13,306    |
| Energy Management                               | 7,569                         | 7,412     | 6,422     | 848                                  | 487      | 504     | 6,721             | 6,925     | 5,918     |
| Aviation  | 21,911                        | 19,994    | 18,859    | 500                                  | 672      | 417     | 21,411            | 19,322    | 18,442    |
| Healthcare                                      | 18,200                        | 18,290    | 18,083    | 14                                   | 37       | 65      | 18,186            | 18,253    | 18,018    |
| Transportation                                  | 5,885                         | 5,608     | 4,885     | 12                                   | 11       | 33      | 5,873             | 5,597     | 4,852     |
| Appliances & Lighting                           | 8,338                         | 7,967     | 7,693     | 25                                   | 23       | 22      | 8,313             | 7,944     | 7,671     |
| Total industrial                                | 103,602                       | 102,811   | 95,225    | 2,706                                | 2,663    | 2,137   | 100,896           | 100,148   | 93,088    |
| GE Capital                                      | 44,067                        | 45,364    | 48,324    | 1,150                                | 1,037    | 977     | 42,917            | 44,327    | 47,347    |
| Corporate items and eliminations <sup>(c)</sup> | (1,624)                       | (1,491)   | 2,993     | (3,856)                              | (3,700)  | (3,114) | 2,232             | 2,209     | 6,107     |
| Total   | \$146,045                     | \$146,684 | \$146,542 | \$ —                                 | \$ —     | \$ —    | \$146,045         | \$146,684 | \$146,542 |

(a) Revenues of GE businesses include income from sales of goods and services to customers and other income.

(b) Sales from one component to another generally are priced at equivalent commercial selling prices.

(c) Includes the results of NBCU (our formerly consolidated subsidiary) and our former equity method investment in NBCUniversal LLC.

Revenues from customers located in the United States were \$68,617 million, \$70,466 million and \$69,910 million in 2013, 2012 and 2011, respectively. Revenues from customers located outside the United States were \$77,428 million, \$76,218 million and \$76,632 million in 2013, 2012 and 2011, respectively.

| (In millions)                                   | Assets <sup>(a)(b)</sup> |           |           | Property, plant and equipment additions <sup>(c)</sup> |          |          | Depreciation and amortization   |          |          |
|---|--------------------------|-----------|-----------|--|----------|----------|---------------------------------|----------|----------|
|   | At December 31           |           |           | For the years ended December 31                        |          |          | For the years ended December 31 |          |          |
|   | 2013                     | 2012      | 2011      | 2013   | 2012     | 2011     | 2013                            | 2012     | 2011     |
| Power & Water                                   | \$29,526                 | \$ 27,174 | \$ 27,074 | \$ 714   | \$ 661   | \$ 770   | \$ 668                          | \$ 647   | \$ 605   |
| Oil & Gas                                       | 26,181                   | 20,099    | 18,855    | 1,185  | 467      | 904      | 479                             | 426      | 434      |
| Energy Management                               | 9,962                    | 9,253     | 9,835     | 137  | 155      | 414      | 323                             | 287      | 239      |
| Aviation  | 32,272                   | 25,144    | 23,567    | 1,178  | 781      | 699      | 677                             | 644      | 569      |
| Healthcare                                      | 27,956                   | 28,458    | 27,981    | 316  | 322      | 378      | 861                             | 879      | 869      |
| Transportation                                  | 4,472                    | 4,389     | 2,633     | 282  | 724      | 193      | 167                             | 90       | 88       |
| Appliances & Lighting                           | 4,237                    | 4,133     | 3,675     | 405  | 485      | 268      | 300                             | 265      | 260      |
| GE Capital                                      | 516,829                  | 539,351   | 584,643   | 9,978  | 11,879   | 9,871    | 7,738                           | 7,348    | 7,480    |
| Corporate items and eliminations <sup>(d)</sup> | 5,125                    | 26,998    | 19,740    | 194  | (99)     | 56       | 260                             | 218      | 186      |
| Total   | \$656,560                | \$684,999 | \$718,003 | \$14,389   | \$15,375 | \$13,553 | \$11,473                        | \$10,804 | \$10,730 |

(a) Assets of discontinued operations, NBCU (our formerly consolidated subsidiary) and our former equity method investment in NBCUniversal LLC are included in Corporate items and eliminations for all periods presented.

(b) Total assets of the Power & Water, Oil & Gas, Energy Management, Aviation, Healthcare, Transportation, Appliances & Lighting and GE Capital operating segments at December 31, 2013, include investment in and advances to associated companies of \$507 million, \$108 million, \$788 million, \$1,463 million, \$576 million, \$10 million, \$388 million and \$17,348 million, respectively. Investments in and advances to associated companies contributed approximately \$(26) million, \$18 million, \$3 million, \$4 million, \$(48) million, \$0 million, \$40 million and \$1,809 million to segment pre-tax income of Power & Water, Oil & Gas, Energy Management, Aviation, Healthcare, Transportation, Appliances & Lighting and GE Capital operating segments, respectively, for the year ended December 31, 2013. Aggregate summarized financial information for significant associated companies assuming a 100% ownership interest included: total assets of \$98,658 million, primarily financing receivables of \$46,655 million; total liabilities of \$66,535 million, primarily debt of \$40,030 million; revenues totaled \$22,692 million; and net earnings totaled \$2,431 million.

(c) Additions to property, plant and equipment include amounts relating to principal businesses purchased.

(d) Includes deferred income taxes that are presented as assets for purposes of our consolidating sheet presentation.

| (In millions)                                   | Interest and other financial charges |          |          | Provision (benefit) for income taxes |         |         |
|---|--------------------------------------|----------|----------|--------------------------------------|---------|---------|
|   | 2013                                 | 2012     | 2011     | 2013                                 | 2012    | 2011    |
| GE Capital                                      | \$ 9,267                             | \$11,596 | \$13,760 | \$(992)                              | \$ 521  | \$ 906  |
| Corporate items and eliminations <sup>(a)</sup> | 849                                  | 811      | 662      | 1,668                                | 2,013   | 4,839   |
| Total   | \$10,116                             | \$12,407 | \$14,422 | \$ 676                               | \$2,534 | \$5,745 |

(a) Included amounts for Power & Water, Oil & Gas, Energy Management, Aviation, Healthcare, Transportation and Appliances & Lighting, for which our measure of segment profit excludes interest and other financial charges and income taxes.

Property, plant and equipment—net associated with operations based in the United States were \$28,657 million, \$27,192 million and \$25,974 million at year-end 2013, 2012, and 2011, respectively. Property, plant and equipment—net associated with operations based outside the United States were \$40,170 million, \$41,441 million and \$38,573 million at year-end 2013, 2012 and 2011, respectively.

## Chapter 14 – Review Questions

The review questions accompanying this course are designed to assist you in achieving the course learning objectives. The review section is not graded; do not submit it in place of your qualified assessment. While completing the review questions, it may be helpful to study any unfamiliar terms in the glossary in addition to course content. After completing the review questions, proceed to the review question answers and rationales.

90. Disaggregated financial information is:
- Not as useful as consolidated financial information.
  - A key component of investors' evaluation of prospective investments.
  - Less of an area of SEC focus than the other footnotes.
  - Mainly useful to academics and researchers.
91. Arguments against segment reporting include all of the following with the **EXCEPTION** of:
- Disclosures to competitors, suppliers and the like create a competitive disadvantage to the company and actually could create more risk.
  - There is already a significant reporting burden on companies.
  - Segment data does not allow for better comparison with competitors due to the nature of conglomerates.
  - Segment data may be meaningless or misleading due to inherent classification and allocation strategies used by the consolidated entity.
92. Which of the following is accurate regarding an operating segment and a reportable segment?
- A reportable segment must meet one of three 10% tests in order to be considered reportable.
  - An operating segment is considered significant to the enterprise's operations.
  - A reportable segment may or may not be an operating segment.
  - All operating segments are reportable segments.
93. Which of the following is accurate regarding segment disclosures?
- Revenues from external customers and from other segments must be disclosed.
  - Segment disclosures are not required for interim reports.
  - Geographic area disclosures are required for each segment.
  - There must be a reconciliation between segment amounts and consolidated amounts for revenue, profit and loss, assets, and other significant items.

94. Publically owned companies must:
- File Form 10-Q each quarter within 60 days unless they are an accelerated filer.
  - File Form 10-Q each quarter and include the full content of the annual financial statements.
  - File Form 10-Q each quarter within 40 days if they are an accelerated filer.
  - File Form 10-Q each quarter which only includes an income statement.
95. GAAP for interim financial reporting:
- Is based on the discrete approach to interim periods.
  - Mandates that inventory valuation for interim periods follow the same procedures as used at year-end.
  - States that inventory losses from market declines should not be recognized until the year-end adjustments are made to avoid any opportunity for manipulation of interim reporting.
  - Concludes that each interim period is an integral part of an annual period.
96. All of the following disclosures are required for interim financial reports with the **EXCEPTION** of:
- Basic and dilute earnings-per-share data for each period presented.
  - Related party disclosures.
  - Contingent items.
  - Changes in accounting principles or estimates.

## **Chapter 15 – Partnerships: Formation, Operation, and Ownership Changes**

### **Learning Objectives**

After completing this section of the course, you will be able to:

- Recognize differences between general partnership, limited partnership, and a joint ventures, citing the important components of the agreement.
- Compare and contrast partnership equity accounts and corporate equity accounts, noting the use of the draw account and the capital account.
- Recall how to prepare journal entries for the partnership.
- Allocate partnership net income or loss under various different approaches.
- Specify the rationales for salary allowances and interest allowances within a partnership, noting the required journal entries.
- Identify the methods used to bring in a new partner or record the withdrawal of a partner as well as the resulting journal entries, differentiating between the bonus method and the goodwill method.

## PARTNERSHIPS: FORMATION, OPERATION, AND OWNERSHIP CHANGES

### CHAPTER CONTENTS

- 15.1 PARTNERSHIP DEFINED
- 15.2 REASONS FOR FORMING A PARTNERSHIP
- 15.3 CHARACTERISTICS OF A PARTNERSHIP
- 15.4 PARTNERSHIP AGREEMENT
- 15.5 ACCOUNTING FOR A PARTNERSHIP
- 15.6 SPECIAL PROBLEMS IN ALLOCATION OF INCOME AND LOSS
- 15.7 FINANCIAL STATEMENT PRESENTATION
- 15.8 CHANGES IN THE OWNERSHIP OF THE PARTNERSHIP
- 15.9 SECTION A: ADMISSION OF A NEW PARTNER
- 15.10 SECTION B: WITHDRAWAL OF A PARTNER

#### IN THE NEWS

"Sustainability can be a 2 + 2 = 5 (or even 50) game. To achieve outstanding triple bottom line performance, new types of economic, social, and environmental partnership are needed. Long-standing enemies must shift from mutual subversion to new forms of symbiosis. The resulting partnerships will help each partner perform traditional tasks more efficiently, while providing a platform from which to reach toward goals that none of the partners could hope to achieve on his own."<sup>1</sup>

The next two chapters deal exclusively with accounting and reporting problems associated with the partnership form of business organization. These chapters cover the complete life cycle of a partnership from its formation and operation to its liquidation. Partnerships are covered in this text because they are a common form of business organization. They are popular because they permit the pooling of limited resources, are easy to form (no special governmental approval is required), and may have certain tax advantages. Because partnerships

<sup>1</sup> *Environmental Quality Management*, "Partnerships from Cannibals with Forks: The Triple Bottom Line of 21st-Century Business," by John Elkington, Autumn 1998, p. 37.

## ILLUSTRATION 15-1

## Partnership Statistics, 2011

| <i>Year 2011</i>   | <i>Number of partnerships</i> | <i>% of Industries</i> | <i>Number of partners</i> | <i>% of Industries</i> |
|--|-------------------------------|------------------------|---------------------------|------------------------|
| All Industries   | 3,285,177                     | 100%                   | 24,389,807                | 100%                   |
| Agriculture, forestry, fishing, and hunting                              | 121,192                       | 4%                     | 393,200                   | 2%                     |
| Mining   | 34,522                        | 1%                     | 1,367,314                 | 6%                     |
| Utilities  | 3,349                         | 0%                     | 113,472                   | 0%                     |
| Construction   | 157,333                       | 5%                     | 404,683                   | 2%                     |
| Manufacturing  | 64,418                        | 2%                     | 682,535                   | 3%                     |
| Wholesale trade  | 73,201                        | 2%                     | 538,253                   | 2%                     |
| Retail trade   | 161,596                       | 5%                     | 647,523                   | 3%                     |
| Transportation and warehousing   | 40,351                        | 1%                     | 2,445,371                 | 10%                    |
| Information  | 44,068                        | 1%                     | 215,393                   | 1%                     |
| Finance and insurance  | 301,267                       | 9%                     | 6,597,560                 | 27%                    |
| Real estate and rental and leasing                                       | 1,595,757                     | 49%                    | 7,654,683                 | 31%                    |
| Professional, scientific, and technical services                         | 225,785                       | 7%                     | 753,583                   | 3%                     |
| Management of companies (holding companies)                              | 28,578                        | 1%                     | 1,027,254                 | 4%                     |
| Administrative and support and waste management and remediation services | 71,998                        | 2%                     | 173,707                   | 1%                     |
| Educational services   | 12,968                        | 0%                     | 33,200                    | 0%                     |
| Health care and social assistance  | 79,803                        | 2%                     | 347,280                   | 1%                     |
| Arts, entertainment, and recreation                                      | 67,183                        | 2%                     | 369,166                   | 2%                     |
| Accommodation and food services  | 122,104                       | 4%                     | 450,271                   | 2%                     |
| Other services   | 77,346                        | 2%                     | 170,711                   | 1%                     |

Adapted from *Statistics of income Bulletin*, Partnership Returns, Fall 2013 U.S. Internal Revenue Service.

are common, accountants are often called on to account for, and serve in, an advisory capacity to partnerships. Although many of the accounting concepts applicable to a sole proprietorship or a corporation are also applicable to partnerships, some aspects of partnership formation, operation, and liquidation require additional consideration. The unique aspects of accounting for a partnership are the focus of these chapters. Illustration 15-1 presents a summary of statistics for partnerships in the United States from 2007 and 2008.

Accounting for a partnership is influenced by the agreement made among the partners and by the appropriate state statutes. Partnerships operate within the legal framework of the state in which they are organized and the statutes may vary from state to state. In order to illustrate statutory provisions, the Uniform Partnership Act (UPA) is integrated throughout the partnership chapters because it, or some modification thereof, is the partnership law that has been adopted by the majority of the states. An in-depth study of the legal aspects of partnerships is generally contained in the typical business law course.

## 15.1 PARTNERSHIP DEFINED

A partnership is defined by the UPA as “an association of two or more persons to carry on as co-owners a business for profit.”<sup>2</sup> Persons in this definition include individuals, partnerships, corporations, and other associations. Not only are corporations sometimes partners, but also partnerships can be shareholders in a corporation.

In some cases, it may be difficult to determine whether a partnership has been formed or whether an individual is a partner in a business arrangement. To determine the existence of a partnership, it may be helpful to look for the following three attributes: (1) there must

<sup>2</sup> UPA, Section 6.

be an agreement, either expressed or implied, between two or more persons; (2) the business must be operated for the purpose of making a profit; and (3) members of the firm must be co-owners of the business. Co-ownership involves the right of each partner to share in the profits of the business, to participate in the management of the business, and to hold an interest in properties conveyed to the partnership. These rights are shared equally unless agreed to otherwise in the partnership agreement.

## 15.2 REASONS FOR FORMING A PARTNERSHIP

The prospective owner(s) of a business should consider the various attributes of the different forms of business organizations before selecting the one that they believe best meets their organizational objectives and personal goals. A form suitable for one set of business objectives may not be appropriate for another. It is possible for a firm to start as a proprietorship and, as the business and personal environments change, to move to a partnership form, and ultimately, to incorporate.

One of the major advantages of a partnership is that it permits the pooling of capital and other resources without the complexities and formalities of a corporation. A partnership is easier and less costly to establish than a corporation and is generally not subject to as much governmental regulation. Furthermore, the partners may be able to operate with more flexibility because they are subject neither to the control of a board of directors nor to outside shareholders. There may also be certain tax advantages to a partnership, discussed later.

### IN THE NEWS

Chip Bell, senior partner with Performance Research Associates in Dallas, compares partnering to dancing. He suggests six steps to great partnerships:

- **Focus**, or prepare to partner. There should be a clear commitment to some purpose.
- **Audition**, or pick great partners. Auditions are about discovery and disclosure. Be open for warning cues.
- **Rehearse**, or get the partnership in shape. Work the plan, ignoring opposition or objections.
- **Dance**, or keep the magic in motion. Great partnerships keep going and growing.
- **Hurt**, or manage the pain. Great dances are rarely flawless, and the capacity to bend and continue in the face of adversity makes for resilience.
- **Bow out**, or know when to call it curtains.<sup>3</sup>

## 15.3 CHARACTERISTICS OF A PARTNERSHIP

**LO 1** Characteristics of a general partnership.

Some partnership characteristics may make it more difficult for a partnership to raise capital than for a corporation. Partnerships are thus most common in comparatively small businesses, professional organizations, such as medical clinics or an accounting practice, and some limited projects undertaken to accomplish a single goal, such as an oil and gas exploration project or the purchase of a parcel of real estate for investment purposes. However, there is no limit to the size or number of partners in a firm. For example, in the large international CPA firms, the number of partners is in the thousands and revenue is in the millions of dollars.

One distinctive characteristic of a partnership is its advantageous federal income tax treatment. A partnership is treated as a “flow through” entity from a federal income tax

<sup>3</sup> Adapted from *Dance Lessons: Six Steps to Great Partnerships in Business and Life*, by Chip Bell and Heather Shea (St. Paul, MN: Highbridge Company, 1998). Also see Executive Excellence, “Steps to Great Partnerships,” by Chip Bell and Heather Shea, March 1999, pp. 5–6.

perspective and as such, income is not subject to taxation at the partnership level. A partnership must file an information return with the IRS in which income or loss is allocated to the individual partners. A partner's respective share of the income or loss is then reported on his or her individual income tax return, whether distributed by the partnership or not.

## General Partnership

In a general partnership, each member is a general partner within the firm. That is, there is no "limited partner" in the organization. The following are characteristics of a general partnership.

**Mutual Agency** Every general partner is an agent of both the partnership and every other partner. Thus, a partner can bind the other partners to a contract if he or she is acting within the apparent scope of the business. Outside parties transacting with a partner can assume the partner has the power to bind the partnership unless they are informed otherwise. Outside parties should be aware, however, that for certain acts, such as the assignment of partnership property, unanimous consent of the partners is required.

**Right to Dispose of a Partnership Interest** A capital interest in a general partnership is a personal asset of the individual partner that can be sold or disposed of in any legal way. However, the UPA, recognizing the highly personal relationship of the partners, provides that a purchaser of another partner's interest does not have the right to participate in management unless he or she is accepted by all the partners. The new partner is entitled to the profit allocation acquired and, in the event of liquidation, to receive whatever assets the selling partner would have received had he or she continued in the partnership.

**Unlimited Liability** In a *general partnership*, each partner is jointly and severally liable for the debts and obligations of the partnership. This means that in the case of liquidation, the creditors of the partnership, if not satisfied from assets of the partnership, can look to each partner's personal resources for recovery of unsatisfied claims. Jointly and severally means that a creditor can seek recovery from all the partners or can proceed against one or more of them separately.

**Limited or Uncertain Life** A general partnership may be dissolved for a number of reasons, including the death of a partner, the bankruptcy of an individual partner, the withdrawal of a partner from the partnership, or a judgment by a court that a partner is unsound of mind and incapable of performing his or her partnership duties.

The characteristics just discussed underline the importance of careful selection of the individuals to be associated in a general partnership. In particular, mutual agency and unlimited liability are distinctive features of a general partnership that could result in extensive personal liability resulting from the acts of other partners.

Recently, state laws have authorized the existence of a popular new form of general partnership known as a *limited liability partnership (LLP)*. An LLP addresses the issue of unlimited liability by granting partners personal protection from partnership obligations arising from the actions of other partners. However, partners are still held personally liable for their own actions and those of others under their authority.

### IN THE NEWS

"Partnerships aren't for everyone. They require an investment of energy and

demand vulnerability. And partnerships diminish the protection of anonymity. They are poor associations in which to hide. Partnership means working onstage, not backstage. Done well, partnerships work at amplifying disclosure and enhancing exposure."<sup>4</sup>

## Limited Partnership

**LO 1** Characteristics of a limited partnership.

In a *limited partnership*, one or more of the partners are general partners and one or more are limited partners. While general partners manage the firm and are personally liable for obligations of the partnership, limited partners invest capital only and limit their liability

<sup>4</sup> *Executive Excellence*, "Steps to Great Partnerships," by Chip Bell and Heather Shea, March 1999, pp. 5–6.



for partnership obligations to the amount of their investment. In return, limited partners give up the right to participate in the management of the firm.

The limited partnership form of organization is selected when the general partners want to raise capital without giving up management control of the business. It is also an attractive form when the tax benefits associated with a partnership are desired, but the investors do not want to assume personal liability for the obligations of the partnership. For these reasons, the limited partnership form is often used for professional sports franchises and offerings of partnership interests made to the public for the purpose of carrying out a specific business plan, such as real estate ventures or oil and gas exploration projects.

## Joint Ventures

**LO 1** Characteristics of a joint venture.

A **joint venture** is an arrangement entered into by two or more parties to accomplish a single or limited purpose for the mutual benefit of the members of the group, often to earn a profit. For example, a firm in one country may enter into an agreement with a firm of another country to pool their resources to construct an automobile manufacturing plant, or two or more firms may enter into an arrangement to develop a new product that requires complementary technological knowledge. Thus, the life of the joint venture is limited to that of the undertaking, which may be of short- or long-term duration.

The relationship between the parties in the arrangement is generally governed by a written agreement. A distinguishing characteristic of the agreement is that each joint venturer participates directly or indirectly in the overall management of the resources. Accordingly, major decisions require the consent of the ownership group.

Joint ventures are commonly organized as corporations or partnerships. If organized as a corporation, the investment in the joint venture generally must be accounted for using the equity method in accordance with the provisions of *Accounting Principles Board Opinion No. 18*.<sup>5</sup> As a corporation, a joint venture is governed by corporate law. If the arrangement is a partnership joint venture, interpretations of *Opinion No. 18* indicate that many of the provisions of that opinion are appropriate in accounting for the investment.<sup>6</sup> In general, partnership law applies to a partnership joint venture, but the authority of a joint venturer is limited to a greater extent than that of a general partner. For example, as a general rule, one party to the arrangement is not an agent of the other parties.

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## 15.4 PARTNERSHIP AGREEMENT

**LO 2** Important items in a partnership agreement.

A partnership is a voluntary association based on the contractual agreement between or among legally competent persons. The contract between the parties is called the **partnership agreement, partnership contract, or articles of partnership**. The partnership agreement generally contains provisions related to the nature of the business, operating policies, and the relations between the partners in operating and terminating the business. In the contract, the partners should clearly express their intention, and the document should cover all aspects of operating the partnership. If there are subsequent disputes and the partners are unable to reach a satisfactory agreement, it may be necessary to resort to litigation.

The partnership agreement should reflect fully the precise intentions of the parties and be as unambiguous as possible. The agreement should include the following important points:

1. The name of the firm and identity of the partners.
2. The nature, purpose, and scope of the business.
3. The effective date of organization.

<sup>5</sup> *Opinion of the Accounting Principles Board No. 18*, "The Equity Method of Accounting for Investments in Common Stock" (New York: AICPA, 1971). [ASC 323]

<sup>6</sup> *Accounting Interpretations of APB Opinion No. 18* (New York: AICPA, 1972), par. 2. [ASC 323–30–15–3]

4. The length of time the partnership is to operate.
5. Location of the place of business.
6. Provision for the allocation of profit and loss.
7. Provision for salaries and withdrawals of assets by partners.
8. The rights, duties, and obligations of each partner such as the amount of time each partner will spend on business activities, and whether each partner is a general or limited partner.
9. Authority of each partner in contract situations.
10. Procedures for admitting a new partner.
11. Provisions that specify how operations are to be conducted and how the various partners' interests are to be satisfied on the withdrawal or the death of a partner.
12. Procedures for the arbitration of disputes.
13. Fiscal period of the partnership.
14. Identification and valuation of initial asset investments and the specification of capital interest that each partner is to receive.
15. Situations that may cause the dissolution of the partnership and provisions for terminating or continuing the business.
16. Accounting practices to be followed, such as depreciation policies, the sequence of closing procedures, and whether the cash or accrual basis is to be used in measuring net income.
17. Whether or not an audit is to be performed.

Some of the items listed will be discussed in more detail in later sections.

The law does not specify the form of the agreement. Although it may be oral, it is a good business practice to have the agreement in writing for the protection of the individual partners. A written agreement tends to reduce the number of disagreements resulting from misunderstandings and “loss of memory.”

Legally, the partners have a great deal of flexibility in drafting an agreement among themselves, but they must recognize that the UPA specifies certain rights of and obligations to outside parties that may not be avoided by the individual partners. For example, as noted previously, the UPA (Section 15) imposes unlimited liability on each general partner for partnership debts and obligations. A provision in a partnership agreement that exempts a general partner from this obligation would be superseded by the provision in the UPA.

In drafting the agreement, the partners should seek both legal and accounting assistance to assure that their rights are protected and to help anticipate and avoid as many points of conflict as possible. If there are later disputes related to the relations among the partners, most provisions set out in the UPA control only if the partners have failed to make an express agreement, or if the partners are unable to reach a mutually satisfying agreement. For example, in the absence of an agreement concerning how to share profits, the UPA provides that profits are to be shared equally. Differences arising from ordinary matters may be decided by a majority vote of the partners [UPA, Section 18(H)].



IN  
THE  
NEWS

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#### *The Greatest Show on Earth*

William Cameron Coup organized a show in 1869 that staged simultaneous performances in two rings. He later formed a partnership with P. T. Barnum, and in 1871 they opened “The Greatest Show On Earth” in Brooklyn, N.Y. About ten years later, Barnum went into partnership with James Anthony Bailey, another American showman and one of the best organizers in the business, and with two other impresarios. Eventually, however, Barnum and Bailey became sole partners, with their circus giving simultaneous shows in three rings.<sup>7</sup>

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<sup>7</sup> From *Funk and Wagnalls' New Encyclopedia*, Cambridge, MA: Funk and Wagnalls, Corp., 1996. *Infopedia*, SoftKey Multimedia Inc., 1996.

## Capital Interest versus Profit Interest

In preparing the partnership agreement, the partners must recognize that there is a distinction between a partner's capital interest and his or her interest in income and losses subsequently reported by the partnership. A partner's *capital interest* is a claim against the net assets of the partnership as shown by the balance in the partner's capital account; an *interest in income and loss* determines how the partner's capital interest will increase or decrease as a result of subsequent operations. The partners may agree that an individual partner is to receive a one-third capital interest in the partnership, but the same partner's interest in income and loss may be equal to, greater than, or less than one-third.

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## 15.5 ACCOUNTING FOR A PARTNERSHIP

### LO 3 Partnerships' equity versus shareholders' equity.

For accounting purposes, a partnership is considered a separate economic and accounting entity. The assets, liabilities, and residual capital interest, as well as the transactions and events that affect the accounts of the partnership, are areas of interest that require a separate accounting to provide information to the partners and other interested parties. Separation of these activities from the personal transactions of the individual partners is necessary in order to evaluate the performance of the partnership. This does not mean that other forms of statements cannot be prepared for other purposes. For example, a general partner has unlimited liability to the creditors of the partnership. Accordingly, the creditors may require information concerning the personal assets and debt position of individual partners, as well as the financial statements of the firm.

There is significantly more freedom in choosing a partnership accounting method than for other types of organizations, such as a corporation. While it is generally assumed that accounting for a partnership basically adheres to the same generally accepted accounting principles as accounting for a proprietorship or a corporation, it should be noted that small or specialized partnerships may utilize either cash basis or tax basis accounting as opposed to GAAP. Since partnerships are required to submit informational returns to the IRS that help determine individual partners' federal income tax, tax-based accounting may provide these partnerships with added convenience over GAAP-based accounting. While these varying methods are acceptable, this text will assume GAAP-based partnership accounting.

The primary difference in accounting for the different forms of organization is in the recording and reporting of capital transactions. A corporation's equity section reports the different sources of capital (for example, the issue of capital stock, additional paid-in capital from various sources, and retained earnings). Because each share of common stock has the same proportional interest in net income, dividends, voting rights, and assets in liquidation as any other share of the same class of stock, a separate capital account for each shareholder is not needed. However, in the case of a partnership, the capital interest in assets of each partner can vary. In addition, the partners' interest in net income or loss can vary and may not be proportional to their respective capital interests. As a result, the relationship of the partners' capital interest will change over time. To report the interest of each partner, a partnership's equity section normally consists of two accounts for each partner: one capital account and one drawing account.

### LO 4 Drawing and capital accounts.

Practice varies as to which of the two accounts is changed by capital transactions. Generally, investments and withdrawals of assets considered to be other than temporary are recorded in the capital account. The drawing account is typically debited to record withdrawals of assets in anticipation of profitable operations or payments of personal expenses of a partner from partnership assets. It is common practice to close the income summary account to either the drawing account or the capital account. The drawing account may be closed periodically to the capital account. The various sources of capital may thus be combined into one account. In this text, the income summary account and each partner's drawing account will be closed to the appropriate partners' capital accounts.

To illustrate the entries, assume that Ed Bell and Jane Peters operate a partnership in which they each originally contributed \$25,000 cash. In the current year, income of

\$60,000 is to be allocated equally and each partner withdraws \$1,000 per month or \$12,000 a year. The entries follow:

| <i>At the beginning of the partnership:</i> |        |        |
|---|--------|--------|
| Cash  | 50,000 |        |
| Bell, Capital                               |        | 25,000 |
| Peters, Capital                             |        | 25,000 |
| To form the partnership.                    |        |        |
| <i>Each month to record withdrawals:</i>    |        |        |
| Bell, Drawing                               | 1,000  |        |
| Peters, Drawing                             | 1,000  |        |
| Cash  |        | 2,000  |
| To record monthly withdrawals.              |        |        |
| <i>At the end of the period:</i>            |        |        |
| Income Summary                              | 60,000 |        |
| Bell, Capital                               |        | 30,000 |
| Peters, Capital                             |        | 30,000 |
| To close the income summary account.        |        |        |
| Bell, Capital                               | 12,000 |        |
| Peters, Capital                             | 12,000 |        |
| Bell, Drawing                               |        | 12,000 |
| Peters, Drawing                             |        | 12,000 |
| To close the partners' drawing accounts.    |        |        |

Generally, the same accounting concepts are used to determine net income for proprietorships, partnerships, and corporations. There are, however, several differences. First, because a partnership is not subject to income tax, no income tax expense is reported in the income statement. Second, interest on capital investment and salaries to partners have traditionally been treated as allocations of net income, rather than as expenses of the business. This practice is considered appropriate under the proprietary theory view of the firm in which all transactions with the owners are viewed as capital transactions. In other words, no revenue or expense should be recognized in transactions with the partners. Also, since the partners are owners of the business, the interest and salaries may not represent objectively determined amounts.

In addition to the transactions discussed before that affect a partner's capital interest, an individual partner may also lend cash to the partnership that may be accounted for as a liability of the partnership. A partner may also borrow cash from the partnership with the intention of repaying the loan to the partnership. In contrast to capital transactions, such as the withdrawal of assets as part of a profit allocation, an advance to a partner is accounted for as a receivable of the partnership, provided that the receivable satisfies the normal tests of collectibility. Generally accepted accounting standards should also be followed in accounting for, and disclosing, receivables from officers or members of a firm.

## Recording the Formation of a Partnership

Assets invested in the partnership, any debts assumed by the partnership, and the capital interest each partner is to receive should be specified in the partnership agreement. A listing of partnership assets is important, because creditors of the partnership must satisfy their claims from partnership assets before seeking recovery of unpaid claims from the personal assets of individual partners.

Assets invested in the partnership can be either cash or noncash assets, such as a patent, land, or equipment. Noncash assets invested in the partnership are properly recorded at fair values on the date of investment.<sup>8</sup> Liabilities assumed by the partnership should also be recorded at their fair values.

<sup>8</sup> FASB ASC paragraph 845-10-30-1.

Once the partners agree as to the identification and valuation of assets being invested, liabilities being assumed by the partnership, and the capital interest that each partner is to receive, the assets, liabilities, and equities are recorded on the books of the partnership. To illustrate, assume that the following items are being invested to form WY Partnership:

|   | <i>Agreed Fair Values</i>       |                                |
|---|---------------------------------|--------------------------------|
|   | <i>Investment<br/>by Wright</i> | <i>Investment<br/>by Young</i> |
| Cash  | \$10,000                        | \$10,000                       |
| Inventory                                       | 10,000                          | —                              |
| Land  | —                               | 20,000                         |
| Building  | —                               | 40,000                         |
| Equipment                                       | 20,000                          | —                              |
| Totals  | <u>40,000</u>                   | <u>70,000</u>                  |
| Mortgage on building assumed by the partnership | <u>—</u>                        | <u>20,000</u>                  |
| Net assets invested                             | <u>\$40,000</u>                 | <u>\$50,000</u>                |

The journal entry to record the initial investment, assuming that Wright and Young agree that each partner is to receive a capital credit equal to the fair value of the net assets each partner invested, is as follows:

|                  |        |        |
|------------------|--------|--------|
| Cash             | 20,000 |        |
| Inventory        | 10,000 |        |
| Land             | 20,000 |        |
| Building         | 40,000 |        |
| Equipment        | 20,000 |        |
| Mortgage Payable |        | 20,000 |
| Wright, Capital  |        | 40,000 |
| Young, Capital   |        | 50,000 |

**LO 5** Recording the formation of a partnership.

A problem results if the sum of the agreed net asset values does not equal the negotiated capital interest or if the agreement is unclear. For example, there are several possible interpretations of an agreement that each partner is to receive an equal capital interest. Two possible types of entries, the bonus method and the goodwill method, might be used to record the formation. Assuming the facts in the preceding paragraph, these entries are as follows:

|                   | <i>I<br/>Bonus Method</i> | <i>II<br/>Goodwill Method</i> |
|-------------------|---------------------------|-------------------------------|
| Cash              | 20,000                    | 20,000                        |
| Inventory         | 10,000                    | 10,000                        |
| Land              | 20,000                    | 20,000                        |
| Building          | 40,000                    | 40,000                        |
| Equipment         | 20,000                    | 20,000                        |
| Intangible Asset* | —                         | 10,000                        |
| Mortgage Payable  |                           | 20,000                        |
| Wright, Capital   | 45,000                    | 50,000                        |
| Young, Capital    | 45,000                    | 50,000                        |

\*Generally referred to as partnership goodwill.

Under the **bonus** method, there is a capital interest transfer of \$5,000 from Young to Wright to equalize the capital balances. Such an entry is made if Young recognizes that Wright is contributing something to the firm other than tangible assets, but the partners are reluctant to recognize an intangible asset, or a value for it cannot be determined objectively. Under the **goodwill** method, if equal capital interests are to be given to each partner, Wright's capital is increased by \$10,000. This is accomplished by recognizing an intangible asset of \$10,000 with a corresponding increase in the credit to the capital account of Wright. It is assumed that Wright is contributing something of value to the partnership that is intangible in nature, and which could not be specifically identified. The value assigned to the intangible asset could have been more than \$10,000. Young may also be

contributing an intangible asset to the partnership in addition to the tangible assets identified and valued. Unless the intangible is specifically identifiable, such as a patent, it should probably *not* be recognized. It is difficult to justify the recognition of an unspecified intangible such as goodwill on the books of a *new* partnership that does not have an established earnings record.

## Allocation of Net Income or Net Loss

The partners should include in the articles of partnership a provision indicating how income and losses are to be allocated. The profit and loss agreement determines how much each partner's interest in the firm increases or decreases as a result of operations. Often one of the major problems of accounting for a partnership is to determine the intent of the partners as indicated in the partnership agreement. The partners have much flexibility in the area. However, to avoid disagreement and potential litigation, the profit and loss agreement should be explicitly stated. In the absence of an agreement, courts have generally concluded that the intent of the parties was to allocate profits and losses equally. If a provision for profits, but not losses, is included in the agreement, the courts have generally concluded that losses should be allocated in the same ratio that profits are allocated. Therefore, the partnership agreement should state whether losses are to be allocated differently than profits.

The objective of the profit and loss agreement should be to reward the individual partners for their contributions of resources to the partnership. Some of the more common agreements are based on some combination of the following:

### Lo 5 Allocating net income or loss.

1. A fixed ratio.
2. A ratio based on capital balances.
3. Interest on capital investment.
4. An allocation for time or managerial talent devoted to the partnership operation, either in the form of a fixed salary allocation or a bonus as a percentage of income.

Partnerships have a number of allocation possibilities and sometimes use several of the following strategies to allocate income or losses. Unless otherwise stated, income for the period is assumed to be \$20,000 in the following examples.

**Fixed Ratio** One of the simplest agreements is for each partner to be allocated profit or loss each period on the basis of an equal percentage or some other specified ratio. For example, Adams and Brown may agree that profit and loss are to be allocated in the ratio 7:3. A profit of \$20,000 would be allocated \$14,000 to Adams and \$6,000 to Brown. The entry to close the Income Summary account would take the following form:

|                |        |        |
|----------------|--------|--------|
| Income Summary | 20,000 |        |
| Adams, Capital |        | 14,000 |
| Brown, Capital |        | 6,000  |

Note that the allocation determines the increase in each partner's interest in net assets resulting from operations. It has nothing to do with the withdrawals of assets by partners, which are recorded as debits to the capital or drawing accounts.

Unless stated otherwise, a loss of \$20,000 would also be allocated using a 7:3 ratio. If this is not the intent of the partners, a separate loss agreement should be stipulated.

**Capital Balances** Assets invested in the partnership are important resources. The allocation of profits on the basis of the ratio of capital balances may result in an equitable allocation of profits when the operation of the partnership requires little of the partners' time, such as the operation of an apartment building in which there is a hired manager. To avoid conflicts, the capital ratio should be based upon the capital balance at a specific point in time, such as the amount of original investment, beginning-of-year balances, on average,

or end-of-year balances. Allocations based on beginning and ending balances could be inequitable. For example, if the allocation ratio is based on ending balances, a partner could make a large capital investment at the end of the year. To avoid such abuse, partners may want to specify restrictions or use a weighted-average capital balance.

Assuming that the ratio is based on beginning capital balances and that Adams and Brown had balances of \$60,000 and \$40,000, respectively, the net income of \$20,000 would be allocated as follows:

|       | <i>Capital Investment</i> | <i>Net Income Allocation</i>                          |
|-------|---------------------------|---|
| Adams | \$ 60,000                 | ( $\$60,000/\$100,000$ ) $\times$ \$20,000 = \$12,000 |
| Brown | 40,000                    | ( $\$40,000/\$100,000$ ) $\times$ \$20,000 = 8,000    |
|       | <u>\$100,000</u>          | <u>\$20,000</u>                                       |

Net income allocation based on a weighted-average capital investment ratio is computed in Illustration 15-2. The weighted average is computed by multiplying the various capital balances that each partner maintained during the year by the fraction of the year that a particular capital balance was maintained. The \$20,000 net income is allocated on the basis of the ratio of the weighted-average capital investment.

The allocation of a loss on the basis of the ratio of capital balances would mean that Adams, who has invested the most capital, would absorb the greatest amount of the loss, which may be considered an unreasonable allocation. If this is the case, the partners may want to stipulate a different ratio for the allocation of losses.

**Interest on Capital Investment** Using the ratio of capital balances as the basis for allocation of profit assumes that invested capital is the most important resource of the partnership. However, in many profit-making organizations, other important resources should also be recognized. To accomplish this and still provide an equitable allocation, the partners may want to provide for interest on capital investment and allocate the remaining income on some other basis. Such a provision may also provide an incentive for additional capital to be invested, if necessary. The agreement should specify a minimum:

1. The interest rate,
2. The proper capital balance (beginning, ending, or average),

#### ILLUSTRATION 15-2

##### Computation of Weighted-Average Capital Balances

|                                    | <i>(A)</i>                                    | <i>(B)</i>                                   | <i>(C)</i>                                | <i>(D)</i>  |
|------------------------------------|---|--|---|---|
|                                    | <i>Increase<br/>(Decrease)<br/>in Capital</i> | <i>Cumulative<br/>Capital<br/>Balance</i>    | <i>Fraction<br/>of Year<br/>in Months</i> | <i>Weighted<br/>Average<br/>(B) <math>\times</math> (C)</i> |
| <b>Adams, Capital</b>              |   |  |   |   |
| January 1 Beginning Balance        |   | \$60,000                                     | 3/12                                      | \$15,000  |
| April 1 Added \$30,000 Investment  | \$ 30,000                                     | 90,000                                       | 3/12                                      | 22,500  |
| July 1 Withdrew \$10,000           | (10,000)                                      | 80,000                                       | 6/12                                      | 40,000  |
| Weighted-Average Capital Balance   |   |  |   | <u>\$77,500</u>   |
| <b>Brown, Capital</b>              |   |  |   |   |
| January 1 Beginning Balance        |   | 40,000                                       | 9/12                                      | \$30,000  |
| October 1 Withdrew \$10,000        | \$(10,000)                                    | 30,000                                       | 3/12                                      | 7,500   |
| Weighted-Average Capital Balance   |   |  |   | <u>\$37,500</u>   |
| <b>Weighted-Average Investment</b> |   |  |   |   |
| Adams                              | \$ 77,500                                     | <i>Net Income Allocation</i>                 |   |   |
| Brown                              | 37,500  | ( $\$77,500/\$115,000$ ) $\times$ \$20,000 = |   | \$13,478  |
|                                    | <u>\$115,000</u>                              | ( $\$37,500/\$115,000$ ) $\times$ \$20,000 = |   | 6,522   |
|                                    |   |  |   | <u>\$20,000</u>   |

3. How remaining profits should be allocated, and
4. Whether or not interest should still be allocated in case of loss or in case profits are less than the agreed interest allocation.

**LO 7** Using interest allowances in allocating profits and losses.

Frequently, the interest allocation is based on weighted-average capital investment. To illustrate, assume the average investment in Illustration 15-2. Interest is then computed on this amount. Assuming a net income of \$20,000, an 8% rate of interest, and that any remaining profit is to be divided equally, the profit (or loss, if negative) is allocated as follows:

| <i>Interest Allocation</i> | <i>Adams</i>    | <i>Brown</i>   | <i>Total</i>    |
|----------------------------|-----------------|----------------|-----------------|
| $\$77,500 \times .08 =$    | \$ 6,200        |                | \$ 6,200        |
| $37,500 \times .08 =$      |                 | \$3,000        | 3,000           |
| Total interest allocated   | 6,200           | 3,000          | 9,200           |
| Remainder shared equally   | 5,400           | 5,400          | 10,800          |
| Total to be allocated      | <u>\$11,600</u> | <u>\$8,400</u> | <u>\$20,000</u> |

**LO 7** Using Salary allowance in allocating profits and losses.

**Salary** The partners may provide, as part of the profit and loss formula, a salary allowance in recognition of personal services rendered by a partner. The amount by which net income exceeds the salary allowances may then be divided by any ratio agreed upon by the partners. For example, if Adams devotes full time to the business activity and Brown spends a limited amount of time, the partnership agreement may specify that Adams is allowed a salary of \$1,000 per month and that the remaining income is to be divided on the basis of the ratio of the beginning capital balances (\$60,000 and \$40,000, respectively). The allocation would be as follows:

|                                       | <i>Adams</i>    | <i>Brown</i>   | <i>Total</i>    |
|---------------------------------------|-----------------|----------------|-----------------|
| Salary allowance                      | \$12,000        | \$—0—          | \$12,000        |
| Remainder                             |                 |                |                 |
| $(\$60,000/\$100,000) \times \$8,000$ | 4,800           | } 3,200        | 8,000           |
| $(\$40,000/\$100,000) \times \$8,000$ |                 |                |                 |
|                                       | <u>\$16,800</u> | <u>\$3,200</u> | <u>\$20,000</u> |

A salary agreement is considered a part of the profit and loss allocation formula and may be made independent of the agreement between the partners as to the right to withdraw cash or other assets from the partnership. The withdrawal of cash reduces the partner's capital interest (debit to the drawing account) but plays no part in the allocation of net income. Since the term **salary** is normally understood to mean a cash payment for services received, it is important that the partners specify their intentions as to an allocation of profit or permission to withdraw assets.

**Bonus** Instead of basing the salary allocation on a fixed amount, the partners may provide for a bonus arrangement as a percentage of income or some other basis. Since a number of interpretations can result, the partners should explicitly state the basis to be used in calculating the bonus. Some possibilities based on net income are:

1. Net income before any allocation of income to partners (for example, before interest on capital, salaries to partners, and any bonus).
2. Net income after other income allocations, but before subtracting the bonus.
3. Net income after subtracting the bonus, but before subtracting the other allocations.
4. Net income after subtracting the bonus and other allocations from net income.

Calculation of the bonus in the first two alternatives is straightforward. To illustrate alternatives 3 and 4, assume that net income is \$24,000, and a bonus of 20% is to be paid to Adams. Also, interest of \$4,000 and \$2,000 is to be allocated to Adams and Brown,



respectively, and any remainder is to be allocated equally. The bonus and a proof of the calculation are as follows:

| <i>Alternative 3</i> |                        | <i>Alternative 4</i> |                                  |
|----------------------|------------------------|----------------------|----------------------------------|
| Bonus                | = .2(\$24,000 - Bonus) | Bonus                | = .2(\$24,000 - \$6,000 - Bonus) |
| Bonus                | = \$4,800 - .2Bonus    | Bonus                | = .2(\$18,000 - Bonus)           |
| 1.2 Bonus            | = \$4,800              | Bonus                | = \$3,600 - .2Bonus              |
| Bonus                | = \$4,000              | 1.2 Bonus            | = \$3,600                        |
|                      |                        | Bonus                | = \$3,000                        |

Proof:

|                         | <i>Alternative 3</i> | <i>Alternative 4</i> |
|-------------------------|----------------------|----------------------|
| Net income              | \$24,000             | \$24,000             |
| Bonus                   | 4,000                | 3,000                |
| Interest                |                      | 6,000                |
| Income subject to bonus | <u>\$20,000</u>      | <u>\$15,000</u>      |
|                         | Bonus = .2(\$20,000) | Bonus = .2(\$15,000) |
|                         | Bonus = \$4,000      | Bonus = \$3,000      |

## Insufficient Income to Cover Allocation

In some cases, the partnership net income may be less than the interest and/or salary provided for in the partnership agreement. If the partners fail to provide for such an occurrence in the profit and loss formula, the established practice is to allocate the interest and/or salary as if sufficient income had been earned. The amount by which the salary and/or interest exceeds the net income is allocated to the individual partners in their agreed ratio for allocating residual income. For example, assume that Adams and Brown agree to divide profits as follows:

1. Salary: Adams, \$4,000; Brown, \$2,000.
2. Interest: 8% on average capital balances (see Illustration 15-2).
3. Remainder: To be divided equally.

A net income of \$11,000 would be allocated as follows:

|   | <i>Adams</i>    | <i>Brown</i>    | <i>Total</i>    |
|---|-----------------|-----------------|-----------------|
| Salary                                  | \$ 4,000        | \$ 2,000        | \$ 6,000        |
| Interest                                | <u>6,200</u>    | <u>3,000</u>    | <u>9,200</u>    |
|   | 10,200          | 5,000           | 15,200          |
| Excess allocation (\$11,000 - \$15,200) | <u>(2,100)</u>  | <u>(2,100)</u>  | <u>(4,200)</u>  |
| Income allocation                       | <u>\$ 8,100</u> | <u>\$ 2,900</u> | <u>\$11,000</u> |

The entry to close the Income Summary account is:

|                |        |       |
|----------------|--------|-------|
| Income Summary | 11,000 |       |
| Adams, Capital |        | 8,100 |
| Brown, Capital |        | 2,900 |

As will be shown in the next section, this procedure produces the same results as if each partner's salary and interest had been treated as an expense in the determination of the partnership net income or loss.

In the case of a loss of \$20,000, the allocation would be as follows:

|  | <i>Adams</i>      | <i>Brown</i>       | <i>Total</i>       |
|--|-------------------|--------------------|--------------------|
| Salary                                   | \$ 4,000          | \$ 2,000           | \$ 6,000           |
| Interest                                 | <u>6,200</u>      | <u>3,000</u>       | <u>9,200</u>       |
|  | 10,200            | 5,000              | 15,200             |
| Excess allocation (-\$20,000 - \$15,200) | <u>(17,600)</u>   | <u>(17,600)</u>    | <u>(35,200)</u>    |
| Loss allocation                          | <u>\$ (7,400)</u> | <u>\$ (12,600)</u> | <u>\$ (20,000)</u> |

To avoid such an allocation, the partners may elect to state an alternative allocation in the articles of partnership. Once again, this situation indicates the need for careful planning in drafting the partnership agreement.

### TEST YOUR KNOWLEDGE 15.1

**NOTE:** Solutions to *Test Your Knowledge* questions are found at the end of each chapter before the end-of-chapter questions.

#### Multiple Choice

- Bob and Tom form a partnership on January 1, 2014. Bob contributes \$50,000, while Tom contributes \$100,000 cash and a building worth \$200,000. The building is subject to a mortgage of \$40,000, which is

assumed by the partnership. They agree to share profits and losses equally. Tom's capital account on January 1, 2014, should be:

- \$300,000
- \$280,000
- \$155,000
- \$260,000

## 15.6 SPECIAL PROBLEMS IN ALLOCATION OF INCOME AND LOSS

### Salaries and Interest as an Expense

In the foregoing illustrations, salaries and interest were accounted for as an allocation of net income, rather than as an expense in the determination of net income. However, the partners may find the income statement more useful for evaluating the operating performance of the partnership if either or both salary and interest allocations were treated as an expense in the determination of net income. If the salary levels and interest rates are reasonable for the resources provided, the income statement for the partnership may be more comparable to income statements of nonpartnership forms of organization. To illustrate, assume that the partnership reported net income of \$11,000 before the interest and salaries of the partners. The partners are to be allocated salaries and interest as follows:

|          | <i>Adams</i> | <i>Brown</i> |
|----------|--------------|--------------|
| Salary   | \$4,000      | \$2,000      |
| Interest | 6,200        | 3,000        |

The partners agree to allocate residual income and loss evenly. Journal entries to record the salaries and interest would be:

|                  |       |       |
|------------------|-------|-------|
| Salary Expense   | 6,000 |       |
| Adams, Capital   |       | 4,000 |
| Brown, Capital   |       | 2,000 |
| Interest Expense | 9,200 |       |
| Adams, Capital   |       | 6,200 |
| Brown, Capital   |       | 3,000 |

Net loss for the period after salaries and interest would be \$4,200, computed as follows:

|   |         |                 |
|---|---------|-----------------|
| Net income before salaries and interest |         | \$11,000        |
| Less: Salary expense                    | \$6,000 |                 |
| Less: Interest expense                  | 9,200   | 15,200          |
| Net loss                                |         | <u>\$ 4,200</u> |

After the revenue and expense accounts are closed, Income Summary would have a debit balance of \$4,200, which would be allocated evenly to the partners as agreed. The following entry would be recorded to close the income summary account:

|                |       |       |
|----------------|-------|-------|
| Adams, Capital | 2,100 |       |
| Brown, Capital | 2,100 |       |
| Income Summary |       | 4,200 |

Changes in the capital accounts are presented here:

| <b>Adams, Capital</b> |       |                       |       |
|-----------------------|-------|-----------------------|-------|
| From Income Summary   | 2,100 | Salary entry          | 4,000 |
|                       |       | Interest entry        | 6,200 |
|                       |       | Net change in capital | 8,100 |
| <b>Brown, Capital</b> |       |                       |       |
| From Income Summary   | 2,100 | Salary entry          | 2,000 |
|                       |       | Interest entry        | 3,000 |
|                       |       | Net change in capital | 2,900 |

This procedure results in the same change in the capital accounts as if the salaries and interest were considered an allocation of profit. (See the previous illustration where profits were insufficient to cover salary and interest allocations.) The method of reporting that is selected should be the one that provides the most useful information to the partners. Since the normal practice is to recognize salaries and interest as an allocation of profit, any such amounts treated as an expense should be adequately disclosed so the statement reader can properly evaluate the operating performance of the firm.

## Adjustment of Income of Prior Years

Errors may occur in accounting for partnership operations, such as failure to accrue or defer expenses or revenue, errors in the inventory count or pricing, or errors in the calculation or amortization of fixed assets. Problems in the allocation of profit and loss can result if (1) errors are discovered that occurred in specific prior years, and (2) the partners have altered the profit and loss agreement since the period in which the error occurred. In a corporation, an error correction is accounted for as an adjustment to the beginning retained earnings balance. However, in a partnership the correction is allocated to the individual partners' capital accounts. The allocation should be based on the profit and loss agreement in effect during the period of the error.

Other allocation problems may arise, such as market changes in assets being held for investment purposes that occur before a change in the allocation formula, or an adjustment for bad debts that cannot be attributed to any specific period. There is no clear-cut answer to such problems. Litigation can be avoided by providing for the treatment of such potential problems in the partnership agreement.

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## 15.7 FINANCIAL STATEMENT PRESENTATION

The income statement, balance sheet, and statement of cash flows for a partnership presented in conformity with GAAP are prepared in much the same manner as they are for a corporation. The following is a list of some of the differences in partnership reporting:

1. On the balance sheet or in a supplementary schedule, changes in partner's equity during the year should be disclosed.<sup>9</sup>
2. Partners' salary allowances are generally recognized as an allocation of net income, not as an expense in the determination of net income.
3. There is no income tax expense. The partners report their share of the partnership income or loss for the period on their individual income tax returns.
4. Interest paid to a partner on a loan balance is recognized as an expense. Interest allowance on capital investment is considered an allocation of profit.

<sup>9</sup> This disclosure is usually not made when the number of partners is very large. For example, some accounting firms have thousands of partners.

**ILLUSTRATION 15-3****AB Partnership Statement of Partners' Capital  
for the Year Ended December 31, 2014**

|                              | <i>Adams</i>     | <i>Brown</i>    | <i>Total</i>     |
|------------------------------|------------------|-----------------|------------------|
| Capital Balance, January 1   | \$ 60,000        | \$40,000        | \$100,000        |
| Add: Additional Investment   | 30,000           | —0—             | 30,000           |
| Net Income Allocation        | 16,800           | 3,200           | 20,000           |
|                              | <u>106,800</u>   | <u>43,200</u>   | <u>150,000</u>   |
| Less: Withdrawals            | 10,000           | 10,000          | 20,000           |
| Capital Balance, December 31 | <u>\$ 96,800</u> | <u>\$33,200</u> | <u>\$130,000</u> |

A statement of changes in partners' capital is prepared to disclose changes in the interest of each partner during the year as shown in Illustration 15-3. For some external reporting purposes, such detail may not be considered necessary. The partnership capital, for example, may be reported as one amount, and the capital balance of each partner may be disclosed in a supplementary schedule or not disclosed at all.

## 15.8 CHANGES IN THE OWNERSHIP OF THE PARTNERSHIP

The UPA (Section 29) defines *dissolution* as “the change in the relation of the partners caused by any partner ceasing to be associated in the carrying on as distinguished from the winding up of the business.” The partnership dissolution may be voluntary (for example, mutual agreement by the partners) or involuntary (for example, bankruptcy of an individual partner or the partnership itself). Although dissolution means the end of a specific relationship among the partners, it does not automatically result in the termination of business activity. For example, in some forms of dissolution, such as the bankruptcy of the partnership, the partnership operations are eventually terminated and the partnership ceases to exist. In other cases of dissolution the partnership may be dissolved, but the remaining partners may continue the normal operations of the partnership without any visible interruptions of the firm's operations.

In this chapter we consider the accounting problems associated with changes in the ownership of a continuing partnership. The changes that will be considered result from (1) admission of a new partner by the purchase of an interest directly from one or more current partners, which is frequently referred to as an assignment of a partnership interest, (2) admission of a new partner by investing assets in the partnership, and (3) withdrawal of a partner as a result of retirement or death. Unless precluded from doing so in the partnership agreement, generally a partner may insist on liquidation of the partnership in these forms of dissolutions. Because the going-concern value of the business is usually greater than its liquidation value, the partners may provide in the partnership agreement that such changes in the relations of the partners do not dissolve the partnership. Dissolution of the partnership in which operations are eventually terminated will be covered in the next chapter.

### Valuation—A Central Issue

When there is a change in the membership of the partnership, the problem of assigning a fair value to the firm arises. For example, if a partner withdraws from the partnership and there are no express provisions in the partnership agreement for determining the settlement, an equitable payment for his or her interest must be negotiated among the existing partners. Similarly, before admission, an incoming partner must negotiate with the existing partners an equitable purchase price for the interest he or she acquires. The settlement or purchase

price is based on a number of factors, one of which is the fair values of the partnership assets. However, the fair values of the partnership assets are generally not reflected on the partnership books. In accordance with generally accepted accounting standards, partnership assets are recorded at cost, and subsequent increases in their market value are not recognized.

**LO 9** Rationale behind the goodwill method.

One approach is to first revalue assets and liabilities to their fair values and record any identifiable unrecorded assets and liabilities before recording the admission or withdrawal of a partner. In addition, the settlement price paid to a withdrawing partner or the purchase price paid by a new partner may be used to infer a value for the firm as a whole. Any difference between the value of the firm implied by the payment and the fair value of the net assets may be assigned to an intangible asset frequently referred to as partnership goodwill. An increase or decrease in net assets is allocated to the appropriate partners in their profit or loss ratio. Under this approach, the use of fair values provides an equitable measure of each partner's capital interest in the partnership. Furthermore, when a new partner is admitted, failure to recognize fair values will result in unrecorded value changes realized later being allocated in the profit- and loss-sharing ratio unless a separate provision is made. An unrecorded increase in value would benefit the new partner, whereas an unrecorded decrease would be a detriment. Revaluation of assets and liabilities is supported on the basis that, in dissolution, the old partnership is dissolved and a new entity is formed.

In practice, some accountants are reluctant to recognize a change in the value of an asset, even though there may be objective evidence that a specific asset is undervalued. They argue that recording an increase in fair value for external reporting purposes is not in accordance with generally accepted accounting practice and that economic substance should take precedence over legal form. That is, even though the partnership may be legally dissolved, the economic substance of some types of dissolution is that the business activity continues without interruption. Proponents of this method would retain the historical cost carrying value, and either prescribe in the agreement that unrecorded changes in value will not be shared with a new partner when realized, or will require a disproportionately high capital investment in relation to the new partner's income-sharing percentage. In this chapter, the revaluation of assets is shown as one of the approaches to recording changes in ownership because it is commonly advocated as an acceptable alternative and its use has some merit.

## Methods of Recording Changes in the Membership of the Partnership

Two methods are frequently used to record changes in partnership membership:

**LO 8** Recording partnership changes.

- 1. *The bonus method.*** When this method is used, the assets of the partnership are increased by the amount of the assets invested by the partner being admitted. Any difference between the assets invested and the credit to the new partner's capital account is adjusted to the capital accounts of the other partners involved in the negotiations. If a partner withdraws from a partnership, the partners may agree to settle his or her capital interest by permitting the withdrawal of partnership assets. If the bonus method is used to record the withdrawal, the difference between the recorded value of the assets withdrawn and the debit to the withdrawing partner's capital account is adjusted to the capital accounts of the remaining partners.
- 2. *The goodwill method.*** When this method is used, a new asset is recorded that is based on the difference between the value implied by the amount of consideration negotiated in the admission or withdrawal of a partner and the values reported in the partnership books.

Whether the bonus method or goodwill method is used, unrecorded changes in the value of existing assets and liabilities that are objectively determinable may be recorded before the change in membership is recorded.

As will be demonstrated, if certain limited conditions related to the profit and loss agreement are satisfied, the bonus and goodwill methods will produce the same result.

If these conditions are met, the use of the bonus method precludes the problem of recording an intangible asset.

The bonus and goodwill methods are used for either *admission of a new partner* or the *withdrawal of a partner*, described in the following sections A and B.

## 15.9 SECTION A: ADMISSION OF A NEW PARTNER

An individual may acquire an interest in a partnership: (1) by purchasing all or part of an interest directly from one or more existing partners (this transaction occurs outside the partnership and represents a transfer of assets between individuals), or (2) by being admitted as an additional partner on the investment of assets in the firm. Generally, the individual invests cash and/or other assets (for example, land, patent rights, equipment, marketable securities). A new partner could be admitted, however, by contributing a resource such as managerial talent. Because accountants ordinarily do not record such assets, unless the partners agree to transfer capital to the new partner's account, he or she will begin with a zero capital balance.

### Assignment of an Interest by an Existing Partner

**LO 8** Methods to record partnership changes.

A partner is entitled to sell his or her interest in the firm, but no partner can be forced to accept a new member to the partnership. The UPA (Section 27) provides that the purchasing party acquire only the right to receive profits and assets in the event of liquidation to which the selling partner would otherwise be entitled. The purchaser does not acquire the right to participate in management unless all remaining partners agree to grant this right. The mere act of selling an interest does not dissolve the partnership, because the overall relation of the partners is not changed.

In the following illustrations, it is assumed that the partnership currently consists of two partners, Alan Adams and Bill Brown, with respective capital interests of \$60,000 and \$40,000. Adams and Brown share income and losses in the ratio of 6:4. Both partners agree to the admission of a new partner.

**Acquisition of Interest by Payment to One Partner** If an individual acquires an interest in a partnership by making payment directly to an existing partner, the interest acquired is recorded in a new capital account by transferring a corresponding amount equal to the percentage interest acquired from the selling partner's capital account. For example, assume that Adams sold one-half of his interest in the firm to Carol Call for \$36,000. The only entry necessary on the partnership books is to record the transfer of capital interest from the selling partner to the capital account established for the new partner. The entry is:

|                                 |        |        |
|---------------------------------|--------|--------|
| Adams, Capital (.50 × \$60,000) | 30,000 |        |
| Call, Capital                   |        | 30,000 |

The following should be noted:

1. Since this is a personal transaction between the two individuals, the entry is the same regardless of the amount paid by Call directly to Adams.
2. Net assets and equities of the firm are not changed as a direct result of the transaction, since the sale was negotiated outside the partnership. However, as noted earlier, the partners may choose to revalue assets and liabilities.
3. The amount of capital transferred to Call is equal to Adams' recorded capital multiplied by the percentage interest in Adams' capital acquired by Call.
4. Call now has a capital interest of 30% (\$30,000 of total interest of \$100,000), but her profit interest does not have to equal this percentage.

A simplified balance sheet after the admission of Call would be as follows:

|            |                  |                |                  |
|------------|------------------|----------------|------------------|
| Net assets | \$100,000        | Adams, Capital | \$ 30,000        |
|            |                  | Brown, Capital | 40,000           |
|            |                  | Call, Capital  | 30,000           |
| Total      | <u>\$100,000</u> | Total          | <u>\$100,000</u> |

**Acquisition of an Interest by Payment to More Than One Partner** If Call had purchased a 30% interest from each partner for \$36,000, the entry would be:

|                                  |        |        |
|----------------------------------|--------|--------|
| Adams, Capital (.30 × \$ 60,000) | 18,000 |        |
| Brown, Capital (.30 × \$ 40,000) | 12,000 |        |
| Call, Capital (.30 × \$100,000)  |        | 30,000 |

The observations outlined before when the purchase was made from one partner apply in this case as well. Furthermore, this entry has no effect on how the cash payment made by Call is to be distributed to Adams and Brown outside the partnership. The amount and distribution of cash is a negotiated transaction between individuals and does not affect the partnership accounts unless the amount is used as a basis for the revaluation of the firm.

**Goodwill Implied by the Purchase Price** In the foregoing examples, the amount paid by Call to gain admission to the firm was ignored in recording the transfer of interest. This procedure is often referred to as the bonus method. Some argue that the payment of \$36,000 for a \$30,000 interest in the partnership indicates that the firm has assets that are unrecorded or undervalued. The assumption is that the negotiated purchase price took into consideration such factors as the fair values of the firm's assets, the present value of the firm's liabilities, and the valuation of the firm on the basis of future prospects. Thus, the payment can be used to approximate the value of the firm. If Call is willing to pay \$36,000 for a 30% interest in the firm, then the implied value of the partnership net assets is \$120,000 ( $\$36,000 \div .30$ ). Net assets and capital should be increased by \$20,000 from the recorded amounts of \$100,000. Since this represents an unrecorded increase in the value of the firm's assets, the increase in assets of \$20,000 is allocated to Adams and Brown in their profit-sharing ratio. To the extent that the excess cannot be assigned to specific identifiable recorded assets, the remaining amount is recorded as partnership goodwill. Assuming that the book values of assets and liabilities equal their fair values, the entries to record the increase in assets and admission of Call are as follows:

|  |        |        |
|--|--------|--------|
| Goodwill   | 20,000 |        |
| Adams, Capital (.60 × \$ 20,000)                         |        | 12,000 |
| Brown, Capital (.40 × \$ 20,000)                         |        | 8,000  |
| Adams, Capital (.30 × \$ 72,000)                         | 21,600 |        |
| Brown, Capital (.30 × \$ 48,000)                         | 14,400 |        |
| Call, Capital (.30 × \$120,000, also equal to cash paid) |        | 36,000 |

This results in account balances as presented in Illustration 15-4.

#### ILLUSTRATION 15-4

##### Schedule of Account Balances

|                                 | Net Assets       |   |                 | = | Capital           |   |                   |   |                   |
|---------------------------------|------------------|---|-----------------|---|-------------------|---|-------------------|---|-------------------|
|                                 | Assets           | + | Goodwill        | = | Adams             | + | Brown             | + | Call              |
| Book Values                     | \$100,000        | + | \$ —0—          | = | \$(60,000)        | + | \$(40,000)        | + | \$ —0—            |
| Record Goodwill                 |                  |   | 20,000          |   | (12,000)          |   | (8,000)           |   | —0—               |
|                                 | <u>100,000</u>   | + | <u>20,000</u>   | = | <u>(72,000)</u>   | + | <u>(48,000)</u>   | + | <u>—0—</u>        |
| Transfer of Capital             |                  |   |                 |   | 21,600            |   | 14,400            |   | (36,000)          |
| Balance after Admission of Call | <u>\$100,000</u> | + | <u>\$20,000</u> | = | <u>\$(50,400)</u> | + | <u>\$(33,600)</u> | + | <u>\$(36,000)</u> |

\*In this chapter, ( ) means that an account has a credit balance or a credit posted to an account.

## ILLUSTRATION 15-5

## Schedule of Account Balances

| <i>Goodwill Method</i>                               | <i>Net Assets</i> |   | +          | <i>Goodwill</i> | =                 | <i>Capital</i> |                   |              |                   |
|--|-------------------|---|------------|-----------------|-------------------|----------------|-------------------|--------------|-------------------|
|  |                   |   |            |                 |                   | <i>Adams</i>   | +                 | <i>Brown</i> | +                 |
| Balances after recording goodwill and admitting Call | \$100,000         | + | \$ 20,000  | =               | \$(50,400)        | +              | \$(33,600)        | +            | \$(36,000)        |
| Impairment of goodwill                               |                   |   | (20,000)   |                 |                   |                |                   |              |                   |
| \$20,000 × .42                                       |                   |   |            |                 | 8,400             |                |                   |              |                   |
| 20,000 × .28   |                   |   |            |                 |                   |                | 5,600             |              |                   |
| 20,000 × .30   |                   |   |            |                 |                   |                |                   |              | 6,000             |
| Totals   | <u>\$100,000</u>  | + | <u>\$—</u> | =               | <u>\$(42,000)</u> | +              | <u>\$(28,000)</u> | +            | <u>\$(30,000)</u> |
| <i>Bonus Method</i>                                  |                   |   |            |                 |                   |                |                   |              |                   |
| Balances after recording admission of Call           | <u>\$100,000</u>  | + | <u>\$—</u> | =               | <u>\$(42,000)</u> | +              | <u>\$(28,000)</u> | +            | <u>\$(30,000)</u> |

**Comparison of Bonus and Goodwill Methods** In the illustration, Call is credited with a 30% interest in the firm under the bonus and the goodwill methods. To assist the partners in making a decision between the two methods, it may be helpful to demonstrate the effects of the two methods on their respective capital balances. If the firm were forced to liquidate, the goodwill would probably be of no value and, therefore, would represent a loss to the partnership.

The bonus and goodwill methods will yield the same result if two conditions related to the new profit and loss agreement are met. These are:

1. The new partner's profit-sharing percentage must be equal to his or her percentage interest in capital. In this illustration, Call received a capital interest of 30%. Her profit-sharing ratio must be 30%.
2. The old partner's profit-sharing ratio in the new partnership must be relatively the same as it was in the old partnership. Thus, if Call is to receive 30% of the profit in the new partnership, Adams and Brown must receive the remaining 70%. To be in the same relative ratio of 6:4, Adams must receive 42% ( $.6 \times .70$ ) of profits, and Brown must receive 28% ( $.4 \times .70$ ). The two methods are equivalent if, after recording goodwill impairment, the account balances are the same as they would be under the bonus method. The balances for each method are presented in Illustration 15-5.

The two methods will also yield the same results if the bonus method is used and the unrecorded assets (\$20,000) are ultimately realized and allocated to the partners in the ratio of 42:28:30.

## Acquisition of an Interest by Investing Assets

An individual may obtain a partnership interest in capital and future income by investing something of value to the firm. If assets are invested, the admission is recorded by debiting the assets invested and adjusting the net capital interest in the firm by a corresponding amount. It is important that the assets invested be fairly valued. Any gain or loss recognized on sales subsequent to recording the admission will be allocated on the basis of the new profit and loss formula.

Three situations can exist when an individual invests assets in a firm:

1. Book value of the capital interest acquired is equal to the fair value of the assets invested.
2. Book value of the capital interest acquired is less than the fair value of the assets invested.
3. Book value of the capital interest acquired is greater than the fair value of the assets invested.



The book value of the capital interest acquired is computed as follows:

$$\left( \begin{array}{l} \text{Capital balances of} \\ \text{existing partners} \end{array} + \begin{array}{l} \text{Investment of} \\ \text{new partner} \end{array} \right) \times \begin{array}{l} \text{Percentage} \\ \text{interest acquired} \\ \text{by new partner} \end{array} = \begin{array}{l} \text{Book value} \\ \text{of capital} \\ \text{interest acquired} \end{array}$$

To illustrate the three situations, assume that Adams and Brown have capital interests of \$40,000 and \$30,000, respectively. Assume further that, unless stated otherwise, the book values of the recorded assets and liabilities of the firm equal their fair values. Profits are shared in the ratio of 6:4. Call is to be admitted to the partnership, after which the profit ratio is to be 4:4:2. For simplicity, we will assume in all cases that Call invests cash.

**Case 1: Book Value Acquired Is Equal to Assets Invested** Assume that Adams, Brown, and Call agree that Call is to invest \$35,000 for a one-third capital interest in the partnership. The book value of Call's interest is equal to the assets invested and is computed as follows:

$$(\$70,000 + \$35,000) \times 1/3 = \$35,000$$

The entry to record the admission of Call is simply:

|               |        |        |
|---------------|--------|--------|
| Cash          | 35,000 |        |
| Call, Capital |        | 35,000 |

Adams' and Brown's capital accounts remain unchanged at \$70,000, which represents the remaining two-thirds interest in the firm. Call's capital account properly reflects a one-third interest of \$35,000. It should be noted that the ratio of the capital balance of 40:30:35 does not equal the agreed profit and loss ratio 4:4:2.

**Case 2: Book Value Acquired Is Less Than Assets Invested** Assume now that Call is to invest \$50,000 for a one-third capital interest in the firm. Book value of the interest acquired is:

$$(\$70,000 + \$50,000) \times 1/3 = \$40,000$$

In this case, the amount invested exceeds the book value interest acquired by \$10,000. There could be a number of explanations for Call's willingness to pay this \$10,000 excess. It could be that, as a result of a profitable and favorable outlook for the firm's operations, Adams and Brown are in a strong bargaining position.

The accounting problem is to record the admission of Call in accordance with the negotiated intentions of the parties involved. Obviously, if Call's capital account is credited with \$50,000, her interest would exceed one-third of the partnership's total capital. Either the bonus method or the goodwill method can be used to record the admission so that Call will end up with a one-third capital interest.

**Bonus Method** When the bonus method is used, the excess of the amount invested over the book value interest received is considered a bonus to the existing partners. In this example, Call invested \$10,000 more than the capital interest received. The \$10,000 bonus is allocated to the old partners on the basis of their profit and loss ratio, since this is an increase in partnership assets. The entry to admit Call is:

|                                   |        |        |
|-----------------------------------|--------|--------|
| Cash                              | 50,000 |        |
| Adams, Capital (.6 × \$ 10,000)   |        | 6,000  |
| Brown, Capital (.4 × \$ 10,000)   |        | 4,000  |
| Call, Capital ((1/3) × \$120,000) |        | 40,000 |

Adams and Brown now have capital balances of \$46,000 and \$34,000 for a total capital interest of \$80,000, which is a two-thirds interest in total capital of \$120,000. Call has the remaining one-third interest of \$40,000.

The assets of the partnership may have been revalued before the admission of a new partner was recorded. The bonus method is frequently used when the parties do not want to record an intangible asset. Notice in the entry to record the admission that the assets are

increased only by the amount invested. Any difference between the capital credit for Call and the cash invested is an adjustment to the capital accounts of Adams and Brown.

**Goodwill Method** Call may negotiate that she is to receive a capital credit equal to her investment. If Call is to receive a capital credit of \$50,000 for a one-third interest, the total capital interest implied by this contract is \$150,000. Adams and Brown must have the remaining two-thirds interest, or \$100,000. Since their current balances of \$70,000 represent their interest in the net assets, assets and capital appear to be understated by \$30,000.<sup>10</sup> Assuming that the specific assets and liabilities are fairly valued, this understatement is recognized as goodwill attributable to the old partners and is allocated to Adams and Brown on the basis of their current profit and loss ratios. The journal entry is:

|                                 |        |        |
|---------------------------------|--------|--------|
| Goodwill                        | 30,000 |        |
| Adams, Capital (.60 × \$30,000) |        | 18,000 |
| Brown, Capital (.40 × \$30,000) |        | 12,000 |

The entry to record the admission of Call is:

|               |        |        |
|---------------|--------|--------|
| Cash          | 50,000 |        |
| Call, Capital |        | 50,000 |

**Net Assets Undervalued** Had the net assets not been fairly valued as assumed here, the excess payment by Call could mean that specific assets of the firm are undervalued, or that partnership liabilities are overstated. If so, the specific assets (whether tangible or identifiable intangible assets) and liabilities of the partnership could be adjusted instead of creating a goodwill account. However, the specific accounts should not be adjusted in the absence of objective evidence that there are unrecorded changes in value.

**Case 3: Book Value Acquired Is Greater Than Assets Invested** Assume that Call is to invest \$20,000 for a one-third capital interest in the firm. Book value of the interest acquired is:

$$(\$70,000 + \$20,000) = \$90,000 \times (1/3) = \$30,000$$

In this case, the book value interest acquired exceeds the value of the assets invested by Call, which could imply that assets are overvalued ( $(1/3)$  (company value) = \$20,000; or, company value = \$60,000), or that for some reason, Adams and Brown are willing to grant Call a capital credit greater than the amount of assets she is investing. In some cases, for example, a partnership may be in need of operating capital and the partners may be willing to sacrifice their interest in existing assets to acquire the cash; or it could be that Call is bringing some particularly needed talent or reputation to the partnership.

In this case, as in Case 2, the admission could be recorded either by the bonus method or by the goodwill method. Under either method, Call will end up with a one-third interest in the net assets of the firm.

**Bonus Method** When the bonus method is used, assets are not increased above what the new partner is investing. If Call is to receive a \$30,000 capital credit on investment of \$20,000, then a bonus of \$10,000 is being granted to Call. This bonus is allocated to reduce Adams' and Brown's capital in their agreed profit and loss ratio. The following entry reflects the bonus to Call and a resulting one-third interest in the total capital of \$90,000:

|                                 |        |        |
|---------------------------------|--------|--------|
| Cash                            | 20,000 |        |
| Adams, Capital (.60 × \$10,000) |        | 6,000  |
| Brown, Capital (.40 × \$10,000) |        | 4,000  |
| Call, Capital                   |        | 30,000 |

Adams and Brown now have capital balances of \$34,000 and \$26,000, respectively, for a total of \$60,000, or a two-thirds interest.

<sup>10</sup> An alternate way to calculate goodwill is: Net value of firm implied by contract of \$150,000 minus \$120,000 (capital balances of Adams and Brown plus Call's investment) equals goodwill of \$30,000.

**Goodwill Method** If Adams and Brown are unwilling to reduce their capital accounts on the admission of Call, then an alternative to the bonus method is to compute and record the goodwill implicit in the agreement. Since Adams' and Brown's capital interests are to remain unchanged, the old partners' capital balances are used as the base to compute the value of the firm. If their interest represents a two-thirds interest in the net assets of the new partnership, then a three-thirds interest in the firm is \$105,000 (or \$70,000 ÷ 2/3), of which Call is to receive a capital credit of \$35,000 ((1/3) × \$105,000). The \$15,000 difference between the capital credit of \$35,000 and Call's investment of \$20,000 is goodwill. The entry to record the admission of Call is:

|               |        |        |
|---------------|--------|--------|
| Cash          | 20,000 |        |
| Goodwill      | 15,000 |        |
| Call, Capital |        | 35,000 |

The entry recognizes that the new partner is investing cash and is bringing an intangible asset to the partnership. The amount recorded is based on the value implied by the partners' agreement.

**Net Assets Overvalued** The payment of \$20,000 by Call for a larger capital interest may provide evidence that the recorded value of the firm's net assets does not reflect fair values and that the use of the bonus method or the creation of a goodwill account is an effort to avoid a reduction in net assets. The \$20,000 invested by Call for a one-third interest could be used to impute a value for the partnership's net assets after the admission of Call of only \$60,000.<sup>11</sup> The journal entries to revalue the assets and admit Call are as follows:

|   |        |        |
|---|--------|--------|
| Adams, Capital                          | 18,000 |        |
| Brown, Capital                          | 12,000 |        |
| Assets (\$70,000 + \$20,000 – \$60,000) |        | 30,000 |
| Cash                                    | 20,000 |        |
| Call, Capital                           |        | 20,000 |

Account balances that result from the admission of Call for the three alternatives discussed are given in Illustration 15-6. Subsequent events alone can indicate which method should have been used to record the admission. An examination of one of a number of events that could result will emphasize the importance of the initial asset valuation. Assume that the bonus method was used to record the admission of Call and that the assets were overvalued and subsequently sold at a loss of \$30,000. The agreed profit and loss ratio is 4:4:2. After this transaction, the partners' capital balances are as follows:

|                                 | <i>Adams</i>       | <i>Brown</i>       | <i>Call</i>        |
|---------------------------------|--------------------|--------------------|--------------------|
| Balance after admission of Call | \$ (34,000)        | \$ (26,000)        | \$ (30,000)        |
| Share of \$30,000 loss          | 12,000             | 12,000             | 6,000              |
|                                 | <u>\$ (22,000)</u> | <u>\$ (14,000)</u> | <u>\$ (24,000)</u> |

#### ILLUSTRATION 15-6

##### Schedule of Account Balances

| <i>Debit</i>   | <i>Bonus Method</i> | <i>Goodwill Method</i> | <i>Overvalued Net Assets</i> |
|----------------|---------------------|------------------------|------------------------------|
| Net Assets     | \$90,000            | \$105,000              | \$60,000                     |
| <i>Credits</i> |                     |                        |                              |
| Adams, Capital | \$34,000            | \$ 40,000              | \$22,000                     |
| Brown, Capital | 26,000              | 30,000                 | 18,000                       |
| Call, Capital  | 30,000              | 35,000                 | 20,000                       |
| Totals         | <u>\$90,000</u>     | <u>\$105,000</u>       | <u>\$60,000</u>              |

<sup>11</sup> The implied value of \$60,000 compared to the total recorded value of net assets of \$90,000 (\$40,000 + \$30,000 + \$20,000), including Call's investment, suggests that recorded assets are overvalued by \$30,000.

The selection of the bonus method as opposed to reducing overvalued assets results in a gain in Call's capital relative to Brown's. Additional comparisons of the three methods assuming various other subsequent events could be developed.

### TEST YOUR KNOWLEDGE 15.2

**NOTE:** Solutions to *Test Your Knowledge* questions are found at the end of each chapter before the end-of-chapter questions.

Richard, Dave, and Luke have been operating a magazine stand for several years. They share profits and losses equally, and each has a \$50,000 capital balance. They decided to admit a new partner, Craig. Craig is to receive a 25% interest in the partnership.

1. Determine the amount of cash that Craig must pay if the partners do not wish to recognize any goodwill or bonus.
2. Determine Craig's initial capital balance if he contributes \$60,000 cash and the bonus method is applied.
3. Determine Craig's initial capital balance if he contributes \$60,000 cash and the goodwill method is applied.

## 15.10 SECTION B: WITHDRAWAL OF A PARTNER

### IN THE NEWS

A buy/sell agreement can mandate that the exiting partner or

heirs, in the case of death, sell his or her interest to the remaining owners, who are legally bound to buy the interest according to an agreed-upon method of valuation. It can also designate which partner becomes the buyer and which the seller if it comes to that end.<sup>12</sup>

A partner cannot be prevented from withdrawing from a partnership by the other partners. Although some complex legal issues are involved, the partnership agreement may specify conditions for withdrawal and provisions for computing the settlement. If a settlement is not specifically provided for in the partnership agreement, Section 42 of the UPA states that "he or his legal representative . . . may have the value of this interest ascertained and shall receive as an ordinary creditor an amount equal to the value of this interest."

If a partner withdraws in violation of the partnership agreement and without approval of the remaining partners, he is entitled only to his interest in the firm without consideration of goodwill. In such a case, the withdrawing partner is liable for damages sustained by the remaining parties for his breach of the partnership agreement. A partner who is forced to withdraw from a partnership is entitled to compensation for his full interest including goodwill.

In the following examples, it is assumed that the partners mutually agree to the withdrawal such that: (1) the withdrawing partner may elect to sell his interest to an outside party; (2) the withdrawing partner may elect to sell his interest to one or more of the remaining partners; or (3) the partners may mutually agree to transfer partnership assets to the withdrawing partner for his interest in the firm. Case 1 has been discussed earlier and need not be reviewed again. The same considerations apply to Case 2, if negotiated outside the partnership. In Case 3 the partnership agreement may include requirements for determining the settlement price. In most cases the capital account does not reflect the current value of the partner's interest. To be equitable the fair values of the assets and liabilities need to be determined. It may be necessary to recognize unrecorded assets, correct the accounts for errors, or reflect changes in estimates such as the book value of depreciable assets. In the absence of a specific agreement, the partners may have to negotiate a settlement price at the date of withdrawal. Determination of an equitable value may be very difficult. The agreed settlement price may be equal to, greater than, or less than the book value interests of the withdrawing partner.

To illustrate the accounting for the withdrawal of a partner by transferring firm assets, assume a partnership consisting of three partners, Adams, Brown, and Call, with capital balances of \$30,000, \$40,000, \$30,000, and a profit and loss ratio of 5:3:2. Any agreed asset and liability revaluations have already been recorded.

### LO 8 Changes in partnership.

### IN THE NEWS

Bad things can happen if an outsider makes a bid for a piece of the

company—the lead partner's share, say, but not everyone else's. You don't want to be forced to work alongside an incompetent heir or a crook. **Solution:** The buy/sell agreement dictates that an outsider cannot buy a majority interest without offering to buy out everyone else on the same terms. Alternatively, it might provide that the remaining partners have a right of first refusal on any shares being sold.<sup>13</sup>

<sup>12</sup> *Forbes*, "Planning for Divorce," by Leigh Gallagher, 3/22/99, pp. 94–95.

<sup>13</sup> *Forbes*, "Planning for Divorce," by Leigh Gallagher, 3/22/99, pp. 94–95.

## Payment to a Retiring Partner

**Payment in Excess of Book Value to a Withdrawing Partner** Assume now that Adams is withdrawing from the partnership and the partners have mutually agreed that he is to receive payment of \$40,000. The partners may agree to use the bonus method or the goodwill method to record the withdrawal.

**Bonus Method** If the bonus method is used, the remaining partners are charged with the amount of the payment that exceeds the book value of the retiring partner's capital balance. The amount of the bonus paid to the retiring partner is commonly allocated to the remaining partners on the basis of their relative profit and loss ratio (in this case the relative ratio of Brown to Call is 3:2). Support for this method is based on the cost principle. The bonus method may also be justified when the remaining partners are simply anxious to get rid of a partner for various reasons. Any recognition of goodwill is difficult to justify in the absence of an arm's-length transaction. The entry to record the withdrawal would be as follows:

|                    |        |        |
|--------------------|--------|--------|
| Adams, Capital     | 30,000 |        |
| Brown, Capital     | 6,000  |        |
| Call, Capital      | 4,000  |        |
| Liability to Adams |        | 40,000 |

### RELATED CONCEPTS

The rationale for the bonus method is the historical cost principle and the absence of an arm's-length transaction. The rationale for the goodwill method is that formation of a new entity should be based on fair values.

**Goodwill Method** The goodwill method is used if (1) Brown and Call do not agree to a reduction in their capital balances; (2) the partners made specific provisions in the partnership agreement on how the withdrawal is to be recorded; or (3) the partners agree that an intangible asset should be recognized. If the partnership has been profitable, the firm as a whole may be worth more than the fair value of the net assets. Once again, the goodwill method is supported on the basis that a new entity is being formed and the accounts of the new entity should be based on fair values. One alternative is to calculate the implied goodwill from the price paid to the retiring partner. In our example, Adams receives a \$10,000 excess payment over his capital balance. Since Adams' capital account is increased by 50% of any increase in assets, then a \$10,000 excess payment implies a total goodwill of \$20,000. The entries are:

|                    |        |        |
|--------------------|--------|--------|
| Goodwill           | 20,000 |        |
| Adams, Capital     |        | 10,000 |
| Brown, Capital     |        | 6,000  |
| Call, Capital      |        | 4,000  |
| Adams, Capital     | 40,000 |        |
| Liability to Adams |        | 40,000 |

Some argue that, in accordance with the cost basis, only the goodwill of \$10,000 that has been purchased should be recorded (called the partial goodwill method) and the entry should be:

|                    |        |        |
|--------------------|--------|--------|
| Goodwill           | 10,000 |        |
| Adams, Capital     |        | 10,000 |
| Adams, Capital     | 40,000 |        |
| Liability to Adams |        | 40,000 |

Others would contend that the basis for recognizing goodwill should be "all or nothing at all."

It is probably difficult to justify recognition of any goodwill. If the goodwill is related to Adams, it will not exist if he withdraws. However, as discussed before, if the goodwill is based on past operations, the withdrawal may provide the objective evidence necessary to recognize it in the partnership accounts.

**Payment of Less Than Book Value to a Withdrawing Partner** A partner who is anxious to dispose of his or her interest in the partnership may agree to accept less than his or her book value interest in the partnership. The partner may do so for a number of reasons,

such as (1) he or she may view the future of the company negatively, (2) he or she may need operating capital for personal reasons, or (3) the business association may no longer be acceptable to the partner and, in his or her opinion, a forced liquidation of the firm might be detrimental to his or her interest. In such cases, use of the bonus method is justified, since the settlement may not be based on the economic value of the firm.

To illustrate, assume that Adams withdraws from the ABC Partnership and agrees to settle his \$30,000 interest for \$25,000. A bonus of \$5,000 accrues to the remaining partners. The common practice is to allocate the bonus on the basis of their relative profit and loss ratio of 3:2. The entry would be:

|                    |        |        |
|--------------------|--------|--------|
| Adams, Capital     | 30,000 |        |
| Brown, Capital     |        | 3,000  |
| Call, Capital      |        | 2,000  |
| Liability to Adams |        | 25,000 |

A payment to Adams that is less than his capital interest may be an indication that assets are overvalued. Assets should be written down to fair values if it is determined that they are overvalued and that the settlement price is based on the net assets' fair value. In particular, if goodwill was previously recorded, an agreement to accept a payment that is less than the partner's book value interest may provide evidence that the intangible is overstated. Accordingly, the intangible should be reduced by the difference between the settlement price and the capital interest being retired. Assuming that assets are overvalued by \$10,000, the sequence of entries becomes:

|                    |        |        |
|--------------------|--------|--------|
| Adams, Capital     | 5,000  |        |
| Brown, Capital     | 3,000  |        |
| Call, Capital      | 2,000  |        |
| Asset              |        | 10,000 |
| Adams, Capital     | 25,000 |        |
| Liability to Adams |        | 25,000 |

Reducing the assets to fair value provides an equitable starting point for the new partnership formed by Brown and Call. As long as Brown and Call share profits in the same relative ratio, they will be indifferent as to the method used. However, it is more informative and conceptually preferred for the recorded asset values to reflect fair values if such values can be determined.

## Death of a Partner

While historically under the UPA a partnership was dissolved by the death of a partner, recent changes now allow the partnership to continue operating by mandating a buyout of the deceased partner's interest.

Determining a partner's equity interest in the firm can result in disagreements between the surviving partners and the executor of the estate. To avoid litigation, the articles of partnership should contain procedures for determining a deceased partner's current equity in the partnership and the method of settlement. In the absence of specific provisions, the surviving partners and the executor of the estate must negotiate a settlement. To determine a partner's equity interest at the time of death, the assets and liabilities normally are adjusted to current values and the accounts are closed to determine the net income or loss earned since the end of the last fiscal period.

The partnership agreement may provide that the interest is to be settled by distributing partnership assets to the estate or the estate may receive payment by selling the interest to an outside party or to one or more of the surviving partners as individuals. Entries to record both types of settlements were presented in earlier sections of this chapter.


**SUMMARY**

- 1 *Describe the characteristics of a general partnership, a limited partnership, and a joint venture.* In a general partnership, the partners can bind the partnership into contracts, and the partnership interest is similar to a personal asset that can be sold. General partners are personally liable for the debts of the partnership, while a limited partner is only liable for the amount invested in the partnership. A joint venture occurs when two or more parties (agents) enter into an arrangement to pursue a specific purpose.
- 2 *List some important items to be included in the partnership agreement.* Important items to include in the partnership agreement are the name of the partnership, the identity of the partners, the effective date and the length of operations, the provision for allocating profits and losses, provisions for salaries and withdrawals, contracting authorities, procedures for admitting a new partner, and procedures for dissolution of the partnership.
- 3 *Understand the differences between partnerships' and corporations' equity accounts in the balance sheet.* In a corporation, amounts contributed by the owners (i.e., stockholders) are recorded in capital stock accounts. In addition, any income or loss earned by the corporation is reported in retained earnings. Dividends are considered a distribution of earnings and thus reduce retained earnings. In a partnership, amounts contributed by the owners (i.e., partners) are recorded in the partners' capital accounts. Any income or loss earned by the partnership is allocated to the partners' capital accounts. If a partner takes money out of the partnership, a drawing account is often used.
- 4 *Explain the purpose of the partners' drawing accounts and capital accounts.* In general, the partners' capital accounts are for permanent investments and should be updated periodically for withdrawals. Drawing accounts are often used in anticipation of earnings or to pay for personal expenses. Drawing accounts record withdrawals during the year and are closed to the partners' capital accounts at year-end.
- 5 *Prepare journal entries to form a partnership using the bonus and the goodwill methods.* A choice between the bonus and the goodwill methods for recording the formation of a partnership is needed if the amounts contributed by each partner do not agree with the amount of capital to be credited to each partner (for example, one partner contributes 40% of the assets but is to be given a 50% interest). For example, suppose that Bob and Ed enter into a partnership. Bob contributes \$40 cash and Ed contributes \$60. Yet each is to be given an equal interest. The journal entries under the bonus and goodwill methods are as follows:

| <i>Bonus Method</i>    |       |      |  |
|------------------------|-------|------|--|
| Cash                   | \$100 |      |  |
| Bob, Capital           |       | \$50 |  |
| Ed, Capital            |       | \$50 |  |
| <i>Goodwill Method</i> |       |      |  |
| Cash                   | \$100 |      |  |
| Intangible Asset       | \$ 20 |      |  |
| Bob, Capital           |       | \$60 |  |
| Ed, Capital            |       | \$60 |  |

Under the bonus method, the total amount contributed is allocated to all partners in accordance with their agreed-upon capital share (equally in this illustration, resulting in a transfer of \$10 from Ed to Bob). Under the goodwill method, Bob is assumed to be contributing an intangible asset to the firm. Since Ed contributed \$60 and Bob only \$40, an intangible asset of \$20 is recorded to increase Bob's capital to \$60.

- 6 *Describe some common agreements used to allocate partnership net income or loss.* Common agreements to allocate partnership net income or loss include using (1) fixed ratios, (2) a ratio based on the partners' capital balances, (3) an implicit interest rate based on the partners' capital accounts (such as 10% of the year-end capital balance), and (4) various amounts that represent salaries or bonuses. In addition, the agreement must specify how any excess or deficit after an original allocation is divided among the partners.
- 7 *Explain why salary allowances and interest allowances are used in allocating partnership profits and losses.* Interest allowances are often used as an incentive for capital to be invested and stay invested in the partnership. If a partner withdraws money from the partnership, that partner will receive a lower amount of interest and thus a smaller allocation of total profits. If the partner contributes more funds, that partner will receive a higher allocation. Similarly, a salary allowance is a common method to reward partners providing services to the partnership for their efforts.
- 8 *Describe the methods used to record partnership changes when a new partner is admitted or when a partner withdraws from the partnership.* When a new partner is admitted, the new partner can purchase the interest from an existing partner or contribute additional assets to the partnership. As when a partnership is formed, either the bonus or the goodwill method may be used if the amount contributed does not agree with the amount of capital to be credited to the new partner. Upon the withdrawal of a partner, the same procedures are applied. If the amount paid to the withdrawing partner is more or less than the partner's existing capital balance, either the bonus or the goodwill method can be used. In this case, the withdrawing partner's final capital balance must equal the amount paid.
- 9 *Describe the rationale behind the goodwill method in accounting for changes in partnership membership.* Under the goodwill method of accounting for changes in partnership membership, the capital interest assigned to the new or withdrawing partner implies a certain value for the firm. Since records are maintained on historical cost, differences in net asset values are likely. In addition, significant intangible assets may have been created by the partnership over time. The goodwill method assumes that the assigned capital interest provides a basis for total firm valuation.

## TEST YOUR KNOWLEDGE SOLUTIONS

15.1 1. d

- 15.2
1.  $(150,000 \div .75) = 200,000$  less existing capital of 150,000 = \$50,000 cash contribution.
  2.  $(150,000 + 60,000) = 210,000 \times 0.25 = \$52,500$  capital balance.
  3.  $(\$60,000 \div 0.25) = \$240,000$  total capital implied  $\times 0.25 = \$60,000$  capital balance.

## QUESTIONS

- LO 1** 1. Describe the tax treatment of partnership income.
- LO 4** 2. Distinguish between a partner's interest in capital and his interest in the partnership's income and losses. Also, make a general distinction between a partner's capital account and his drawing account.
- LO 1** 3. Explain why a partnership is viewed in accounting as a "separate economic entity."
- LO 6** 4. What are some of the methods commonly used in allocating income and losses to the partners?
- LO 7** 5. Explain the distinction between the terms "withdrawals" and "salaries."
- LO 5** 6. List some of the alternative methods of calculating a bonus that may appear in a partnership agreement.
- LO 8** 7. What is meant by dissolution and what are its causes?
- LO 8** 8. Discuss the methods used to record changes in partnership membership.
- LO 8** 9. Differentiate between the admission of a new partner through assignment of an interest and through investment in the partnership.
- LO 8** 10. Under what two conditions will the bonus and goodwill methods of recording the admission of a partner yield the same result?
- LO 8** 11. Describe the circumstances where neither the goodwill nor the bonus method should be used to record the admission of a new partner.
12. How might a partner withdrawing in violation of the partnership agreement and without the consent of the other partners be treated? What about a partner who is forced to withdraw? **LO 8**

**Business Ethics**

Many companies with defined benefit plans are curtailing or eliminating the plans altogether. With a defined benefit plan, the company guarantees some set amount (or formula-determined payment) when the employee retires. Because most pension assets are invested in the stock market, whether a pension plan is fully funded often depends on the strength of the stock market. Because of this volatility, companies often find themselves unexpectedly in a position where they must either increase funding or disclose significant underfunding. Because of this, many companies simply reduce or eliminate the plan. Consider the pension plan of Golden Years Company (GYC). Historically, GYC has been a great company to work for, with strong employee benefits. GYC's pension liability is approximately \$15 million. However, recently the company has been experiencing minor financial troubles in a decreasing stock market and, consequently, announced the termination of the pension plan in an effort to save costs. However, the pension plan was fully funded by \$9 million (the fair value of assets exceeded the expected liability).

1. How does the firm reconcile the trade-off between financial performance and the responsibility to its employees?

## EXERCISES

**EXERCISE 15-1 Partnership Formation: Bonus and Goodwill Methods LO 5**

John, Jeff, and Jane decided to engage in a real estate venture as a partnership. John invested \$100,000 cash and Jeff provided office equipment that is carried on his books at \$82,000. The partners agree that the equipment has a fair value of \$110,000. There is a \$30,000 note payable remaining on the equipment to be assumed by the partnership. Although Jane has no physical assets to invest in the partnership, both John and Jeff believe that her experience as a real estate appraiser is a valuable skill needed by the partnership and is a basis for granting her a capital interest in the partnership.

**Required:**

Assuming that each partner is to receive an equal capital interest in the partnership,

- A. Record the partnership formation under the bonus method.
- B. Record the partnership formation under the goodwill method, and assume a total goodwill of \$90,000.
- C. Discuss the appropriateness of using either the bonus or goodwill methods to record the formation of the partnership.



**EXERCISE 15-2 Partnership Transactions and Capital Statements LO5 LO6**

Tom and Julie formed a management consulting partnership on January 1, 2014. The fair value of the net assets invested by each partner follows:

|                     | <i>Tom</i> | <i>Julie</i> |
|---------------------|------------|--------------|
| Cash                | \$13,000   | \$12,000     |
| Accounts receivable | 8,000      | 6,000        |
| Office supplies     | 2,000      | 800          |
| Office equipment    | 30,000     | —            |
| Land                | —          | 30,000       |
| Accounts payable    | 2,000      | 5,000        |
| Mortgage payable    | —          | 18,800       |

During the year, Tom withdrew \$15,000 and Julie withdrew \$12,000 in anticipation of operating profits. Net profit for 2014 was \$50,000, which is to be allocated based on the original net capital investment.

**Required:**

- A. Prepare journal entries to:
  1. Record the initial investment in the partnership.
  2. Record the withdrawals.
  3. Close the Income Summary and Drawing accounts.
- B. Prepare a statement of changes in partners' capital for the year ended December 31, 2014.

**EXERCISE 15-3 Allocation of Income or Loss LO6**

Jones, Silva, and Thompson form a partnership and agree to allocate income equally after recognition of 10% interest on beginning capital balances and monthly salary allowances of \$2,000 to Jones and \$1,500 to Thompson. Capital balances on January 1 were as follows:

|          |          |
|----------|----------|
| Jones    | \$40,000 |
| Silva    | 25,000   |
| Thompson | 30,000   |

**Required:**

Calculate the net income (loss) allocation to each partner under each of the following independent situations.

1. Net income for the year is \$99,500.
2. Net income for the year is \$38,300.
3. Net loss for the year is \$15,100.

**EXERCISE 15-4 Allocation of Net Loss LO6**

Mary and Nancy invested \$80,000 each to form a partnership. Mary has been authorized a salary of \$20,000, while Nancy's salary is \$25,000. Each partner is to receive 10% on the original capital investment. The profit and loss agreement stipulates that any remaining income or loss is to be divided equally. The partnership had a net loss of \$20,000 this year.

**Required:**

Prepare the journal entry to record the allocation of the net loss for the year. Show supporting computations.

**EXERCISE 15-5 Bonus Agreement LO6**

On January 1, 2014, Tony and Jon formed T&J Personal Financial Planning with capital investments of \$480,000 and \$340,000, respectively. The partners wanted to draft a profit and loss agreement that would reward each individual for the resources invested in the partnership. Accordingly, the partnership agreement provides that profits are to be allocated as follows:

1. Annual salaries of \$42,000 and \$66,000 are granted to Tony and Jon, respectively.
2. In addition to the salary, Jon is entitled to a bonus of 10% of net income after salaries and bonus but before interest on capital investments is subtracted.
3. Each partner is to receive an interest credit of 8% on the original capital investment.
4. Remaining profits are to be allocated 40% to Tony and 60% to Jon.

On December 31, 2014, the partnership reported net income before salaries, interest, and bonus of \$188,000.

**Required:**

Calculate the 2014 allocation of partnership profit.

**EXERCISE 15-6 Profit Distribution and Capital Statements LO 6**

Hill, Jones, and Vose have been partners throughout 2014. Their average balances for the year and their balances at the end of the year before closing the nominal accounts are as follows:

| <i>Partner</i> | <i>Average<br/>Balances</i> | <i>Balances<br/>12/31/14</i> |
|----------------|-----------------------------|------------------------------|
| Hill           | \$97,500                    | \$70,000                     |
| Jones          | 27,300                      | 21,800                       |
| Vose           | 14,250                      | 11,700*                      |

\*Debit balance.

The income for 2014 is \$108,000 before charging partners' salary allowances and before payment of interest on average balances at the agreed rate of 5% per annum. Annual salary allocations are \$12,000 to Hill, \$9,600 to Jones, and \$8,800 to Vose. The balance of income is to be allocated at the rate of 60% to Hill, 10% to Jones, and 30% to Vose.

It is intended to distribute cash to the partners so that, after credits and allocations have been made as indicated in the preceding paragraph, the balances in the partners' accounts will be proportionate to their residual profit-sharing ratios. None of the partners is to invest additional cash, but they wish to distribute the lowest possible amount of cash.

**Required:**

Prepare a schedule of partners' accounts, showing balances at the end of 2014 before closing, the allocations of the net income for 2014, the cash distributed, and the closing balances.

(AICPA adapted)

**EXERCISE 15-7 Partner Admission LO 8**

Phil Phoenix and Tim Tucson are partners in an electrical repair business. Their respective capital balances are \$90,000 and \$50,000, and they share profits and losses equally. Because the partners are confronted with personal financial problems, they decided to admit a new partner to the partnership. After an extensive interviewing process they elect to admit Don Dallas into the partnership.

**Required:**

Prepare the journal entry to record the admission of Don Dallas into the partnership under each of the following conditions:

1. Don acquires one-fourth of Phil's capital interest by paying \$30,000 directly to him.
2. Don acquires one-fifth of each of Phil's and Tim's capital interests. Phil receives \$25,000 and Tim receives \$15,000 directly from Don.
3. Don acquires a one-fifth capital interest for a \$60,000 cash investment in the partnership. Total capital after the admission is to be \$200,000.
4. Don invests \$40,000 for a one-fifth interest in partnership capital. Implicit goodwill is to be recorded.

**EXERCISE 15-8 Adjusting Entries for Partner Admission LO 8**

Bill and Jane share profits and losses in a 70:30 ratio. Mike is to be admitted into a partnership upon the investment of \$14,000 for a one-third capital interest. Account balances for Bill and Jane on June 30, 2014 just before the admission of Mike are as follows:

|                       | <i>Debit</i> | <i>Credit</i> |
|-----------------------|--------------|---------------|
| Cash                  | \$ 6,000     |               |
| Accounts Receivable   | 9,000        |               |
| Notes Receivable      | 2,000        |               |
| Merchandise Inventory | 12,000       |               |
| Prepaid Insurance     | 500          |               |
| Accounts Payable      |              | \$ 9,500      |
| Bill, Capital         |              | 12,000        |
| Jane, Capital         |              | 8,000         |
|                       | \$29,500     | \$29,500      |



COMPREHENSIVE

It is agreed that for purposes of establishing the interests of the former partners, the following adjustments shall be made:

1. An allowance for doubtful accounts of 2% of the accounts receivable is to be established.
2. The merchandise inventory is to be valued at \$10,000.
3. Accrued expenses of \$600 are to be recognized.
4. Prepaid insurance is to be valued at \$300.
5. The goodwill method is to be used to record the admission of Mike.

**Required:**

Prepare the entries to adjust the account balances in establishing the interests of Bill and Jane and to record the investment by Mike.

**EXERCISE 15-9 Partner Admission LO 8**

Beth, Steph, and Linda have been operating a small gift shop for several years. After an extensive review of their past operating performance, the partners concluded that the business needed to expand in order to provide an adequate return to the partners. The following balance sheet is for the partnership prior to the admission of a new partner, Mary.

|                      |                  |
|----------------------|------------------|
| Cash                 | \$160,000        |
| Other Assets         | 640,000          |
|                      | <u>\$800,000</u> |
| Liabilities          | \$200,000        |
| Beth, Capital (40%)  | 265,000          |
| Steph, Capital (40%) | 215,000          |
| Linda, Capital (20%) | 120,000          |
|                      | <u>\$800,000</u> |

Figures shown parenthetically reflect agreed profit-and-loss sharing percentages.

**Required:**

Prepare the necessary journal entries to record the admission of Mary in each of the following independent situations. Some situations may be recorded in more than one way.

1. Mary is to invest sufficient cash to receive a one-sixth capital interest. The parties agree that the admission is to be recorded without recognizing goodwill or bonus.
2. Mary is to invest \$160,000 for a one-fifth capital interest.
3. Mary is to invest \$160,000 for a one-fourth capital interest.
4. Mary is to invest \$160,000 for a 40% capital interest.

**EXERCISE 15-10 Multiple Choice LO 6 LO 8**

Select the best answer for each of the following.

1. Jon and Joe formed a partnership on July 1, 2014, and invested the following assets:

|        | <i>Jon</i> | <i>Joe</i> |
|--------|------------|------------|
| Cash   | \$65,000   | \$125,000  |
| Realty |            | 250,000    |

The realty was subject to a mortgage of \$25,000, which was assumed by the partnership. The partnership agreement provides that Jon and Joe will share profits and losses in the ratio of one-third and two-thirds, respectively. Joe's capital account at July 1, 2014, should be

- (a) \$375,000
  - (b) \$366,667
  - (c) \$285,000
  - (d) \$350,000
2. On July 1, 2014, Mary and Jane formed a partnership, agreeing to share profits and losses in the ratio of 4:6, respectively. Mary invested a parcel of land that cost her \$40,000. Jane invested \$50,000 cash.

The land was sold for \$60,000 on July 1, 2014, four hours after formation of the partnership. How much should be recorded in Mary's capital account on formation of the partnership?

- (a) \$8,000  
 (b) \$24,000  
 (c) \$60,000  
 (d) \$20,000
3. The partnership agreement of Tami, Julie, and Kim provides for annual distribution of profit or loss in the following order:

Tami, the managing partner, receives a bonus of 15% of profit.

Each partner receives 10% interest on average capital investment.

Residual profit or loss is divided equally.

The average capital investments for 2014 were:

|       |           |
|-------|-----------|
| Tami  | \$100,000 |
| Julie | 200,000   |
| Kim   | 300,000   |

How much of the \$94,500 partnership profit for 2014 should be allocated to Tami?

- (a) \$10,000  
 (b) \$20,000  
 (c) \$30,950  
 (d) \$14,175
4. Tom and Jim are partners who share profits and losses in the ratio of 3:2, respectively. On August 31, 2014, their capital accounts were as follows:

|     |                  |
|-----|------------------|
| Tom | \$ 80,000        |
| Jim | 50,000           |
|     | <u>\$130,000</u> |

On that date they agreed to admit John as a partner with a one-third interest in the capital and profits and losses, for an investment of \$50,000. The new partnership will begin with a total capital of \$180,000. Immediately after John's admission, what are the capital balances of the partners?

|     | <i>Tom</i> | <i>Jim</i> | <i>John</i> |
|-----|------------|------------|-------------|
| (a) | \$60,000   | \$60,000   | \$60,000    |
| (b) | \$73,333   | \$46,667   | \$60,000    |
| (c) | \$74,000   | \$46,000   | \$60,000    |
| (d) | \$80,000   | \$50,000   | \$50,000    |

5. On June 30, 2014, the balance sheet for the partnership of Al, Carl, and Paul, together with their respective profit and loss ratios, were as follows:

|                     |                  |
|---------------------|------------------|
| Assets, at Cost     | <u>\$180,000</u> |
| Al, Loan            | \$ 9,000         |
| Al, Capital (20%)   | 42,000           |
| Carl, Capital (20%) | 39,000           |
| Paul, Capital (60%) | 90,000           |
| Total               | <u>\$180,000</u> |

Al has decided to retire from the partnership. By mutual agreement, the assets are to be adjusted to their fair value of \$220,000 at June 30, 2014. It was agreed that the partnership would pay Al \$61,200 cash for Al's partnership interest, including Al's loan, which is to be repaid in full. No goodwill is to be recorded. After Al's retirement, what is the balance of Carl's capital account?

- (a) \$36,450.  
 (b) \$39,000.  
 (c) \$46,450.  
 (d) \$47,000.

(AICPA adapted)

**EXERCISE 15-11 Multiple Choice LO 1 LO 2 LO 6**

Select the best answer for each of the following.

- Which of the following is *not* a characteristic of a partnership?
  - Limited life.
  - Mutual agency.
  - Limited liability.
  - Right to dispose of partnership interest.
- The articles of partnership need not include which of the following?
  - Location of the place of business.
  - Allocation of profit/loss.
  - Procedures for admitting a new partner.
  - Fiscal period of the partnership.
  - All of the above should be included.
- The High and Low partnership agreement provides special compensation to High for managing the business. High receives a bonus of 15% of partnership net income before salary and bonus, and also receives a salary of \$45,000. Any remaining profit or loss is to be allocated equally. During 2014, the partnership had net income of \$50,000 before the bonus and salary allowance. As a result of these distributions, Low's equity in the partnership would
  - Increase.
  - Not change.
  - Decrease the same as High's.
  - Decrease.
- The allocation of an error correction should be based on the profit and loss agreement in effect when
  - The error was made.
  - The error was corrected.
  - The error was discovered.
  - The allocation should always be made equally.
- If there is a provision for allocation of profits but not losses in the partnership agreement, courts have generally concluded that
  - Losses should not be allocated to the capital accounts, but matched against future earnings.
  - Losses should be allocated using the same approach as allocation of profits.
  - Losses should be allocated equally.
  - Losses should be allocated according to the ratio of balances in the capital accounts.
- Partners E and F share profits and losses equally after each has been credited in all circumstances with annual salary allowances of \$15,000 and \$12,000, respectively. Under this agreement, E will benefit by \$3,000 more than F in which of the following circumstances?
  - Only if the partnership has earnings of \$27,000 or more for the year.
  - Only if the partnership does not incur a loss for the year.
  - In all earnings or loss situations.
  - Only if the partnership has earnings of at least \$3,000 for the year.

**EXERCISE 15-12 Income Allocation with Bonus LO 6**

The partnership agreement of ABC Associates provides that income should be allocated in the following manner:

- Each partner receives interest of 20% of beginning capital.
- Sue receives a salary of \$25,000 and Josh receives a salary of \$21,000.
- Josh also receives a bonus of 10%.
- Residual—divided equally.

The partnership's net income for 2014 was \$90,000. Beginning capital balances were Sue, \$30,000; Josh, \$40,000.

**Required:**

Prepare a schedule to allocate the net income under each of the following independent situations:

- Bonus is to be based on income before any profit allocation to partners for interest and salary.

- B. Bonus is to be based on income after subtracting the bonus, but before allocation to partners for interest and salary.
- C. Bonus is to be based on income after subtracting the bonus, interest, and salary.

**EXERCISE 15-13 Partner Withdrawal LO 8**

Kazma, Folkert, and Tucker are partners with capital account balances of \$30,000, \$75,000, and \$45,000, respectively. Income and losses are divided in a 4:4:2 ratio. When Tucker decided to withdraw, the partnership revalued its assets from \$225,000 to \$252,000, which represented an increase in the value of inventory of \$8,000 and an increase in the value of land of \$19,000. Tucker was then given \$15,000 cash and a note for \$40,000 for his withdrawal from the partnership.

**Required:**

- A. Prepare the journal entry to record the revaluation of the partnership's assets.
- B. Prepare the journal entry to record the withdrawal using the following independent methods.
  1. Bonus.
  2. Partial goodwill.
  3. Full goodwill amount.

**ASC Exercises:** For all ASC exercises indicate as part of your answer: the Codification topic, subtopic, section, and/or paragraph upon which your answer is based (unless otherwise specified). All ASC questions require access to the FASB Codification.

- ASC15-1** **General** How does the presentation of personal balance sheets differ from balance sheets for entities (in general terms)? Where is this located in the Codification?
- ASC15-2** **Disclosure** List the relevant paragraph in the Codification that describes the minimum disclosure requirements for personal financial statements.
- ASC15-3** **Presentation** Where are estimated income taxes reported on the statement of financial condition for personal financial statements?

**PROBLEMS****PROBLEM 15-1 Profit Allocation LO 6**

Day and Night formed an accounting partnership in 2014. Capital transactions for Day and Night during 2014 are as follows:

| <i>Date</i>  | <i>Transaction</i> | <i>Amount</i> |
|--------------|--------------------|---------------|
| <b>Day</b>   |                    |               |
| 1/1          | Beginning balance  | \$75,000      |
| 4/1          | Withdrawal         | 18,750        |
| 6/1          | Investment         | 37,500        |
| 11/1         | Investment         | 18,750        |
| <b>Night</b> |                    |               |
| 1/1          | Beginning balance  | \$37,500      |
| 7/1          | Investment         | 18,750        |
| 10/1         | Withdrawal         | 9,375         |

Partnership net income for the year ended December 31, 2014; is \$68,400 before considering salaries or interest.

**Required:**

Determine the amount of profit that is to be allocated to Day and Night in accordance with each of the following independent profit-sharing agreements:

1. Day and Night failed to provide a profit-sharing arrangement in the articles of partnership and fail to compromise on an agreement.
2. Net income is to be allocated 60% to Day and 40% to Night.

3. Net income is to be allocated in the ratio of ending capital balances.
4. Net income is to be allocated in the ratio of average capital balances.
5. Interest of 15% is to be granted on average capital balances, salaries of \$15,000 and \$8,250 are to be allocated to Day and Night, respectively, and the remainder is to be divided equally.

**PROBLEM 15-2 Income Allocation and Capital Statements LO 6**

Dave, Brian, and Paul are partners in a retail appliance store. The partnership was formed January 1, 2014, with each partner investing \$45,000. They agreed that profits and losses are to be shared as follows:

1. Divided in the ratio of 40:30:30 if net income is not sufficient to cover salaries, bonus, and interest.
2. A net loss is to be allocated equally.
3. Net income is to be allocated as follows if net income is in excess of salaries, bonus, and interest.
  - (a) Monthly salary allowances are:

|       |         |
|-------|---------|
| Dave  | \$3,500 |
| Brian | 2,500   |
| Paul  | 1,500   |

- (b) Brian is to receive a bonus of 8% of net income before subtracting salaries and interest, but after subtracting the bonus.
- (c) Interest of 10% is allocated based on the beginning-of-year capital balances.
- (d) Any remainder is to be allocated equally.

Operating performance and other capital transactions were as follows.

| Year-End | <i>Net Income<br/>(Loss)</i> | <i>Capital Transactions</i> |                    |                   |                    |                   |                    |
|----------|------------------------------|-----------------------------|--------------------|-------------------|--------------------|-------------------|--------------------|
|          |                              | <i>Dave</i>                 |                    | <i>Brian</i>      |                    | <i>Paul</i>       |                    |
|          |                              | <i>Investment</i>           | <i>Withdrawals</i> | <i>Investment</i> | <i>Withdrawals</i> | <i>Investment</i> | <i>Withdrawals</i> |
| 12/31/14 | \$(5,400)                    | \$15,000                    | \$17,000           | \$15,000          | \$7,000            | \$6,000           | \$3,200            |
| 12/31/15 | 27,000                       | —0—                         | 17,000             | —0—               | 7,000              | 6,000             | 3,200              |
| 12/31/16 | 120,000                      | —0—                         | 19,000             | —0—               | 9,000              | 6,000             | 3,200              |

**Required:**

- A. Prepare a schedule of changes in partners' capital accounts for each of the three years.
- B. Prepare the journal entry to close the income summary account to the partners' capital accounts at the end of each year.

**PROBLEM 15-3 Conversion from Cash to Accrual Basis LO 8**

The partnership of Cain, Gallo, and Hamm engaged you to adjust its accounting records and convert them uniformly to the accrual basis in anticipation of admitting Kerns as a new partner. Some accounts are on the accrual basis and some are on the cash basis. The partnership's books were closed at December 31, 2014, by the bookkeeper, who prepared the general ledger trial balance that appears as follows:

**Cain, Gallo, and Hamm  
General Ledger Trial Balance  
December 31, 2014**

|   | <i>Debit</i> | <i>Credit</i> |
|---|--------------|---------------|
| Cash                                    | \$ 15,000    |               |
| Accounts Receivable                     | 40,000       |               |
| Inventory                               | 30,000       |               |
| Land                                    | 9,000        |               |
| Buildings                               | 50,000       |               |
| Allowance for Depreciation of Buildings |              | \$ 6,000      |
| Equipment                               | 56,000       |               |
| Allowance for Depreciation of Equipment |              | 6,000         |
| Goodwill                                | 5,000        |               |
| Accounts Payable                        |              | 56,000        |
| Allowance for Future Inventory Losses   |              | 8,000         |
| Cain, Capital                           |              | 37,000        |
| Gallo, Capital                          |              | 60,000        |
| Hamm, Capital                           |              | 32,000        |
| Totals                                  | \$205,000    | \$205,000     |

Your inquiries disclose the following:

1. The partnership was organized on January 1, 2013. No provision was made in the partnership agreement for the allocation of partnership profits and losses. During 2013, profits were allocated equally among the partners. The partnership agreement was amended, effective January 1, 2014, to provide for the following profit and loss ratio: Cain, 40%; Gallo, 40%; and Hamm, 20%. The amended partnership agreement also stated that the accounting records were to be maintained on the accrual basis and that any adjustments necessary for 2013 should be allocated according to the 2013 profit allocation agreement.
2. The following amounts were not recorded as prepayments or accruals.

|                          | <i>December 31</i> |             |
|--------------------------|--------------------|-------------|
|                          | <i>2014</i>        | <i>2013</i> |
| Prepaid insurance        | \$700              | \$ 800      |
| Advances from customers  | 900                | 1,500       |
| Accrued interest expense | —                  | 450         |

The advances from customers were recorded as sales in the year the cash was received.

3. In 2014, the partnership recorded a provision of \$8,000 for anticipated declines in inventory prices. You convinced the partners that the provision was unnecessary and should be removed from the books.
4. The partnership charged equipment purchased for \$4,400 on January 1, 2014, to expense. This equipment has an estimated life of 10 years and an estimated salvage value of \$400. The partnership depreciates its capitalized equipment using the declining balance method at twice the straight-line depreciation rate.
5. The partners agreed to establish an allowance for doubtful accounts at 2% of current accounts receivable and 5% of past-due accounts. At December 31, 2013, the partnership had \$54,000 of accounts receivable, of which only \$4,000 was past due. At December 31, 2014, 20% of accounts receivable was past due, of which \$4,000 represented sales made in 2013 and was considered collectible. The partnership had written off uncollectible accounts in the year the accounts became worthless as follows:

|               | <i>Accounts Written Off In</i> |             |
|---------------|--------------------------------|-------------|
|               | <i>2014</i>                    | <i>2013</i> |
| 2014 accounts | \$ 800                         | —           |
| 2013 accounts | 1,000                          | \$250       |

6. Goodwill was recorded on the books in 2014 and credited to the partners' capital accounts in the profit and loss ratio in recognition of an increase in the value of the business resulting from improved sales volume. The partners agreed to write off the goodwill before admitting the new partner.

**Required:**

Prepare a worksheet showing the adjustments and the adjusted trial balance for the partnership on the accrual basis at December 31, 2014. All adjustments affecting income should be made directly to partners' capital accounts. Support-computations should be in good form. (Do not prepare formal financial statements or formal journal entries.)

*(AICPA adapted)*

**PROBLEM 15-4 Partner Admission LO 8**

Brown and Coss have been operating a tax accounting service as a partnership for five years. Their current capital balances are \$92,000 and \$88,000, respectively, and they share profits in a 60:40 ratio. Because of the growth in their tax business, they decide that they need a new partner. Moore is admitted to the partnership, after which the partners agree to share profits 40% to Brown, 35% to Coss, and 25% to Moore.

**Required:**

Prepare the necessary journal entries to admit Moore in each of the following independent conditions. If the information is such that both the bonus and goodwill methods are appropriate, record the admission using both methods.

1. Moore invests \$90,000 in cash and receives a one-third capital interest.
2. Moore invests \$120,000 cash for a 45% capital interest. Total capital after his admission is to be \$300,000.
3. Moore agrees to invest \$120,000 cash for a one-third capital interest, but will not accept a capital credit for less than his investment.
4. Moore invests \$40,000 cash for a one-fourth capital interest. The partners agree that assets and the firm as a whole should not be revalued.
5. Moore invests \$35,000 cash for a one-fifth capital interest. The partners agree that total capital after the admission of Moore should be \$225,000.



6. Moore invests land in the partnership as a site for a new office building. The land, which originally cost Moore \$90,000, now has a current market value of \$150,000. Moore is admitted with a one-third capital interest.
7. Moore is admitted to the partnership by purchasing a 30% capital interest from each partner. A payment of \$35,000 is made outside the partnership and is split between Brown and Coss.

**PROBLEM 15-5** Adjusting Entries for Partner Admission **LO 8**

The CAB Partnership, although operating profitably, has had a cash flow problem. Unable to meet its current commitments, the firm borrowed \$34,000 from a bank giving a long-term note. During a recent meeting, the partners decided to obtain additional cash by admitting a new partner to the firm. They feel that the firm is an attractive investment, but that proper management of their liquid assets will be required. Meyers agrees to invest cash in the firm if her chief accountant can review the accounting records of the partnership.

The balance sheet for CAB Partnership as of December 31, 2014, is as follows:

| <i>Assets</i>                   |                  |
|---------------------------------|------------------|
| Cash                            | \$ 8,000         |
| Accounts Receivable             | 33,600           |
| Inventory (at cost)             | 35,750           |
| Land                            | 27,000           |
| Building (net of depreciation)  | 41,600           |
| Equipment (net of depreciation) | 27,250           |
| Total                           | <u>\$173,200</u> |
| <i>Liabilities and Capital</i>  |                  |
| Accounts Payable                | \$ 32,450        |
| Other Current Liabilities       | 6,750            |
| Long-Term Note (8% due 2008)    | 34,000           |
| Cox, Capital                    | 37,500           |
| Andrews, Capital                | 25,000           |
| Bennet, Capital                 | 37,500           |
| Total                           | <u>\$173,200</u> |

The review of the accounts resulted in the accumulation of the following information:

1. Approximately 5% of the accounts receivable are uncollectible. The old partnership had been using the direct write-off method of accounting for bad debts.
2. Current replacement cost of the inventory is \$41,250.
3. The market value of the land based on a current appraisal is \$65,000.
4. The partners had been using an unreasonably long estimated life in establishing a depreciation policy for the building. On the basis of sound value (current replacement cost adjusted for use), the value of the building is \$32,750.
5. There are unrecorded accrued liabilities of \$3,275.

The partners agree to recognize the foregoing adjustments to the accounts. Cox, Andrews, and Bennet share profits 40:30:30. After the admission of Meyers, the new profit agreement is to be 30:20:30:20. Meyers is to receive a 25% capital interest in the partnership after she invests sufficient cash to increase the total capital interest to \$150,000. Because of the uncertainty of the business, no goodwill is to be recognized before or after Meyers is admitted.

**Required:**

- A. Prepare the necessary journal entries on the books of the old partnership to adjust the accounts.
- B. Record the admission of Meyers.
- C. Prepare a new balance sheet giving effect to the foregoing requirements.

**PROBLEM 15-6 Adjusting Entries for Partner Withdrawal LO 8**

The December 31, 2014, balance sheet of the Datamation Partnership is shown below.

**Datamation Partnership  
Balance Sheet  
December 31, 2014**

| <i>Assets</i>                                     |           |
|---|-----------|
| Cash  | \$ 80,000 |
| Accounts Receivable                               | 80,000    |
| Inventory   | 62,000    |
| Equipment   | 290,000   |
| Total Assets                                      | \$512,000 |
| <i>Liabilities and Partners' Equity</i>           |           |
| Accounts Payable                                  | \$ 60,000 |
| Notes Payable to Dave, 8% dated September 1, 2014 | 22,000    |
| Dave, Capital                                     | 220,000   |
| Allen, Capital                                    | 110,000   |
| Matt, Capital                                     | 100,000   |
| Total Liabilities and Partners' Equity            | \$512,000 |

Dave, Allen, and Matt share profits and losses in the ratio of 50:30:20. The inventory on December 31 has a fair value of \$68,000; accrued interest on the note payable to Dave is to be recognized as of December 31. The book values of all the other accounts are equal to their fair values. Allen withdrew from the partnership on December 31, 2014.

**Required:**

Prepare the journal entry or entries to record the withdrawal of Allen, given each of the following situations. Assume that the *bonus* method is used to account for the withdrawal.

1. Allen receives \$36,624 cash and a \$75,000 note from the partnership for his interest.
2. Matt purchases Allen's interest for \$110,000.
3. The partnership gives Allen \$35,000 cash and equipment with a book value and a fair value of \$90,000 for his interest.
4. The partnership gives Allen \$100,000 cash for his interest.
5. Allen sells one-fourth of his interest to Dave for \$40,000 and three-fourths to Matt for \$90,000.

**PROBLEM 15-7 Partner Withdrawal and New Profit-Loss Ratio LO 6 LO 8**

Neal, Palmer, and Ruppe are partners in a real estate company. Their respective capital balances and profit-sharing ratios are as follows:

| <i>As of December 31, 2014</i> |                        |                             |
|--------------------------------|------------------------|-----------------------------|
| <i>Partners</i>                | <i>Capital Balance</i> | <i>Profit-Sharing Ratio</i> |
| Neal                           | \$250,000              | 4                           |
| Palmer                         | 150,000                | 3                           |
| Ruppe                          | 100,000                | 3                           |

Neal wishes to withdraw from the partnership on January 1, 2015, Palmer and Ruppe have agreed to pay Neal \$300,000 from the partnership assets for his 50% capital interest. This settlement price was based on such factors as capital investments, sales performance, and earning capacity.

Palmer and Ruppe must decide whether to use the bonus method or the goodwill method (recognize total goodwill implied by the payment) to record the withdrawal, and they wish to compare the results of using the two methods.

**Required:**

Prepare a comparison of capital balances using the bonus and goodwill methods (and writing off goodwill implied due to subsequent impairment), assuming that

1. The new profit and loss ratio is in the same relative ratio as that existing before Neal's withdrawal.
2. The profit and loss ratio is changed to 3:2. Palmer is particularly interested in these results, because he feels that his present contribution of time and capital is better reflected by this new profit and loss ratio.

**PROBLEM 15-8 Comprehensive Partnership Problem LO5 LO6 LO8**

COMPREHENSIVE

Brian Snow and Wendy Waite formed a partnership on July 1, 2013. Brian invested \$20,000 cash, inventory valued at \$15,000, and equipment valued at \$67,000. Wendy invested \$50,000 cash and land valued at \$120,000. The partnership assumed the \$40,000 mortgage on the land.

On June 30, 2014, the partnership reported a net loss of \$24,000. The partnership contract specified that income and losses were to be allocated by allowing 10% interest on the original capital investment, salaries of \$15,000 to Brian and \$20,000 to Wendy, and the remainder to be divided in the ratio of 40:60.

On July 1, 2014, Alan Young was admitted into the partnership with a \$70,000 cash investment. Alan was given a 30% interest in the partnership because of his special skills. The partners elect to use the bonus method to record the admission. Any bonus should be divided in the old ratio of 40:60.

On June 30, 2015, the partnership reported a net income of \$150,000. The new partnership contract stipulated that income and losses were to be divided in a fixed ratio of 20:50:30.

On July 2, 2015, Brian withdrew from the partnership for personal reasons. Brian was given \$40,000 cash and a \$60,000 note for his capital interest.

**Required:**

Prepare journal entries for each of the following events. Show computations.

1. Formation of the partnership.
2. Distribution of the net loss for the first year.
3. Admission of Alan into the partnership.
4. Distribution of the net income for the second year.
5. Withdrawal of Brian from the partnership.

**PROBLEM 15-9 Various Changes in Partnership Composition LO6 LO8**

The partnerships of Up & Down and Back & Forth started in business on July 1, 2011; each partnership owns one retail appliance store. It was agreed as of June 30, 2014, to combine the partnerships to form a new partnership to be known as Discount Partnership. Trial balances of the two original partnerships as of June 30, 2014 follow.

|                                 | <i>Up &amp; Down<br/>Trial Balance<br/>June 30, 2014</i> |                  | <i>Back &amp; Forth<br/>Trial Balance<br/>June 30, 2014</i> |                  |
|---------------------------------|--|------------------|---|------------------|
| Cash                            | \$ 25,000  |                  | \$ 20,000   |                  |
| Accounts Receivable             | 90,000   |                  | 140,000   |                  |
| Allowance for Doubtful Accounts |  | \$ 2,000         |   | \$ 6,000         |
| Merchandise Inventory           | 180,000  |                  | 115,000   |                  |
| Land                            | 25,000   |                  | 35,000  |                  |
| Buildings and Equipment         | 80,000   |                  | 125,000   |                  |
| Allowance for Depreciation      |  | 24,000           |   | 61,000           |
| Prepaid Expenses                | 6,000  |                  | 8,000   |                  |
| Accounts Payable                |  | 42,000           |   | 54,000           |
| Notes Payable                   |  | 65,000           |   | 74,000           |
| Accrued Expenses                |  | 34,000           |   | 44,000           |
| Up, Capital                     |  | 95,000           |   |                  |
| Down, Capital                   |  | 144,000          |   |                  |
| Back, Capital                   |  |                  |   | 65,000           |
| Forth, Capital                  |  |                  |   | 139,000          |
| Totals                          | <u>\$406,000</u>   | <u>\$406,000</u> | <u>\$443,000</u>  | <u>\$443,000</u> |

The following additional information is available.

1. The profit- and loss-sharing ratios for the former partnerships were 40% to Up and 60% to Down; 30% to Back and 70% to Forth. The profit- and loss-sharing ratio for the new partnership will be Up, 20%; Down, 30%; Back, 15%; and Forth, 35%.
2. The opening capital ratios for the new partnership are to be the same as the profit- and loss-sharing ratios for the new partnership. The capital assigned to Up & Down will total \$225,000. Any cash settlements among the partners arising from capital account adjustments will be a private matter and will not be recorded on the partnership books.

3. The partners agreed that the allowance for bad debts for the new partnership is to be 4% of the accounts receivable balances.
4. The opening inventory of the new partnership is to be valued by the FIFO method. The inventory of Up & Down was valued by the FIFO method and the Back & Forth inventory was valued by the LIFO method. The LIFO inventory represents 80% of its FIFO value.
5. Depreciation is to be computed by the double-declining balance method with a 10-year life for the depreciable assets. Depreciation for three years is to be accumulated in the opening balance of the Allowance for Depreciation account. Up & Down computed depreciation by the straight-line method, and Back & Forth used the double-declining balance method. All assets were obtained on July 1, 2011.
6. After the books were closed, an unrecorded merchandise purchase of \$4,000 by Back & Forth was discovered. The merchandise had been sold by June 30, 2014.
7. The accounts of Up & Down include a vacation pay accrual. It was agreed that Back & Forth should make a similar accrual for their 10 employees, who will receive a two-week vacation of \$200 per employee per week.

**Required:**

- A. Prepare a worksheet to determine the opening balances of a new partnership after giving effect to the information above. Formal journal entries are not required. Supporting computations, including the computation of goodwill, should be in good form.
- B. Prepare a schedule computing the cash to be exchanged between Up & Down and between Back & Forth, in settlement of the affairs of each original partnership.

*(AICPA adapted)*

## Chapter 15 – Review Questions

The review questions accompanying this course are designed to assist you in achieving the course learning objectives. The review section is not graded; do not submit it in place of your qualified assessment. While completing the review questions, it may be helpful to study any unfamiliar terms in the glossary in addition to course content. After completing the review questions, proceed to the review question answers and rationales.

97. All of the following are attributes of a partnership with the **EXCEPTION** of:
- There is a partnership agreement.
  - The partnership charter is filed with the state.
  - There is a profit motive.
  - Members are co-owners of the firm.
98. Which of the following is accurate regarding partnerships?
- Each partner has the right to dispose of his/her partnership interest without the consent of the other partners and the remaining partners must accept the new partner unconditionally.
  - Partnership agreements must specify the term of the partnership or it is assumed to be no more than 20 years.
  - The Uniform Partnership Act (UPA) is the federal law which governs partnerships.
  - The UPA stipulates that while a partner has the right to sell his/her partnership interest, the buyer partner does not have the right to manage the business without the acceptance of the other partners.
99. All of the following are benefits of a limited partnership with the **EXCEPTION** of:
- The general partner(s) are shielded from personal liability.
  - The limited partners are only liable for the amount invested.
  - The partners benefit from the flow-through nature of the partnership tax structure.
  - The general partners are able to manage the business without the interference from the limited partners.
100. Which statement is true regarding a joint venture?
- It must be formed as a corporation.
  - Major decisions within the joint venture require consent of the ownership group.
  - Joint venture partners are agents of the joint venture and one another.
  - The life of the joint venture is perpetual.

101. When determining the allocation of profits and losses, the method which is the **LEAST** complex and **LEAST** subject to misinterpretation is:
- A fixed amount per partner.
  - A ratio based on capital balances.
  - A fixed ratio.
  - Interest on capital investment.
102. Which of the following is accurate regarding the necessary accounting when a new partner joins the partnership?
- The assets and liabilities must be adjusted to their fair values with the resulting adjustments of the existing partner's capital accounts prior to admittance of the new partner.
  - Changes in fair value of assets and liabilities cannot be adjusted on the books of the partnership but there should be an agreement put into place documenting the fair values and stipulating that the new partner will not participate in the eventual realization of these increases.
  - Under the bonus method, the assets being contributed by the new partner are recorded and make up his initial capital account. If that value differs from the agreed upon amount of his starting capital balance, the balances of the other partners' capital accounts are adjusted to bring it to the agreed-upon amount.
  - Under the bonus method, the assets being contributed by the new partner are recorded and make up his initial capital account. If that value differs from the agreed upon amount of his starting capital balance, his capital account is adjusted as necessary with the offset being a receivable which is a priority payment from the partnership profits prior to allocation to the partners as a whole until the receivable is repaid.
103. When a partner withdraws from the partnership by mutual agreement of the partners and a settlement process is not specifically outlined in the partnership agreement:
- The partner will be paid out based on the value of his partnership account.
  - The partners may have to negotiate a settlement price at the withdrawal date.
  - The withdrawing partner must be paid out specific partnership assets as agreed-upon by the partners at the withdrawal date.
  - The partnership will have to undergo a full business valuation to determine the fair value as of the date of withdrawal.

## Chapter 16 – Partnership Liquidation

### Learning Objectives

After completing this section of the course, you will be able to:

- Specify the steps used to distribute available partnership assets in liquidation under the Uniform Partnership Act (UPA), noting the applicable rules and considerations within each step.
- Cite the order of priority for each class of creditors in a partnership liquidation under the UPA.
- Recall how to prepare a liquidation schedule to settle debts and allocate assets as well as a “safe payment approach” liquidation schedule.
- Identify the four steps used in the preparation of an advance plan for the distribution of cash in a partnership liquidation.
- Recall how to prepare the journal entries to incorporate a partnership.

## PARTNERSHIP LIQUIDATION

### CHAPTER CONTENTS

- 16.1 STEPS IN THE LIQUIDATION PROCESS
- 16.2 PRIORITIES OF PARTNERSHIP AND PERSONAL CREDITORS
- 16.3 SIMPLE LIQUIDATION ILLUSTRATED
- 16.4 INSTALLMENT LIQUIDATION
- 16.5 INCORPORATION OF A PARTNERSHIP

#### IN THE NEWS

In an article entitled “How to Achieve a Productive Partnership—Accounting Firms,” suggestions are provided on how to avoid or resolve problems in a partnership. One suggestion is to have clear agreements about the business relationship. For instance, focusing on the partnership’s goal is more practical than attempting to change someone’s personality. The key to managing personality differences is respect. Respect is shown by listening to partners and trying to understand them.<sup>1</sup>

In the preceding chapter, dissolution of a partnership in which the business affairs were continued without interruption was discussed. In this chapter, we will consider dissolutions in which the partnership is terminated. The phase of partnership operations that begins after dissolution and ends with the termination of partnership activities is referred to as “winding up the affairs.” During this period the partnership’s unfinished business is completed, some of the firm’s noncash assets may be converted into cash (realization), liabilities are settled to the extent possible, and any remaining assets are distributed to the partners in settlement of their residual interest. These events may occur over a relatively short period of time (for example, there may be a lump-sum sale of the assets, and the liabilities may be assumed by the purchaser or discharged with the cash received), or over a period of several years if the assets are sold individually as the business affairs are gradually terminated.

<sup>1</sup> *Journal of Accountancy*, “How to Achieve a Productive Partnership—Accounting Firms,” by David Coleman, May 1992.




 IN  
THE  
NEWS

“Long before your business partnership is dissolved, the handling

of the breakup or transfer of ownership should be planned. Astonishingly, 80% of new businesses fail to spell out the mechanism for a divorce. Why? The very idea introduces a seed of suspicion into an otherwise happy union.”<sup>2</sup>

In the first part of this chapter, we will assume that all noncash assets are converted into cash before any assets are distributed to creditors and partners; this procedure is referred to as a **simple liquidation**. In the second part of the chapter, we assume instead that noncash assets are sold in installments and cash is distributed to the various equity interests as it becomes available.

During the liquidation process, the accountant can provide service to the partners in a number of areas. He or she may assist in preparing financial statements and providing guidance to the partners to ensure that the liquidation proceeds in accordance with legal requirements and the partnership agreement. Much of the accounting for partnership liquidations depends on interpretation of the partnership agreement and the legal provisions governing partnership liquidation. The accountant needs to be familiar with pertinent statutory provisions, which may include the UPA and federal and state bankruptcy laws. In addition, for the protection of all parties concerned, it is advisable to seek legal counsel.

## 16.1 STEPS IN THE LIQUIDATION PROCESS

### LO 1 Steps in the liquidation process.

The first step in the liquidation process is to compute any net income or loss up to the date of dissolution. The closing process should be completed and, as part of it, any net income or loss should be allocated to the partners in accordance with their profit and loss agreement.

In the next step of the liquidation process, assets that are not acceptable for distribution in their present form are converted into cash. If the sales price of an asset is greater than (less than) the recorded book value, there is a gain (loss) from the sale. Procedurally, gains and losses on the realization of assets may be collected in one account and then closed to the capital accounts of the individual partners. The allocation of realization gains or losses should be based on the residual profit and loss ratio, unless specific provisions for such allocation are made in the partnership agreement.<sup>3</sup> The rationale for this procedure is that since the changes in asset values are the result of risk assumed by the partnership, the gain or loss should be shared in the agreed profit and loss ratio. In addition, it may be difficult to separate gains and losses that result from liquidation from the under- or overstatement of book values that results from accounting policies followed in prior years. For example, a gain on the sale of an item of equipment could reflect the fact that the firm had used a conservative depreciation policy and recorded excessive depreciation in prior years. Other adjustments could result from the failure to recognize changes in market values in the appropriate year. Furthermore, any agreement as to interest and salaries in the income allocation formula is ignored when allocating realization gains and losses. The use of the residual ratio is justified, since interest and salaries are income allocations for time and resources devoted to the normal operating activities of a going concern and are not directly associated with changes in fair values of assets.

The last step is to distribute the available assets to creditors and partners. Section 40(b) of the Uniform Partnership Act (UPA) provides that

The liabilities of the partnership shall rank in order of payment, as follows:

- (I) Liabilities to creditors other than partners,
- (II) Liabilities to partners other than for capital and profits (such as loans),
- (III) Liabilities to partners in respect of capital,
- (IV) Liabilities to partners in respect of profits.

According to this ranking, firm creditors are the first to be paid from partnership assets. In determining the rights of various creditors to payment, liabilities are classified as

<sup>2</sup> *Forbes*, “Planning for Divorce,” by Leigh Gallagher, 3/22/99, pp. 94–95.

<sup>3</sup> Section 18 of the UPA provides a list of rights and duties of partners, “subject to any agreement between them.” Section 18(a) provides that “each partner must contribute toward the losses, whether of capital or otherwise, sustained by the partnership according to his share in the profits.”



"If a farm family partnership is not salvageable, the best

procedure may be to negotiate a business 'divorce' as quickly as possible. Dissolution will require a mediator or attorney and, unfortunately, it won't be cheap. Competent lawyers and mediators cost money. Still the family members' desire to save on professional fees shouldn't lock them into a waltz toward inevitable financial and emotional ruin."<sup>5</sup>

those that are secured, partially secured, and unsecured, with some unsecured having priority. Bankruptcy laws dictate which of the partnership creditors are to be paid as cash becomes available. However, since this decision would have no impact on the total unpaid claims of the partnership, we will view the pool of creditors as if it were one unsecured obligation and will treat any cash payment as a reduction in total liabilities.

The UPA then provides for an order of payment that ranks partnership obligations to a partner ahead of asset distribution to a partner for capital investment. However, if a partner has a debit capital balance and has lent money to the partnership, it is legally permissible to offset the loan balance against the debit capital balance. The courts have recognized that this "right of offset" is necessary in order to avoid the potential inequity of distributing cash to a partner to satisfy an outstanding loan balance when the partner has either a debit capital balance, or potential for a debit capital balance. A debit capital balance is considered an asset of the partnership.<sup>4</sup> If the partner is unable to honor this obligation to the partnership by contributing additional assets, and for some reason cannot be forced to do so, the debit capital balance is allocated as a realization loss to the remaining partners in their relative profit and loss ratio. The residual claims of the remaining partners are reduced, as is the amount of cash they will receive.

Items III and IV are generally combined into one balance because of the practical problem of separating them. In other words, after several years of operation, a partner's capital investments, withdrawals, and income and loss elements may become combined into one balance and difficult to separate if the income summary account is closed to the capital accounts of each partner. In settling a partner's claim against the partnership, the partners may agree to the distribution of noncash assets. If so, the carrying value of the asset should be adjusted to fair value and the amount of the adjustment allocated to all the partners in accordance with the partnership agreement. The fair value of the distributed asset is then charged against the proper capital account.

## 16.2 PRIORITIES OF PARTNERSHIP AND PERSONAL CREDITORS

**LO 2** Order of priority for each class of creditors.

The UPA (Section 15) provides that partners are jointly liable for all contracts and other obligations of the partnership. This means that creditors of a partnership that are not paid in full from distribution of partnership assets must bring legal action against all the partners together to enforce their unsettled claims. Partners are jointly and severally liable for obligations that arise out of a tort and breach of trust committed by a partner while acting within the scope of the partnership business. **Joint and several** means that legal action may be brought against all the partners together or against any one or more of the partners in separate suits. A number of states have enacted legislation eliminating the distinction, and in those jurisdictions both contract and tort actions are joint and several. This latter approach, which permits suits against all (joint) or less than all (several) of the partners, is followed in this chapter. Conversely, personal creditors of an individual partner can seek recovery of payment from personal assets of the respective partner, and under certain conditions from partnership assets. Recognition of the rights of these two groups of creditors and the classification of assets into personal and partnership categories is referred to as **marshaling of assets**.

<sup>4</sup> Section 40(a) of the UPA defines the assets of a partnership as including not only the partnership property, but also the contributions of partners necessary for the payment of all liabilities specified in section 40(b). Section 40(b) specifies that amounts owing to creditors and to partners for loans, capital, and profits are liabilities of a partnership.

<sup>5</sup> *Successful Farming*, Iowa edition, "Can Their Problem Be Solved?" by Donald Jonovic, May/June 1997, p. 65, copyright Meredith Corporation.

The order of priority concerning the availability of assets for each class of creditors in states that have adopted the UPA is as follows:

**A. Partnership assets**

1. Partnership creditors.
2. Personal creditors that did not recover their claims in full from personal assets. Recovery from partnership assets is limited to the extent that the partner has a credit interest in the partnership assets.

**B. Personal assets**

1. Personal creditors.
2. Partnership creditors who were not satisfied from partnership assets. Such claims may be made against an individual partner regardless of whether the partner has a debit or credit equity interest in the partnership.
3. Claims of the partnership against the partner by nature of a deficit equity interest.

Because of the foregoing rules, the reader should recognize the importance of properly recording all partnership assets, liabilities, and capital interest of each partner.

To illustrate the marshaling of assets rules, assume that ABCD Partnership reports the following balance sheet after the sale of all noncash assets:

| <i>Debits</i>         |                  | <i>Credits</i>      |                  |
|-----------------------|------------------|---------------------|------------------|
| Cash                  | \$ 50,000        | Liabilities         | \$ 75,000        |
| Bill Baker, Capital   | 15,000           | Alice Amos, Capital | 15,000           |
| Carol Carter, Capital | 35,000           | Don Davis, Capital  | 10,000           |
| Total                 | <u>\$100,000</u> |                     | <u>\$100,000</u> |

The partners share profits and losses equally. The personal and partnership status of each partner is as follows:

| <i>Partner</i> | <i>Personal</i> |                    |  | <i>Partnership</i>               |
|----------------|-----------------|--------------------|--|----------------------------------|
|                | <i>Assets</i>   | <i>Liabilities</i> | <i>Assets Greater Than (Less Than) Liabilities</i> | <i>Capital Balance (Cr.) Dr.</i> |
| Alice Amos     | \$20,000        | \$50,000           | \$(30,000)   | \$(15,000)                       |
| Bill Baker     | 33,000          | 30,000             | 3,000  | 15,000                           |
| Carol Carter   | 90,000          | 40,000             | 50,000   | 35,000                           |
| Don Davis      | 40,000          | 10,000             | 30,000   | (10,000)                         |

The personal assets of each partner must be applied to the settlement of his or her personal liabilities before personal assets can be used to satisfy any partnership claims. Thus, the maximum amount that the partnership creditors and other partners could recover from the personal assets is \$83,000 (\$3,000 + \$50,000 + \$30,000). Because the personal liabilities of Amos exceed her personal assets, partnership claims cannot be enforced against her personal assets even though she has a credit interest in the partnership. However, her unsettled personal creditors in the amount of \$30,000 can look for full or partial settlement of their claims from final distribution of partnership assets in settlement of her capital interest. At this time, the partnership has a claim of \$15,000 and \$35,000 against Baker and Carter, respectively. Baker, however, will have only \$3,000 left for investment in the partnership to reduce his capital deficit. Carter has sufficient personal assets to satisfy her personal liabilities and invest in the partnership to cover her share of partnership losses. Davis is personally solvent and has a credit capital interest in the partnership.

Marshaling of Assets

ILLUSTRATION 16-1

|                                   | Schedule of Partnership Liquidation |             |                           |              |               |              |
|-----------------------------------|-------------------------------------|-------------|---------------------------|--------------|---------------|--------------|
|                                   | Cash                                | Liabilities | Capital and Loan Balances |              |               |              |
|                                   |                                     |             | Amos<br>1/4               | Baker<br>1/4 | Carter<br>1/4 | Davis<br>1/4 |
| Balance before cash distributions | 50,000                              | (75,000)*   | (15,000)                  | 15,000       | 35,000        | (10,000)     |
| Investment by Baker               | 3,000                               |             |                           | (3,000)      |               |              |
|                                   | 53,000                              | (75,000)    | (15,000)                  | 12,000       | 35,000        | (10,000)     |
| Allocation of Baker's deficit     |                                     |             | 4,000                     | (12,000)     | 4,000         | 4,000        |
|                                   | 53,000                              | (75,000)    | (11,000)                  | —0—          | 39,000        | (6,000)      |
| Payment to creditors              | (53,000)                            | 53,000      |                           |              |               |              |
|                                   | —0—                                 | (22,000)    | (11,000)                  | —0—          | 39,000        | (6,000)      |
| Investment by Carter              | 39,000                              |             |                           |              | (39,000)      |              |
|                                   | 39,000                              | (22,000)    | (11,000)                  | —0—          | —0—           | (6,000)      |
| Payment to creditors              | (22,000)                            | 22,000      |                           |              |               |              |
|                                   | 17,000                              | —0—         | (11,000)                  | —0—          | —0—           | (6,000)      |
| Payment to partners               | (17,000)                            |             | 11,000                    |              |               | 6,000        |
|                                   | —0—                                 | —0—         | —0—                       | —0—          | —0—           | —0—          |

\* In this chapter, () means that an account has a credit balance or a credit posted to an account.

The liquidation of the partnership is summarized in Illustration 16-1. Although formal journal entries are not shown, they would be recorded in a journal in accordance with the tabular arrangement summarized in the liquidation schedule. The steps in the liquidation process may proceed in any order as long as the rights of the partners, partnership creditors, and personal creditors are recognized. In this example, the following sequence of events occurs.

1. Baker invests \$3,000 in the partnership and his remaining deficit of \$12,000 is a liquidation loss that is allocated to the remaining partners in their relative profit and loss ratio, one-third each. (Note that because Carter has sufficient assets to cover her share of additional losses, \$4,000 loss is allocated to her, even though she currently has a deficit capital balance.)
2. Cash of \$53,000 is distributed to the creditors.
3. The partnership creditors obtain judgment against Carter. (The creditors could have proceeded to recover their claims from any solvent partner individually, including Davis, who has a credit capital interest, or from the partners jointly.) Since Carter has a personal net asset position of \$50,000, she will invest an additional \$39,000 in the partnership, \$22,000 of which will go to partnership creditors and \$17,000 to the other partners.
4. The cash is distributed first to liquidate partnership liabilities and then to satisfy partner's capital interests.

**Observe that the cash distribution to partners is based on their capital balances, not their profit and loss ratio.** The unpaid personal creditors of Amos have a claim against her \$11,000 partnership distribution.

If, in the illustration above, Carter was able to invest only \$20,000 from her personal assets and Davis as well as Amos are personally insolvent, then the creditors and partners Amos and Davis would have unrecoverable losses of \$19,000 as shown next.

|                        | Cash     | Liabilities | Amos     | Baker | Carter   | Davis   |
|------------------------|----------|-------------|----------|-------|----------|---------|
| From Illustration 16-1 | —0—      | (22,000)    | (11,000) | —0—   | 39,000   | (6,000) |
| Investment by Carter   | 20,000   |             |          |       | (20,000) |         |
| Payment to creditors   | (20,000) | 20,000      |          |       |          |         |
|                        | —0—      | (2,000)     | (11,000) | —0—   | 19,000   | (6,000) |



3. The right of offset is exercised where a partner with an outstanding loan has a debit capital balance.
4. In transactions (4) and (5), the principles concerning the marshaling of assets are applied to determine if additional investments can be expected. In this case, Carter with a deficit capital interest is also personally insolvent. Thus, her deficit is allocated to the other partners on the basis of their relative loss-sharing ratio: to Amos, to Baker.
5. Baker invests \$10,500 in the partnership to eliminate his deficit after his personal assets were applied to the settlement of his personal liabilities.
6. Cash is distributed to Amos to satisfy her capital claim against the partnership assets.

**TEST YOUR KNOWLEDGE**  **16.1**

**NOTE:** Solutions to *Test Your Knowledge* questions are found at the end of each chapter before the end-of-chapter questions.

The trial balance for the ABC Partnership before bankruptcy is as follows:

|                  |                       |                    |
|------------------|-----------------------|--------------------|
| <i>Cash</i>      | <i>Noncash Assets</i> | <i>Liabilities</i> |
| \$20,000         | \$200,000             | \$30,000           |
|                  |                       |                    |
| <i>A Capital</i> | <i>B Capital</i>      | <i>C Capital</i>   |
| \$100,000        | \$60,000              | \$30,000           |

The partners share profits and losses in the ratio 40:40:20.

1. If the noncash assets are sold for \$100,000 cash, determine the amount of cash, if any, that partner A will receive upon liquidation.
2. If the noncash assets are sold for \$50,000 cash and assuming that partners with a deficit balance cannot contribute additional assets, determine the amount of cash, if any, that partner A will receive upon liquidation.

## 16.4 INSTALLMENT LIQUIDATION

Instead of the immediate conversion of noncash partnership assets to cash under a simple liquidation, it is sometimes advantageous for a partnership to extend the conversion over several months. For example, in certain types of businesses, such as land development, more cash may be generated if a company completes construction projects it has started. In other situations, the partnership may receive a greater cash price for the noncash assets if they are not sold at a forced liquidation. If the liquidation extends over a period of time, the partners will probably prefer that cash be distributed as it becomes available. If partners are to receive cash in installments before the total liquidation losses and the total cash available are known, safeguards must be taken to protect the interests of the creditors and the respective interest of each partner. In addition, the individual in charge of the liquidation must use safeguards to avoid potential liability for wrongful distributions. The remainder of this chapter focuses on the problems associated with a liquidation in installments and the general rules governing such liquidations. Once again, many of the procedures followed are necessary to satisfy legal requirements and to protect the person in charge of the liquidation and the residual partners' interests.

### Safe Payment Approach

In computing how cash is to be distributed to the partners before all assets are disposed of, care must be taken to ensure that the partners' remaining capital balances will be adequate to absorb any potential loss. However, at this point, the amount of cash to be generated from the sale of noncash assets and the resulting gain or loss is not known. Therefore, the partners should view each cash distribution as if it were the final distribution.

One approach used to calculate a safe cash distribution is based on three assumptions:

1. A loan to or from an individual partner will be combined with the respective partner's capital account to determine his or her net interest in the partnership assets.

2. The remaining noncash assets will not provide any additional cash. In other words, the maximum potential loss is equal to the book value of noncash assets. (This assumption will be modified later in the chapter.)
3. A partner with a debit balance in his or her capital account will be unable to pay amounts owed to the partnership (that is, each partner is personally insolvent).

**LO 4** Safe payment approach.

The result of applying these assumptions is that cash will not be distributed to a partner whose capital account balance (including loan balance and drawing account) is insufficient to absorb his or her share of potential losses either from the write-off of assets or from the failure of a deficit partner to cover a debit capital balance. Of course, no partner should receive cash until the liabilities have been liquidated or provided for through the retention of adequate cash.

**Computation of Safe Payment before Each Distribution** To illustrate the safe payment approach when a partnership is liquidated in installments, assume that the following condensed balance sheet was prepared before the partners' agreement to liquidate the partnership.

|                |                  |                             |                  |
|----------------|------------------|-----------------------------|------------------|
| Cash           | \$ 10,000        | Liabilities                 | \$ 28,000        |
| Noncash Assets | 100,000          | Alice Amos, Capital (30%)   | 34,000           |
|                |                  | Bill Baker, Capital (50%)   | 30,000           |
|                |                  | Carol Carter, Capital (20%) | 18,000           |
| Total          | <u>\$110,000</u> | Total                       | <u>\$110,000</u> |

The partners' income- and loss-sharing percentages are stated in parentheses. The noncash assets were converted into cash over a period of time as follows:

|            | <i>Sales Price</i> | <i>Book Value</i> | <i>(Loss)</i> |
|------------|--------------------|-------------------|---------------|
| Sale No. 1 | \$20,000           | \$30,000          | (10,000)      |
| Sale No. 2 | 15,000             | 25,000            | (10,000)      |
| Sale No. 3 | 10,000             | 30,000            | (20,000)      |
| Sale No. 4 | 2,000              | 10,000            | (8,000)       |
| Sale No. 5 | —0—                | 5,000             | (5,000)       |

The realization of the partnership assets and liquidation of the partnership are summarized in Illustration 16-3. A safe payment schedule is prepared *each time cash is to be distributed*. After the first sale of assets and all creditors have been paid, \$2,000 cash remains to be distributed to partners. Schedule I in Illustration 16-3 demonstrates how the \$2,000 will be distributed. In this case, the assumption that the remaining noncash assets of \$70,000 are worthless results in a debit balance in Baker's capital account. Another assumption is that all partners are personally insolvent. Therefore, the hypothetical deficit is allocated to the remaining partners with credit balances on the basis of their relative profit and loss ratio: 3/5 to Amos, 2/5 to Carter. This allocation results in a hypothetical debit balance in Carter's capital account, which is assigned to Amos. Thus, if \$2,000 is paid to Amos, this will leave her with a capital balance sufficient to absorb her share of the potential remaining losses. Amos will not be required to make an additional investment in the partnership unless significant amounts of unrecorded liabilities are discovered or significant amounts of liquidation expenses are incurred. But if it became necessary for Amos to make an additional investment, the other two partners would also be required to do so.

After the second sale of assets, \$15,000 cash is available for distribution. The allocation of the \$15,000 is shown in schedule II of Illustration 16-3. Note that, if the fair value of the remaining assets is zero, Baker's capital balance of \$20,000 would be inadequate to absorb his share of the losses, which would be \$22,500 ( $\$45,000 \times .50$ ). Accordingly, at this time, Baker does not receive any of the cash to be distributed, since he could end up with a debit capital balance. After the third cash distribution, the partners'/capital balances are in their profit and loss ratio of 3:5:2. Once their capital interests are in accordance with the profit and loss ratio, any subsequent distribution of assets

will be based on the profit and loss ratio. Note that each partner's capital account is now sufficient to absorb the final potential loss of \$5,000.

A safe payment schedule is prepared to compute the amount of cash to be distributed and to determine which partner(s) will receive cash. The series of computations is not recorded in the accounts, since they are based upon certain assumed events that have not yet occurred. Only the actual transactions as they occur, such as the sale of assets and distribution of cash, are recorded in the accounts.

**Additional Losses, Discovery of Liabilities, and Liquidation Expense** Up to this point in this chapter, all available cash was distributed to (1) the partnership's creditors who were recorded on the partnership books or (2) the partners. In the calculation of a safe payment, it was assumed that the potential loss was equal to the book value of the remaining noncash assets. In addition, no liquidation expenses were incurred. As the liquidation proceeds, some liabilities that had not been recorded previously may be reported. These creditors have claims that must be satisfied from the available cash before payments are made to partners for their capital interest.

Certain expenses, such as the reasonable cost of carrying out the liquidation, have priority over payments to creditors. Furthermore, the disposal cost of assets may exceed the proceeds from the sale of the assets so that the resulting loss is greater than the assets' recorded book value. Such items can be considered in the safe payment schedule by adding the estimated liquidation expenses, disposal cost, and unrecorded liabilities to the book value of noncash assets. To illustrate, assume the facts presented in Illustration 16-3 except that it is estimated that added expenses of \$1,000 will be incurred in completing the liquidation. The safe payment calculation for the first cash distribution would be modified as follows:

|   | <i>Amos</i>    | <i>Baker</i>    | <i>Carter</i>  |
|---|----------------|-----------------|----------------|
| Capital and loan balances                           | (31,000)       | (25,000)        | (16,000)       |
| Allocation of potential losses (\$70,000 + \$1,000) | <u>21,300</u>  | <u>35,500</u>   | <u>14,200</u>  |
| Balances  | (9,700)        | 10,500          | (1,800)        |
| Allocation of Baker's potential deficit             | <u>6,300</u>   | <u>(10,500)</u> | <u>4,200</u>   |
| Balances  | (3,400)        | —0—             | 2,400          |
| Allocation of Carter's potential deficit            | <u>2,400</u>   | —               | <u>(2,400)</u> |
| Safe payment  | <u>(1,000)</u> | <u>—0—</u>      | <u>—0—</u>     |

As can be seen, the effect of the adjustment is to hold back cash equal to the estimated expenses, which results in a corresponding reduction in the cash distributed to Amos.

## Advance Plan for the Distribution of Cash

### Lo 5 Four steps in an advance plan.

In the preceding illustration, a safe payment to each partner was calculated before each cash distribution. This process was necessary until the capital accounts were in the profit-and-loss-sharing ratio. Although this method is feasible, it is more informative and efficient to prepare an advance schedule that specifies the order in which each partner will participate and the amount of cash each partner will receive as it becomes available for distribution. For example, from such a schedule, the personal creditors of an insolvent partner would be able to compute how much cash would have to be generated from the sale of the partnership assets before any cash is distributed to the insolvent partner.

To illustrate the procedures for the preparation of an advance cash distribution plan, assume the set of facts employed in Illustration 16-3. The objective of the procedure is to derive the order and the amount of cash that should be distributed to each partner such that no partner receiving a cash distribution will have to make an additional investment in the firm. Such a distribution plan will bring the balances of the partners' capital accounts into their profit and loss ratio as soon as possible. The rationale for this procedure is that once the capital balances are in the profit and loss ratio, no one partner is in any better position than any other partner to absorb losses.



**ILLUSTRATION 16-3****Schedule of Partnership Realization and Liquidation****Installment Liquidation**

|                                   | <i>Capital and Loan Balances</i> |                     |                    |                 |                 |                  |
|-----------------------------------|----------------------------------|---------------------|--------------------|-----------------|-----------------|------------------|
|                                   | <i>Cash</i>                      | <i>Other Assets</i> | <i>Liabilities</i> | <i>Amos .3</i>  | <i>Baker .5</i> | <i>Carter .2</i> |
| Balance before realization        | 10,000                           | 100,000             | (28,000)           | (34,000)        | (30,000)        | (18,000)         |
| Sale of assets                    | 20,000                           | (30,000)            |                    | 3,000           | 5,000           | 2,000            |
|                                   | <u>30,000</u>                    | <u>70,000</u>       | <u>(28,000)</u>    | <u>(31,000)</u> | <u>(25,000)</u> | <u>(16,000)</u>  |
| Payment to creditors              | (28,000)                         |                     | 28,000             |                 |                 |                  |
|                                   | <u>2,000</u>                     | <u>70,000</u>       | <u>—0—</u>         | <u>(31,000)</u> | <u>(25,000)</u> | <u>(16,000)</u>  |
| Payment to partners               |                                  |                     |                    |                 |                 |                  |
| Safe payment Schedule I (below)   | (2,000)                          |                     |                    | 2,000           |                 |                  |
|                                   | <u>—0—</u>                       | <u>70,000</u>       | <u>—0—</u>         | <u>(29,000)</u> | <u>(25,000)</u> | <u>(16,000)</u>  |
| Sale of assets                    | 15,000                           | (25,000)            |                    | 3,000           | 5,000           | 2,000            |
|                                   | <u>15,000</u>                    | <u>45,000</u>       | <u>—0—</u>         | <u>(26,000)</u> | <u>(20,000)</u> | <u>(14,000)</u>  |
| Payment to partners               |                                  |                     |                    |                 |                 |                  |
| Safe payment Schedule II (below)  | (15,000)                         |                     |                    | 11,000          |                 | 4,000            |
|                                   | <u>—0—</u>                       | <u>45,000</u>       | <u>—0—</u>         | <u>(15,000)</u> | <u>(20,000)</u> | <u>(10,000)</u>  |
| Sale of assets                    | 10,000                           | (30,000)            |                    | 6,000           | 10,000          | 4,000            |
|                                   | <u>10,000</u>                    | <u>15,000</u>       | <u>—0—</u>         | <u>(9,000)</u>  | <u>(10,000)</u> | <u>(6,000)</u>   |
| Payment to partners               |                                  |                     |                    |                 |                 |                  |
| Safe payment Schedule III (below) | (10,000)                         |                     |                    | 4,500           | 2,500           | 3,000            |
|                                   | <u>—0—</u>                       | <u>15,000</u>       | <u>—0—</u>         | <u>(4,500)</u>  | <u>(7,500)</u>  | <u>(3,000)</u>   |
| Sale of assets                    | 2,000                            | (10,000)            |                    | 2,400           | 4,000           | 1,600            |
|                                   | <u>2,000</u>                     | <u>5,000</u>        | <u>—0—</u>         | <u>(2,100)</u>  | <u>(3,500)</u>  | <u>(1,400)</u>   |
| Payment to partners               | (2,000)                          |                     |                    | 600             | 1,000           | 400              |
|                                   | <u>—0—</u>                       | <u>5,000</u>        | <u>—0—</u>         | <u>(1,500)</u>  | <u>(2,500)</u>  | <u>(1,000)</u>   |
| Write-off of assets               |                                  | (5,000)             |                    | 1,500           | 2,500           | 1,000            |
|                                   | <u>—0—</u>                       | <u>—0—</u>          | <u>—0—</u>         | <u>—0—</u>      | <u>—0—</u>      | <u>—0—</u>       |

**Schedule I****Computation of Safe Payments**

|  | <i>Amos .3</i>  | <i>Baker .5</i> | <i>Carter .2</i> |
|--|-----------------|-----------------|------------------|
| Capital and loan balances                | (31,000)        | (25,000)        | (16,000)         |
| Allocation of potential loss—\$70,000    | 21,000          | 35,000          | 14,000           |
|  | <u>(10,000)</u> | <u>10,000</u>   | <u>(2,000)</u>   |
| Allocation of Baker's potential deficit  | 6,000           | (10,000)        | 4,000            |
|  | <u>(4,000)</u>  | <u>—0—</u>      | <u>2,000</u>     |
| Allocation of Carter's potential deficit | 2,000           |                 | (2,000)          |
| Safe payment                             | <u>(2,000)</u>  | <u>—0—</u>      | <u>—0—</u>       |

**Schedule II****Computation of Safe Payments**

|   | <i>Amos .3</i>  | <i>Baker .5</i> | <i>Carter .2</i> |
|---|-----------------|-----------------|------------------|
| Capital and loan balances               | (26,000)        | (20,000)        | (14,000)         |
| Allocation of potential loss—\$45,000   | 13,500          | 22,500          | 9,000            |
|   | <u>(12,500)</u> | <u>2,500</u>    | <u>(5,000)</u>   |
| Allocation of Baker's potential deficit | 1,500           | (2,500)         | 1,000            |
| Safe payment                            | <u>(11,000)</u> | <u>—0—</u>      | <u>(4,000)</u>   |

**Schedule III****Computation of Safe Payments**

|                                       | <i>Amos .3</i> | <i>Baker .5</i> | <i>Carter .2</i> |
|---------------------------------------|----------------|-----------------|------------------|
| Capital and loan balances             | (9,000)        | (10,000)        | (6,000)          |
| Allocation of potential loss—\$15,000 | 4,500          | 7,500           | 3,000            |
| Safe payment                          | <u>(4,500)</u> | <u>(2,500)</u>  | <u>(3,000)</u>   |

Steps in the development of an advance cash distribution plan are presented in Illustration 16-4 and explained below.

**Step 1** Determine the net capital interest of each partner by combining the balance in the partner's capital account with obligations to or receivables from the partner.

|                      | Amos            | Baker           | Carter          |
|----------------------|-----------------|-----------------|-----------------|
| Capital balance      | \$34,000        | \$30,000        | \$18,000        |
| Loan balance         | <u>—0—</u>      | <u>—0—</u>      | <u>—0—</u>      |
| Net capital interest | <u>\$34,000</u> | <u>\$30,000</u> | <u>\$18,000</u> |

**Step 2** Determine the order in which the partners are to participate in cash distributions. The objective of this step is to provide an order of cash distribution in which the ratio of the partners' capital interest will eventually be equal to their profit and loss ratio. Once this is accomplished, all partners will have an equal ability to absorb their share of partnership losses. Several approaches can be used to accomplish this objective. One systematic approach is to determine the loss absorption potential of each partner by dividing the net capital interest of each partner by his or her respective profit and loss ratio.

**ILLUSTRATION 16-4**

**Preparation of an Advance Plan for the Distribution of Cash**

| <i>Step 1</i>   | Amos                             | Baker            | Carter          |                           |               |               |
|---|----------------------------------|------------------|-----------------|---------------------------|---------------|---------------|
| Capital balances  | \$ 34,000                        | \$ 30,000        | \$18,000        |                           |               |               |
| Loan balances   | —                                | —                | —               |                           |               |               |
| Net capital interest  | <u>\$ 34,000</u>                 | <u>\$ 30,000</u> | <u>\$18,000</u> |                           |               |               |
| Profit and loss ratio   | .30                              | .50              | .20             |                           |               |               |
| <i>Step 2</i>   |                                  |                  |                 |                           |               |               |
| Loss necessary to reduce net capital balance to zero  | \$113,333                        | \$ 60,000        | \$90,000        |                           |               |               |
| Order of cash distribution  | 1                                | 3                | 2               |                           |               |               |
|   | <i>Loss Absorption Potential</i> |                  |                 | <i>Asset Distribution</i> |               |               |
| <i>Step 3</i>   | Amos                             | Baker            | Carter          | Amos                      | Baker         | Carter        |
| Profit and loss ratio   | .30                              | .50              | .20             | .30                       | .50           | .20           |
| Loss absorption potential   | \$113,333                        | \$60,000         | \$90,000        |                           |               |               |
| Net capital interest  |                                  |                  |                 | \$34,000                  | \$30,000      | 18,000        |
| Distribution to Amos to reduce her capital interest so that her loss absorption potential is the same as Carter's<br>$(\$113,333 - \$90,000 = \$23,333) \times .30$   | 23,333                           |                  |                 | 7,000                     |               |               |
| Balances after distribution to Amos   | <u>90,000</u>                    | <u>60,000</u>    | <u>90,000</u>   | <u>27,000</u>             | <u>30,000</u> | <u>18,000</u> |
| Distribution to Amos and Carter to reduce their capital interest so that their loss absorption potential is the same as Baker's<br>$(\$90,000 - \$60,000 = \$30,000) \times .30$<br>$(\$90,000 - \$60,000 = \$30,000) \times .20$ | 30,000                           |                  | 30,000          | 9,000                     |               |               |
| Balances after distribution to Amos and Carter  | <u>60,000</u>                    | <u>60,000</u>    | <u>60,000</u>   | <u>18,000</u>             | <u>30,000</u> | <u>12,000</u> |
| Remainder of asset distributions  |                                  |                  |                 | .30                       | .50           | .20           |
| <i>Step 4</i>   |                                  |                  |                 |                           |               |               |
| <i>Cash Distribution Plan</i>   |                                  |                  |                 |                           |               |               |
| <i>Order of Cash Distribution</i>   | <i>Liabilities</i>               | Amos             | Baker           | Carter                    |               |               |
| 1. First \$28,000   | 100%                             | .3               | .5              | .2                        |               |               |
| 2. Next \$7,000   |                                  | 100%             |                 |                           |               |               |
| 3. Next \$15,000  |                                  | 60%              |                 | 40%                       |               |               |
| 4. Remainder  |                                  | 30%              | 50%             | 20%                       |               |               |

|                            | <i>Amos</i> | <i>Baker</i> | <i>Carter</i> |
|----------------------------|-------------|--------------|---------------|
| Net capital interest       | \$ 34,000   | \$30,000     | \$18,000      |
| Profit and loss ratio      | .30         | .50          | .20           |
| Loss absorption potential  | \$113,333   | \$60,000     | \$90,000      |
| Order of cash distribution | 1           | 3            | 2             |

This computation determines the maximum amount of loss each partner is capable of absorbing and provides a basis for ranking the partners in terms of each partner's capital interest relative to his or her loss ratio. The partner with the largest loss absorption potential has the ability to absorb a greater share of losses before his or her capital account would be reduced to a zero balance. Thus, Amos will receive the first distribution of assets after the creditors' claims have been satisfied. The partner with the lowest loss absorption potential (Baker) will be the last partner to participate in the distribution of assets from the partnership.

**Step 3** In Step 2, the order in which each partner is to participate in cash distributions was determined. The next step is to compute the amount of cash each partner is to receive as it becomes available for distribution. The objective is to determine the **amount** of cash to distribute to each partner to bring the ratios of their capital interests in the partnership into alignment with their profit and loss ratios. One way to do this is to consider the loss absorption potential computed in Step 2. It was determined in Step 2 that Amos is in the strongest position relative to the other partners and is to receive the first cash distribution. Amos is capable of absorbing her share of \$113,333 in losses, which is \$23,333 greater than the loss potential of Carter (\$113,333 – \$90,000), who is the next partner to participate in cash distributions. However, Amos must absorb only 30% or \$7,000 ( $\$23,333 \times .30$ ) of such potential losses. Thus, a payment to Amos of \$7,000 reduces her loss absorption potential to Carter's (the next closest loss potential) level ( $\$34,000 - \$7,000 = \$27,000 / .30 = \$90,000$ ). Amos and Carter now have the same absorption potential for future losses. Also, note that a payment of \$7,000 to Amos brings her capital interest into a ratio of 3:2 to that of Carter (\$27,000:\$18,000), which is the same as their relative profit and loss ratio.

The next step in the process is to bring the loss absorption potential of Amos and Carter into balance with that of Baker, who is the last partner to participate in the distribution of cash. Using the same rationale, Amos and Carter are now capable of absorbing losses of \$30,000 ( $\$90,000 - \$60,000$ ) greater than Baker. Since they must absorb 30% and 20% of the losses, respectively, the distribution to each partner is computed as follows:

$$\begin{aligned} \text{To Amos: } & \$30,000 \times .30 = \$9,000 \\ \text{To Carter: } & \$30,000 \times .20 = \$6,000 \end{aligned}$$

Of the next \$15,000, Amos is to receive \$9,000 and Carter is to receive \$6,000. Now all partners' capital balances are in the same ratio as their profit and loss sharing ratio.<sup>6</sup>

<sup>6</sup> An alternative method of determining the amount to be distributed at each level is to compute the capital account balances needed by each partner so as to bring the partners' capital balances into their agreed profit- and loss-sharing ratio. This approach is simpler in certain cases, but the approach in the text is more systematic when there are numerous partners. The alternative works by bringing the ratio of the partners' capital account balances into their profit- and loss-sharing ratio in the order in which the partners are to participate in the distribution. In this case, the first step is to compute what the capital account balance of Amos should be so that her capital balance is in the profit- and loss-sharing ratio with that of Carter (3:2). This can be computed as follows:

$$\begin{aligned} \text{Let } X &= \text{desired capital balance} \\ \frac{\text{Loss ratio of Amos}}{\text{Loss ratio of Carter}} &= \frac{X}{\text{Capital balance of Carter}} \\ \frac{3}{2} &= \frac{X}{\$18,000} \\ 2X &= \$54,000 \\ X &= \$27,000 \end{aligned}$$

(Continues next page)

**Step 4** A cash distribution plan is then prepared as follows:

| <i>Order of Cash Distribution</i> | <i>Liabilities</i> | <i>Amos</i> | <i>Baker</i> | <i>Carter</i> |
|-----------------------------------|--------------------|-------------|--------------|---------------|
| 1. First \$28,000                 | 100%               |             |              |               |
| 2. Next \$7,000                   |                    | 100%        |              |               |
| 3. Next \$15,000                  |                    | 60%         |              | 40%           |
| 4. Remainder                      |                    | 30%         | 50%          | 20%           |

The first \$28,000 available is, of course, paid to the creditors. Cash may be held back from distribution if it is anticipated that unrecorded liabilities will be discovered or if additional liquidation expenses will be incurred. The distribution of cash in excess of this reserve amount proceeds as determined. Amos will receive all of any additional cash up to \$7,000. Additional cash in excess of \$7,000 and up to \$22,000 is distributed 60:40 to Amos and Carter. After \$22,000 (\$15,000 + \$7,000) has been distributed to the partners, the capital accounts are in the desired profit and loss ratio of 3:5:2. Any further distributions to the partners are made according to the profit and loss ratio.

The advance distribution plan developed before will yield the same cash distribution as the process of computing a safe payment each time cash is available. As proof, in Illustration 16-5, the advance plan for distributing cash as developed in Illustration 16-4 is applied to determine the cash distribution in Illustration 16-3. Even though both methods produce the same results, the advance plan is more informative to both personal and partnership creditors, and to the partners. Interested parties now know the order in which individual partners will receive cash and the amounts that each may receive at each stage of the distribution process.

**ILLUSTRATION 16-5**

**Cash Distribution per Advance Plan**

|                               | <i>Liabilities</i> | <i>Amos</i>     | <i>Baker</i>   | <i>Carter</i>  | <i>Total</i>    |
|-------------------------------|--------------------|-----------------|----------------|----------------|-----------------|
| First Distribution: \$30,000  |                    |                 |                |                |                 |
| First—\$28,000                | \$28,000           |                 |                |                | \$28,000        |
| Next—\$2,000                  |                    | \$2,000         |                |                | 2,000           |
|                               | <u>\$28,000</u>    | <u>\$2,000</u>  | <u>—</u>       | <u>—</u>       | <u>\$30,000</u> |
| Second Distribution: \$15,000 |                    |                 |                |                |                 |
| First—\$5,000                 |                    |                 |                |                |                 |
| (Remainder of \$7,000 level)  |                    | \$ 5,000        |                |                | \$ 5,000        |
| Next—\$10,000                 |                    | 6,000           |                | \$4,000        | 10,000          |
|                               | <u>—</u>           | <u>\$11,000</u> | <u>—</u>       | <u>\$4,000</u> | <u>\$15,000</u> |
| Third Distribution: \$10,000  |                    |                 |                |                |                 |
| First—\$5,000                 |                    |                 |                |                |                 |
| (Remainder of \$15,000 level) |                    | \$ 3,000        |                | \$2,000        | \$ 5,000        |
| Next—\$5,000                  |                    | 1,500           | \$2,500        | 1,000          | 5,000           |
|                               | <u>—</u>           | <u>\$ 4,500</u> | <u>\$2,500</u> | <u>\$3,000</u> | <u>\$10,000</u> |
| Last Distribution: \$2,000    |                    |                 |                |                |                 |
| First—\$2,000                 |                    |                 |                |                |                 |
|                               | <u>—</u>           | <u>\$ 600</u>   | <u>\$1,000</u> | <u>\$ 400</u>  | <u>\$ 2,000</u> |

Since Amos has a capital balance of \$34,000, it would take a distribution of \$7,000 to reduce the balance to \$27,000. The next level of payments should reduce the capital balances of Amos and Carter in such a way that their capital balances will be in the loss ratio to that of Baker, which is 3:5 and 2:5, respectively.

$$\frac{3}{5} = \frac{X}{\$30,000} \quad \frac{2}{5} = \frac{X}{\$30,000}$$

$$5X = \$90,000 \quad 5X = \$60,000$$

$$X = \$18,000 \quad X = \$12,000$$

A distribution of \$9,000 to Amos (\$27,000 – \$18,000) and \$6,000 to Carter (\$18,000 – \$12,000) will produce capital balances in the ratio of 3:5:2 (\$18,000: \$30,000: \$12,000).

One requirement that must be satisfied in the development of the advance plan is that the partners must share income in the same ratio that they share losses. If this were not the case, the potential amount of a new loss would need to be computed after every allocation to the partners' capital accounts. This occurs because the allocation of liquidation gains alters the order of cash distribution computed in the advance plan. To illustrate, assume that Amos, Baker, and Carter, with capital balances of \$45,000, \$24,000, and \$20,000, respectively, share losses in the ratio of 5:3:2, but share income in the ratio of 3:5:2. The order of cash distribution based on the ratio of losses would be as follows:

|                            | <i>Amos</i> | <i>Baker</i> | <i>Carter</i> |
|----------------------------|-------------|--------------|---------------|
| Net capital interest       | \$45,000    | \$24,000     | \$ 20,000     |
| Loss ratios                | .50         | .30          | .20           |
| Loss absorption potential  | \$90,000    | \$80,000     | \$100,000     |
| Order of cash distribution | 2           | 3            | 1             |

Now assume that the partnership realizes a \$50,000 gain. The allocation of the gain in the ratio of 3:5:2 and computation of the order of cash distribution follow:

|                                | <i>Amos</i>       | <i>Baker</i>      | <i>Carter</i>     |
|--------------------------------|-------------------|-------------------|-------------------|
| Net capital interest           | \$(45,000)        | \$(24,000)        | \$(20,000)        |
| Allocation of \$50,000 gain    | <u>(15,000)</u>   | <u>(25,000)</u>   | <u>(10,000)</u>   |
| Net capital interest           | <u>\$(60,000)</u> | <u>\$(49,000)</u> | <u>\$(30,000)</u> |
| Loss ratios                    | .50               | .30               | .20               |
| New loss absorption potential  | \$120,000         | \$163,333         | \$150,000         |
| New order of cash distribution | 3                 | 1                 | 2                 |

In this illustration an allocation of the \$50,000 gain moved Baker from being the last partner to receive cash to being the first partner to receive cash.

It is also necessary to recompute an advance plan if a certain classification of losses is shared in a different ratio from the one used in preparing the advance plan, or if adjustments are made to the capital balances in other than the loss ratio. For example, assume that it has been discovered that a cash withdrawal by a partner had been expensed instead of debited to his drawing account. The correction of the error would modify the loss absorption potential of that partner. If such adjustments occur frequently, then the computation of a safe payment may be less time-consuming and easier to use than the development of an advance cash distribution plan.

### TEST YOUR KNOWLEDGE 16.2

**NOTE:** Solutions to *Test Your Knowledge* questions are found at the end of each chapter before the end-of-chapter questions.

in the ratio 60:40. The partnership has \$15,000 in liabilities. Prepare a cash distribution plan.

Short Answer

1. The capital balances for partners A and B are \$120,000 and \$60,000, respectively. They share profits and losses

## 16.5 INCORPORATION OF A PARTNERSHIP

### LO 6 Incorporation of a partnership.

After a partnership has been operating for a period of time, the partners may find that the partnership form of business is no longer satisfactory. The corporation, with its limited liability, continuity of existence, and ability to raise needed resources, may become more attractive. Upon incorporation, the assets and liabilities are transferred to the corporation and the partners receive capital stock in settlement of their interests. The partnership accounts should be restated to fair values to assure that the partners receive an equitable distribution of stock for their interests.

The partnership books may be retained for use by the corporation, or a new set of books may be established.

## Retention of Partnership Books by Corporation

Assuming that the partnership books are used by the corporation, the steps to record the incorporation are as follows:

1. Assets and liabilities are adjusted to fair value. Frequently, a valuation adjustment account is created to accumulate the gains and losses.
2. The valuation adjustment account is closed to the partners' capital accounts in accordance with their profit and loss ratio.
3. The partners' capital accounts are closed upon the transfer of capital stock. Since the books are retained, offsetting credits are made to Capital Stock at par value for the number of shares issued. If the debit to partners' capital accounts exceeds the credit to Capital Stock, the difference is a credit to Additional Paid-in Capital.

To illustrate, assume that AB Partnership is to incorporate. The new corporation is authorized to issue 5,000 shares of \$10 par value stock. Book values of the partnership accounts and fair values for the assets are determined to be:

|                                 | <i>Book Value</i> |                 | <i>Fair Values</i> |
|---------------------------------|-------------------|-----------------|--------------------|
|                                 | <i>Debit</i>      | <i>Credit</i>   |                    |
| Cash                            | \$ 5,000          |                 | \$ 5,000           |
| Accounts Receivable             | 4,000             |                 | 3,600              |
| Inventory                       | 5,000             |                 | 7,000              |
| Land                            | 10,000            |                 | 15,000             |
| Equipment (net of depreciation) | 6,000             |                 | 5,000              |
| Accounts Payable                |                   | \$ 7,000        |                    |
| Notes Payable                   |                   | 10,000          |                    |
| Art, Capital                    |                   | 8,000           |                    |
| Beck, Capital                   |                   | 5,000           |                    |
| Total                           | <u>\$30,000</u>   | <u>\$30,000</u> |                    |

Other facts are: (1) Liabilities are assumed to be fairly valued; (2) Art and Beck share profits equally; (3) Art and Beck are to receive par value stock equal to their adjusted ending capital balances. The journal entries to incorporate are:

|                          |        |        |
|--------------------------|--------|--------|
| (1) Inventory            | 2,000  |        |
| Land                     | 5,000  |        |
| Equipment                |        | 1,000  |
| Accounts Receivable      |        | 400    |
| Valuation Adjustment     |        | 5,600  |
| (2) Valuation Adjustment | 5,600  |        |
| Art, Capital             |        | 2,800  |
| Beck, Capital            |        | 2,800  |
| (3) Art, Capital         | 10,800 |        |
| Beck, Capital            | 7,800  |        |
| Capital Stock—\$10 par   |        | 18,600 |

## New Books Established by Corporation

If the corporation establishes a new set of books, then all accounts on the partnership books will end with a zero balance. The only difference as compared to the illustration above is that on receipt of the stock, asset and liability accounts are closed on the partnership books and transferred to the corporation. To balance the entry, an asset account is created for the capital stock received in the amount of \$18,600. This balance should also equal the sum of

the balances in the remaining capital accounts. The entry to record the distribution of the capital stock is:

|                                  |        |        |
|----------------------------------|--------|--------|
| Art, Capital                     | 10,800 |        |
| Beck, Capital                    | 7,800  |        |
| Capital Stock (from Corporation) |        | 18,600 |

The corporation records the assets received and the liabilities assumed on the new books at the net cost of the stock issued (\$18,600), which is also equal to the adjusted value of the net assets on the partnership books. A credit of \$18,600 to balance the entry is made to capital stock issued.

## SUMMARY

- 1** *Describe the steps used to distribute available partnership assets in liquidation under the Uniform Partnership Act (UPA).* The first step in the liquidation process is to compute any net income or loss up to the date of dissolution. The closing process should be completed and any net income or loss allocated to the partners in accordance with their profit and loss agreement. Next the assets that are not acceptable for distribution in their present form are converted into cash, and any gains or losses realized are allocated as specified in the partnership agreement (usually according to the profit and loss ratio). Finally, the available assets are distributed to creditors and partners.
- 2** *List the order of priority for each class of creditors in partnership liquidation under the UPA.* The liabilities are settled in the following order: (1) those owing to creditors other than partners, (2) those owing to partners other than for capital and profits, (3) those owing to partners in respect to capital, and (4) those owing to partners in respect to profits.
- 3** *Prepare a liquidation schedule to settle debts and allocate assets.* The liquidation schedule begins with a listing, generally in columns, of the partnership's assets, liabilities, and partners' capital balances. Any additional investments made by individual partners are recorded first, including those made by partners with debit balances and those resulting from a judgment of partnership creditors against individual partners. Cash is distributed first to liquidate partnership liabilities and then to satisfy partners' capital interests. The cash distribution is based on the partners' capital balances, not their profit and loss ratios.
- 4** *Prepare a "safe payment approach" liquidation schedule.* To calculate a safe cash distribution, the following three assumptions may be made: (1) A loan to or from an individual partner is combined with the partner's capital balance to determine his or her interest in the partnership assets. (2) The remaining non-cash assets will not provide any additional cash (the worst-case scenario). (3) Any partner with a debit balance is assumed unable to pay the amounts owed to the partnership. The result of applying these assumptions is that cash will not be distributed to any partner whose capital balance is insufficient to absorb his or her share of potential losses.
- 5** *Describe the four steps in the preparation of an advance plan for the distribution of cash in a partnership liquidation.* Determine the net capital interest of each partner by combining the balance in the partner's capital account with any obligations to, or receivables from, that partner. Determine the order in which the partners are to participate in cash distributions. Compute the amount of cash each partner is to receive as it becomes available for distribution. Prepare a cash distribution plan. This plan will yield the same distribution as a safe payment plan computed each time cash becomes available, but it is more informative to both creditors and partners, as they know the plan in advance.
- 6** *Prepare the journal entries to incorporate a partnership.* Assets and liabilities are adjusted to fair values, often using a valuation adjustment account to accumulate gains and losses. The valuation adjustment account (or gains/losses) is closed to the partners' capital accounts in accordance with their profit and loss ratios. The partners' capital accounts are closed upon the transfer of capital stock. Since the books are retained, offsetting credits are made to the capital stock account at par for the number of shares issued. If the debit to partners' capital accounts is greater than the credit to the capital stock account, the difference is credited to additional paid-in capital.

## TEST YOUR KNOWLEDGE SOLUTIONS

- 16.1**
1. Partner A will receive \$60,000 cash.
  2. Partner A will receive \$40,000 cash.

**16.2**

| Order of Cash Distribution | Liabilities | A (.6) | B (.4) |
|----------------------------|-------------|--------|--------|
| 1. First \$15,000          | 100%        |        |        |
| 2. Next \$30,000           |             | 100%   |        |
| 3. Remainder               |             | 60%    | 40%    |

## QUESTIONS

- LO 1** 1. Why are realization gains or losses allocated to partners in their profit and loss ratios?
- LO 3** 2. In what manner should the final cash distribution be made in partnership liquidation?
- LO 2** 3. Why does a debit balance in a partners' capital account create problems in the UPA order of payment for a partnership liquidation?
- LO 2** 4. Is it important to maintain separate accounts for a partner's outstanding loan and capital accounts? Explain why or why not.
- LO 5** 5. Discuss the possible outcomes in the situation where the equity interest of one partner is inadequate to absorb realization losses.
- LO 3** 6. During a liquidation, at which point may cash be distributed to any of the partners?
- LO 3** 7. What is "marshaling of assets"?
- LO 3** 8. To what extent can personal creditors seek recovery from partnership assets?
- LO 4** 9. In an installment liquidation, why should the partners view each cash distribution as if it were the final distribution?
- LO 4** 10. Discuss the three basic assumptions necessary for calculating a safe cash distribution. How is this safe cash distribution computed?
11. How are unexpected costs such as liquidation expenses, disposal costs, or unrecorded liabilities covered in the safe distribution schedule? **LO 4**
12. What is the objective of the procedures used for the preparation of an advance cash distribution plan? **LO 5**
13. What is the "loss absorption potential"? **LO 5**
14. In what order must partnership assets be distributed? **LO 2**

### Business Ethics

You and two of your former college friends, Freeman and Oxyman, formed a partnership called FOB, which builds and installs fabricated swimming pools. The business has been operating for 15 years and has become one of the top swimming pool companies in the area. Typically, you have been providing the on-site estimates for the pools, while your partners do most of the on-site construction. While visiting one of the sites, you hear a conversation between one of your partners and a customer. Your partner is explaining that the cost will increase by \$10,000 because of unexpected rock removal. You are a bit surprised by this, since you had tested the area for rocks. Later, back at the office, you review the core-sample results done on that job, which did not reveal any rock. You decide to talk to the partner when he returns to the office. When the partner returns to the office, he is arguing with someone from a local bank concerning an outstanding personal loan.

1. What do you see as your duty with respect to the partnership?
2. What should you do? Explain your reasoning.

## EXERCISES

### EXERCISE 16-1 Simple Liquidation **LO 3**

The CPA Partnership operated by Cook, Parks, and Argo is being liquidated. A balance sheet prepared at this stage in their liquidation process is presented below.

|              |                 |                |                 |
|--------------|-----------------|----------------|-----------------|
| Cash         | \$40,000        | Liabilities    | \$25,000        |
| Other Assets | 50,000          | Parks, Loan    | 10,000          |
|              |                 | Cook, Capital  | 30,000          |
|              |                 | Parks, Capital | 10,000          |
|              |                 | Argo, Capital  | 15,000          |
| Total        | <u>\$90,000</u> | Total          | <u>\$90,000</u> |

The partners share profits and losses 30% (Cook), 50% (Parks), and 20% (Argo). The partners are all personally insolvent.

#### Required:

- A. The partners wish to distribute the \$40,000 in cash. Record in journal entry form the distribution of the available cash.
- B. Record in journal entry form the completion of the liquidation process, assuming that the other assets of \$50,000 are sold for \$15,000.

### EXERCISE 16-2 Simple Liquidation **LO 3**

John, Jake, and Joe are partners with capital accounts of \$90,000, \$78,000, and \$64,000 respectively. They share profits and losses in the ratio of 30:40:30. When the partners decide to liquidate, the business has \$70,000 in cash, noncash assets totaling \$260,000, and \$98,000 in liabilities. The noncash assets are sold for \$270,000, and the creditors are paid.



**Required:**

- A. Prepare a schedule of partnership liquidation.
- B. Prepare journal entries to record each of the following transactions.
- (1) The sale of the noncash assets.
  - (2) The payment to the creditors.
  - (3) The distribution of cash to the partners.

**EXERCISE 16-3 Cash Distribution Schedule LO 3**

The unsuccessful partnership of the Jones Brothers is about to undergo liquidation. They have asked you to estimate the amount of cash that each brother will receive. They share profits and losses equally.

|                |                  |               |                  |
|----------------|------------------|---------------|------------------|
| Cash           | \$ 22,000        | Liabilities   | \$ 35,000        |
| Noncash Assets | 110,000          | Doug, Capital | 55,000           |
|                |                  | Dave, Capital | 50,000           |
|                |                  | Dan, Capital  | (8,000)          |
|                | <u>\$132,000</u> |               | <u>\$132,000</u> |

Both Doug and Dave are personally solvent, but Dan is not. They estimate that they will receive \$65,000 from the sale of the noncash assets.

**Required:**

Prepare a schedule to estimate the amount of cash each brother will receive.

**EXERCISE 16-4 Cash Distribution Schedule LO 3**

The ABC Partnership is in the process of liquidation. The account balances prior to liquidation are given below:

| <i>Debits</i>    |                  | <i>Credits</i>  |                  |
|------------------|------------------|-----------------|------------------|
| Cash             | \$ 72,000        | Liabilities     | \$ 40,000        |
| Amos, Drawing    | 10,000           | Boone, Loan     | 8,000            |
| Boone, Drawing   | 15,000           | Childs, Loan    | 25,000           |
| Childs, Drawing  | 20,000           | Amos, Capital   | 49,000           |
| Operating Loss   | 21,000           | Boone, Capital  | 18,000           |
| Liquidation Loss | 12,000           | Childs, Capital | 10,000           |
|                  | <u>\$150,000</u> |                 | <u>\$150,000</u> |

The partners share profits in the following ratio: Amos, 1/5; Boone, 2/5; Childs, 2/5.

**Required:**

Prepare a schedule showing the calculations of the distribution of cash under the Uniform Partnership Act, assuming that all three partners have personal liabilities in excess of their personal assets.

**EXERCISE 16-5 Partnership Liquidation—Safe Payment Approach LO 4**

Following is the balance sheet of the BDO Partnership:

|                     |                  |                |                  |
|---------------------|------------------|----------------|------------------|
| Cash                | \$ 10,000        | Liabilities    | \$ 18,000        |
| Accounts Receivable | 40,000           | Brink, Capital | 45,000           |
| Inventory           | 30,000           | Davis, Capital | 27,000           |
| Equipment           | 60,000           | Olsen, Capital | 50,000           |
|                     | <u>\$140,000</u> |                | <u>\$140,000</u> |

The partners share income 40:40:20, respectively. Assume that 70% of the receivables are collected and that inventory with a book value of \$15,000 is sold for \$10,000. All cash available at this time is to be distributed.

**Required:**

Determine the proper distribution of cash, using the safe payment approach.

**EXERCISE 16-6 Partnership Liquidation with Personal Asset Information LO 3**

Pete, Tom, and Zack have operated a laundromat for 10 years. The partners, who share profits 4:3:3, respectively, decide to liquidate the partnership. The firm's balance sheet just before the partners sell the other assets for \$30,000 is as follows:

| <i>Assets</i> |                  | <i>Liabilities and Capital</i> |                  |
|---------------|------------------|--------------------------------|------------------|
| Cash          | \$ 15,000        | Liabilities                    | \$ 42,000        |
| Other Assets  | 110,000          | Pete, Capital                  | 55,000           |
|               |                  | Tom, Capital                   | 14,000           |
|               |                  | Zack, Capital                  | 14,000           |
|               | <u>\$125,000</u> |                                | <u>\$125,000</u> |

The personal status of each partner just before liquidation is as follows:

|      | <i>Personal<br/>Assets</i> | <i>Personal<br/>Liabilities</i> |
|------|----------------------------|---------------------------------|
| Pete | \$55,000                   | \$80,000                        |
| Tom  | 30,000                     | 10,000                          |
| Zack | 30,000                     | 50,000                          |

The partnership operates in a state that has adopted the Uniform Partnership Act.

**Required:**

- A. Determine the amount of cash each partner will receive in liquidation and how much cash each partner must invest in the firm, given their personal positions.
- B. Determine the amounts that the personal creditors will receive from personal assets and any distribution from the partnership.

**EXERCISE 16-7 Multiple Choice LO3 LO4**

Select the best answer for each of the following items:

1. In accordance with the marshaling of assets provision of the Uniform Partnership Act, rank the following liabilities of a partnership in order of payment.
  - (1) \$20,000 loan from B. Barry who is a partner.
  - (2) \$30,000 of profits from the last year of operations.
  - (3) \$3,000 payable to a supplier.
  - (4) \$100,000 in capital balances of the partners.
  - (a) 2,3,4,1.
  - (b) 4,2,1,3.
  - (c) 3,1,4,2.
  - (d) 3,1,2,4.
2. Personal assets are first allocated to partnership creditors and then to personal creditors.
  - (a) This statement is true.
  - (b) True if partner has debit balance in his/her capital account.
  - (c) This statement is false.
3. The following condensed balance sheet is presented for the partnership of Lisa, Lori, and Lucy, who share profits and losses in the ratio of 5:3:2, respectively:

|              |                  |               |                  |
|--------------|------------------|---------------|------------------|
| Cash         | \$ 80,000        | Liabilities   | \$140,000        |
| Other Assets | 280,000          | Lisa, Capital | 100,000          |
|              |                  | Lori, Capital | 100,000          |
|              |                  | Lucy, Capital | 20,000           |
| Total        | <u>\$360,000</u> | Total         | <u>\$360,000</u> |

The partners agreed to liquidate the partnership after selling the other assets. If the other assets are sold for \$160,000, how much should Lisa receive upon liquidation?

- (a) \$37,500
- (b) \$38,500
- (c) \$40,000
- (d) \$100,000

Questions 4 and 5 are based on the following balance sheet for the partnership of Allen, Bob, and Cecil:

|              |                  |                      |                  |
|--------------|------------------|----------------------|------------------|
| Cash         | \$ 20,000        | Liabilities          | \$ 50,000        |
| Other Assets | 180,000          | Allen, Capital (40%) | 37,000           |
|              |                  | Bob, Capital (30%)   | 65,000           |
|              |                  | Cecil, Capital (30%) | 48,000           |
|              | <u>\$200,000</u> |                      | <u>\$200,000</u> |

Figures shown parenthetically reflect agreed profit and loss sharing percentages.

4. If the firm, as shown on the original balance sheet, is dissolved and liquidated by selling assets in installments, the first sale of noncash assets having a book value of \$90,000 realizes \$50,000, and all cash available after settlement with creditors is distributed, the respective partners would receive (to the nearest dollar)

- (a) Allen, \$8,000; Bob, \$6,000; Cecil, \$6,000.  
 (b) Allen, \$6,667; Bob, \$6,667; Cecil, \$6,666.  
 (c) Allen, \$0; Bob, \$10,000; Cecil, \$10,000.  
 (d) Allen, \$0; Bob, \$18,500; Cecil, \$1,500.
5. If the facts are as in item 4 above except that \$3,000 cash is to be withheld, the respective partners would then receive (to the nearest dollar)
- (a) Allen, \$6,800; Bob, \$5,100; Cecil, \$5,100.  
 (b) Allen, \$5,667; Bob, \$5,667; Cecil, \$5,666.  
 (c) Allen, \$0; Bob, \$8,500; Cecil, \$8,500.  
 (d) Allen, \$0; Bob, \$17,000; Cecil, \$0.

(AICPA adapted)

**EXERCISE 16-8 Multiple Choice LO2 LO3 LO6**

Select the best answer for each of the following items. Questions 1 and 2 are based on the following condensed balance sheet for the partnership of Caine, Davis, and Jones.

|                   |                  |                  |                  |
|-------------------|------------------|------------------|------------------|
| Cash              | \$ 90,000        | Accounts Payable | \$220,000        |
| Other Assets      | 820,000          | Jones, Loan      | 40,000           |
| Caine, Receivable | 40,000           | Caine, Capital   | 300,000          |
|                   |                  | Davis, Capital   | 200,000          |
|                   |                  | Jones, Capital   | 190,000          |
| Total             | <u>\$950,000</u> | Total            | <u>\$950,000</u> |

The partners share income and loss in the ratio of 5:3:2, respectively.

1. Assume that the assets and liabilities are fairly valued in the balance sheet and the partnership decides to admit Kuman as a new partner with a one-fourth capital interest. No goodwill or bonus is to be recorded. How much should Kuman invest in cash or other assets?
- (a) \$172,500.  
 (b) \$175,000.  
 (c) \$230,000.  
 (d) \$233,333.
2. Assume that instead of admitting a new partner, the partners decide to liquidate the partnership. If the other assets are sold for \$600,000, how much of the available cash should be distributed to Caine?
- (a) \$170,000.  
 (b) \$150,000.  
 (c) \$190,000.  
 (d) \$300,000.
3. A, B, C, and D are partners sharing profits and losses equally. The partnership is insolvent and is to be liquidated. The status of the partnership and each partner is as follows:

|   | <i>Partnership<br/>Capital Balance</i> | <i>Personal Assets<br/>(Exclusive of<br/>Partnership Interest)</i> | <i>Personal Liabilities<br/>(Exclusive of<br/>Partnership Interest)</i> |
|---|--|--|---|
| A | \$15,000 Credit                        | \$100,000  | \$40,000  |
| B | 10,000 Credit                          | 30,000   | 60,000  |
| C | 20,000 Debit                           | 80,000   | 5,000   |
| D | 30,000 Debit                           | 1,000  | 28,000  |

Assuming the Uniform Partnership Act applies, the partnership creditors

- (a) Must first seek recovery against C because he is personally solvent and he has a negative capital balance.  
 (b) Will not be paid in full regardless of how they proceed legally because the partnership assets are less than the claims of the partnership creditors.  
 (c) Will have to share B's interest in the partnership on a pro-rata basis with B's personal creditors.  
 (d) Have first claim to the partnership assets before any partner's personal creditors have rights to the partnership assets.

4. If a partner with a debit capital balance during liquidation is insolvent, the following results:
  - (a) The partner must borrow money to invest in the partnership.
  - (b) The partnership will give the partner cash to the extent of the partners' debit balance.
  - (c) The partner's debit balance will be allocated to the other partners.
  - (d) None of the above.
5. If a partnership is undergoing a transformation to a corporation, which of the following is a result?
  - (a) Assets and liabilities are adjusted to fair value.
  - (b) The net assets are distributed to the partners in their profit and loss ratio.
  - (c) The partners receive stock in the new corporation.
  - (d) Both (a) and (c) are correct.

### EXERCISE 16-9 Rights of Various Parties LO 3

Q, R, S, and T are partners, sharing profits and losses 40%:20%:20%:20%, respectively. After sale of firm assets and payment of the available cash to the partnership creditors, a partnership trial balance and the personal status of each partner are as follows:

| <i>Partnership Trial Balance</i> |                 | <i>Personal Status Exclusive<br/>of Partnership Interest</i> |               |                    |
|----------------------------------|-----------------|--|---------------|--------------------|
| <i>Debit</i>                     | <i>Credit</i>   | <i>Partner</i>   | <i>Assets</i> | <i>Liabilities</i> |
|                                  | \$ 2,000        |  |               |                    |
| Creditors                        |                 |  |               |                    |
| Q, Capital                       | 500             | Q  | \$15,000      | \$10,000           |
| R, Capital                       | 7,500           | R  | 8,000         | 20,000             |
| S, Capital                       | \$ 6,000        | S  | 15,000        | 4,000              |
| T, Capital                       | 4,000           | T  | 6,000         | 8,000              |
|                                  | <u>\$10,000</u> |  |               |                    |
|                                  | <u>\$10,000</u> |  |               |                    |

The partnership operates in a state that has adopted the Uniform Partnership Act.

#### Required:

- A. What are the rights of the partnership creditors on the unpaid balance of \$2,000?
- B. What are the rights of the individual creditors of each partner?
- C. Assuming that Q pays the partnership creditors, prepare a schedule to show how the settlement by the partners will be completed.
- D. Indicate the amount of assets that will be available to the personal creditors of R after the settlement by the partners.
- E. Indicate the amount of assets that will be available to the personal creditors of T after the settlement by the partners.

### EXERCISE 16-10 Rights of Various Parties LO 3

The trial balance for the MAD Partnership is as follows just before declaring bankruptcy.

| <i>Cash</i> | <i>Other Assets</i> | <i>Liabilities</i> | <i>Matt<br/>Loan</i> | <i>Matt<br/>Capital</i> | <i>Allen<br/>Capital</i> | <i>Dave<br/>Capital</i> |
|-------------|---------------------|--------------------|----------------------|-------------------------|--------------------------|-------------------------|
| \$20,000    | \$100,000           | =                  | \$18,000             | \$10,000                | \$44,000                 | \$30,000                |
|             |                     |                    |                      |                         | \$30,000                 | \$18,000                |

Partners share profits in the ratio 45:30:25.

#### Required:

- A. Prepare a schedule to show how available cash would be distributed to the partners after creditors are paid in full. State which partner would receive the first cash available and at what point and to what degree each of the remaining partners would participate in cash distributions.
- B. Cash of \$30,000 is available to partners after the creditors have been paid in full. Prepare the general journal entry to record the distribution of \$30,000.

**ASC Exercises:** For all ASC exercises indicate as part of your answer: the Codification topic, subtopic, section, and/or paragraph upon which your answer is based (unless otherwise specified). All ASC questions require access to the FASB Codification.

**ASC16-1** **Presentation** Describe the conditions under which a firm can change one of its accounting principles. What is the preferred accounting treatment for a change in accounting principle? List the relevant paragraphs in the Codification.

**ASC16-2** **Recognition** Where in the Codification are the conditions listed that allow an entity that sells a product to recognize revenue on an accrual basis?

**ASC16-3** **Scope** Is a debt restructuring always classified as a troubled debt restructuring if the entity is experiencing some financial difficulties? Explain.

**ASC16-4** **Recognition** In a limited partnership with multiple general partners, the determination of which, if any, general partner within the group controls and consolidates the limited partnership is based on an analysis of the relevant facts and circumstances. List the rights of a limited partner that would indicate that the general partners do not control the limited partnership.

## PROBLEMS

### PROBLEM 16-1 Simple Liquidation LO 3

The Discount Partnership is being liquidated. The current balance sheet is shown here.

#### Discount Partnership Balance Sheet January 14, 2014

|   |                  |
|---|------------------|
| <i>Assets</i>                           |                  |
| Cash                                    | \$ 25,000        |
| Other assets                            | 120,000          |
| Total assets                            | <u>\$145,000</u> |
| <i>Liabilities and Partners' Equity</i> |                  |
| Accounts payable                        | \$ 40,000        |
| Dawson, capital                         | 31,000           |
| Feeney, capital                         | 65,000           |
| Hardin, capital                         | 9,000            |
| Total liabilities and partners' equity  | <u>\$145,000</u> |

Dawson, Feeney, and Hardin share profits and losses in a 30:40:30 ratio.

#### Required:

- A. Prepare a schedule of partnership liquidation for each of the following three independent cases.
- (1) The noncash assets are sold for \$60,000, and any partner with a deficit is unable to eliminate any of the deficit.
  - (2) The noncash assets are sold for \$60,000, and any partner with a deficit is able to invest cash equal to the amount of the deficit.
  - (3) The noncash assets are sold for \$50,000, and any partner with a deficit is able to invest up to \$8,000 cash in the partnership.
- B. Prepare all necessary journal entries for case 2 above.

### PROBLEM 16-2 Installment Liquidation LO 4

Nelson, Parker, and Rice are partners who share profits 4:3:3, respectively. Parker decides that it would be more profitable for him to operate as a sole proprietor. Nelson and Rice are in agreement that life would be more rewarding if Parker were to enter into direct competition with them. Nelson and Rice make repeated attempts to

acquire Parker's interest in the partnership. Unable to reach an agreement, the partners mutually agree that their association should be dissolved. A condensed balance sheet before realization of assets shows the following balances:

| <i>Assets</i> |                 | <i>Liabilities and Capital</i> |                 |
|---------------|-----------------|--------------------------------|-----------------|
| Cash          | \$ 5,000        | Liabilities                    | \$20,000        |
| Other Assets  | 60,000          | Nelson, Capital                | 20,000          |
|               |                 | Parker, Capital                | 12,000          |
|               |                 | Rice, Capital                  | 13,000          |
| Total         | <u>\$65,000</u> | Total                          | <u>\$65,000</u> |

Asset realization is accomplished in four stages as follows:

| <i>Stage</i> | <i>Sales Price</i> | <i>Book Value</i> |
|--------------|--------------------|-------------------|
| 1            | \$16,000           | \$12,000          |
| 2            | 12,000             | 10,000            |
| 3            | 10,000             | 20,000            |
| 4            | 2,000              | 18,000            |

The partners prefer that cash be distributed as soon as it is available.

**Required:**

Prepare a summary in columnar form of the partnership realization and liquidation. You should prepare supporting schedules of safe payments before each cash distribution.

**PROBLEM 16-3 Installment Liquidation LO 4**

Hann, Murphey, and Ryan have operated a retail furniture store for the past 30 years. Their business has been unprofitable for several years, since several large discount furniture stores opened in their sales territory. The partners recognize that they will be unable to compete with the larger chain stores and decide that since all the partners are near retirement, they should liquidate their business before it is necessary to declare bankruptcy. Account balances just before the liquidation process began were as follows:

|              |                  |                  |                  |
|--------------|------------------|------------------|------------------|
| Cash         | \$ 10,000        | Liabilities      | \$110,000        |
| Other Assets | 218,000          | Hann, Capital    | 50,000           |
|              |                  | Murphey, Capital | 42,000           |
|              |                  | Ryan, Capital    | 26,000           |
|              | <u>\$228,000</u> |                  | <u>\$228,000</u> |

The partners share profits in the ratio of 5:3:2, respectively.

Rather than selling all the assets in a forced liquidation and incurring selling expenses, the partners agree that some of the noncash assets may be withdrawn in partial settlement of their capital interest. The partners agree that if the market value of a withdrawn asset is less than book value, the difference should be allocated to all partners in their loss ratio. If market value is greater than book value, the asset is to be adjusted to its market value before recording the withdrawal. All the partners are personally solvent and can make additional cash investment in the partnership up to \$20,000 each. The following is a schedule of transactions that occurred during 2014 in the liquidation process.

|                |   |
|----------------|---|
| March 15, 2014 | During liquidation sale, noncash assets with a book value of \$90,000 were sold for \$80,000.   |
| March 16, 2014 | Sold accounts receivable with a book value of \$30,000 to a factory for \$26,000.   |
| March 16, 2014 | Paid all recorded partnership creditors.  |
| March 18, 2014 | Distributed all but \$1,000 of available cash to partners.  |
| March 19, 2014 | Murphey withdrew from inventory furniture with a book value of \$10,000 and a market value of \$13,000 to satisfy part of his capital interest. |
| March 21, 2014 | Sold remainder of inventory with a book value of \$50,000 to a discount furniture store for \$30,000 cash.                                      |
| March 25, 2014 | Assigned for \$12,000 cash the remaining term of the lease on the warehouse. The lease was accounted for as an operating lease.                 |
| March 25, 2014 | Distributed all available cash to partners.   |
| April 1, 2014  | Hann agreed to accept two vehicles with a book value of \$10,000 and a market value of \$8,000 in partial settlement of his capital interest.   |

|               |   |
|---------------|---|
| April 5, 2014 | All remaining assets were sold for \$4,000.                         |
| April 6, 2014 | Received additional cash from partners with debit capital balances. |
| April 6, 2014 | Distributed available cash to partners.                             |

**Required:**

Prepare a schedule of partnership realization and liquidation in accordance with the sequence of the foregoing events. Compute a safe payment to support your cash distribution to partners.

**PROBLEM 16-4 Simple Liquidation with Personal Asset Information LO 3**

Mary, Paula, and Ray have operated a retail store for 20 years. The partners share profits and losses in the ratio of 4:3:3, respectively. The partnership is unable to meet its obligations and the partners decide to liquidate the partnership. The firm's balance sheet just before the partners sell the other assets for \$20,000 is as follows.

| <i>Assets</i> |                  | <i>Liabilities and Partners' Equities</i> |                  |
|---------------|------------------|---|------------------|
| Cash          | \$ 10,000        | Liabilities                               | \$ 40,000        |
| Other Assets  | 100,000          | Mary, Capital                             | 50,000           |
|               |                  | Paula, Capital                            | 10,000           |
|               |                  | Ray, Capital                              | 10,000           |
|               | <u>\$110,000</u> |   | <u>\$110,000</u> |

After the sale of the noncash assets, the personal assets and liabilities of each partner are determined to be the following:

|       | <i>Personal Assets</i> | <i>Personal Liabilities</i> |
|-------|------------------------|-----------------------------|
| Mary  | \$50,000               | \$80,000                    |
| Paula | 30,000                 | 10,000                      |
| Ray   | 30,000                 | 50,000                      |

The partnership operates in a state that has adopted the Uniform Partnership Act.

**Required:**

- Determine the amount of cash each partner will receive in liquidation and how much cash each partner must contribute to the firm, given their personal positions.
- Determine the amounts that the personal creditors will receive from personal assets and any distribution from the partnership.

**PROBLEM 16-5 Advance Cash Distribution Plan LO 5****Part A**

Baker, Strong, and Weak have called on you to assist them in winding up the affairs of their partnership. You are able to gather the following information.

- The trial balance of the partnership at June 30, 2014, is as follows.

|                           | <i>Debit</i>     | <i>Credit</i>    |
|---------------------------|------------------|------------------|
| Cash                      | \$ 6,000         |                  |
| Accounts Receivable       | 22,000           |                  |
| Inventory                 | 14,000           |                  |
| Plant and Equipment (net) | 99,000           |                  |
| Baker, Advance            | 12,000           |                  |
| Weak, Advance             | 7,500            |                  |
| Accounts Payable          |                  | \$ 17,000        |
| Baker, Capital            |                  | 67,000           |
| Strong, Capital           |                  | 45,000           |
| Weak, Capital             |                  | 31,500           |
| Total                     | <u>\$160,500</u> | <u>\$160,500</u> |

- The partners share profits and losses as follows: Baker, 40%; Strong, 40%; and Weak, 20%.
- The partners are considering an offer of \$100,000 for the accounts receivable, inventory, and plant and equipment as of June 30. The \$100,000 would be paid to the partners in installments, the number and amounts of which are to be negotiated.

**Required:**

Prepare an advance cash distribution plan as of June 30, 2014. Prepare a schedule to show how the potential cash (\$106,000) would be distributed as it becomes available.

**Part B**

Assume the facts in Part A except that the partners liquidate in stages instead of accepting the offer of \$100,000. Cash is distributed to the partners at the end of each month.

A summary of the liquidation transactions follows.

*July*

\$16,500—collected on accounts receivable; balance is uncollectible.

\$10,000—received for the entire inventory.

\$ 1,000—liquidation expenses paid.

\$ 8,000—cash retained in the business at the end of the month.

*August*

\$ 1,500—liquidation expenses paid.

As part payment of his capital interest, Weak accepted a piece of special equipment that he developed that had a book value of \$4,000. The partners agreed that a value of \$10,000 should be placed on the machine for liquidation purposes.

\$ 2,500—cash retained in the business at the end of the month.

*September*

\$75,000—received on sale of remaining plant and equipment.

\$ 1,000—liquidation expenses paid.

No cash retained in the business.

**Required:**

Prepare a schedule of cash payments as of September 30, 2014, showing how the cash was actually distributed. Use the advance cash distribution plan developed in Part A where appropriate.

(AICPA adapted)

**PROBLEM 16-6 Statement of Changes in Partners' Capital and Liquidation LO 3**

Mark Malone, Pete Patton, and Sally Spencer formed a partnership on January 1, 2014. Their original capital investments (all cash) were \$140,000, \$160,000, and \$100,000, respectively. During the first year of operations, Mark withdrew \$30,000, and the partnership reported a net income of \$60,000. The partnership agreement stipulates that all income and losses are to be divided in the ratio of the original capital investments.

At the beginning of the second year, the partners decided to liquidate the business because of a disagreement. The assets and liabilities on January 2, 2015, were as follows: Cash, \$37,000; Accounts Receivable, \$129,000; Inventory, \$188,000; Land, \$85,000; Building (net), \$180,000; Furniture and Fixtures (net), \$30,000; Accounts Payable, \$74,000; and Mortgage Payable, \$145,000. The inventory was sold for three-quarters of its book value, the furniture and fixtures brought in \$10,000, and \$92,000 of the accounts receivable were collected. The remaining receivables were uncollectible. After the losses were allocated according to the partnership agreement and the accounts payable were paid in full, Pete accepted the land and building at book value and assumed the mortgage payable at book value as partial settlement of his capital interest. The cash balance was then distributed to the partners.

**Required:**

- A. Prepare a statement of changes in partners' capital for the year ended December 31, 2014.
- B. Prepare the journal entries to close the Drawing and Income Summary accounts for 2014.
- C. Prepare a schedule of partnership liquidation.
- D. Prepare the journal entries to record the liquidation activities.

**PROBLEM 16-7 Incorporation of a Partnership LO 6**

Jan and Sue have engaged successfully as partners in their law firm for a number of years. Soon after their state's incorporation laws are changed to allow professionals to incorporate, the partners decide to organize a corporation to take over the business of the partnership.



The after-closing trial balance for the partnership is as follows:

| <b>After-Closing Trial Balance</b>        |              |               |
|---|--------------|---------------|
| <b>December 31, 2014</b>                  |              |               |
|   | <i>Debit</i> | <i>Credit</i> |
| Cash                                      | \$15,000     |               |
| Accounts Receivable                       | 32,400       |               |
| Allowances for Uncollectibles             |              | \$ 2,000      |
| Prepaid Insurance                         | 800          |               |
| Office Equipment                          | 30,200       |               |
| Accumulated Depreciation                  |              | 12,600        |
| Jan, Loan (outstanding since 2006, at 5%) |              | 6,400         |
| Jan, Capital (50%)                        |              | 29,400        |
| Sue, Capital (50%)                        |              | 28,000        |
|   | \$78,400     | \$78,400      |

Figures shown parenthetically reflect agreed profit- and loss-sharing ratios.

The partners have hired you as an accountant to adjust the recorded assets and liabilities to their market values and to close the partners' capital accounts to the new corporate capital stock. The corporation is to retain the partnership's books, and the assets of the partnership should be taken over by the corporation in the following amounts:

|                              |          |
|------------------------------|----------|
| Cash                         | \$15,000 |
| Accounts receivable          | 32,400   |
| Allowance for uncollectibles | 2,900    |
| Prepaid insurance            | 800      |
| Office equipment             | 16,000   |

Jan's loan is to be transferred to her capital account in the amount of \$6,600.

**Required:**

- A. Prepare the necessary journal entries to express the agreement described.
- B. Prepare the entries to record the issuance of shares to Jan and Sue, assuming the issuance of 400 shares (par value \$100) of stock to Jan and Sue.

**PROBLEM 16-8 Discussion Case with Ethical Issue LO 6**

Alan Norwood is currently a senior associate with the law firm of Butler, Starns, and Madden (BSM). His compensation currently includes a salary of \$155,000, and benefits valued at \$5,000. BSM is considered among the strongest of local firms, with assets of \$10 million (cash \$2,000,000, and accounts receivables \$8,000,000), liabilities of \$7.5 million, and 11 partners.

Alan anticipates admission to the partnership on July 1 of this year. The senior managing partner, Jane Butler, has had preliminary discussions with Alan in which the senior partner proposed the following:

1. A 5% interest in BSM capital and profits in recognition of Alan's commitment to the firm and in exchange for a capital investment by Alan of \$150,000. This 5% interest would be acquired from the other partners.
2. Alan's compensation will consist of a monthly withdrawal of \$18,000 and benefits valued at \$5,000 annually. Monthly withdrawals approximate firm profits, but any unpaid profits will be distributed as a bonus to Alan after the end of each partnership year.

On March 1, only one month prior to Alan's final negotiation meeting for entry into the partnership, Mary, one of the junior associates, discreetly informed Alan that the firm was drawing up documents for Hugh Starns' retirement. Hugh has a 5% interest in the firm's capital and profits with a book value of \$125,000. The partners have agreed upon a \$75,000 cash settlement of the interest held by Mr. Starns. (Of the other 10 partners, numbers 1 through 9 hold 10% interests, and number 10 holds a 5% interest).

**Required:**

- A. Assume Mr. Starns retires with his \$75,000 settlement, and Alan is admitted to the partnership as proposed.
  - (1) Prepare journal entries to record the retirement and admission.
  - (2) Discuss the factors Alan needs to consider in evaluating whether he has improved his annual compensation from the firm. Although this is not a tax course, include a discussion of the various tax issues.

- (3) Should Alan be concerned regarding the impending retirement and settlement of Mr. Starns' capital account assuming Alan is confident that he will be able to match the revenue-generating ability of Mr. Starns?
- B.** Assume instead that Alan is so disturbed by the impending departure of Mr. Starns that he decides to join Mary, the junior associate, in leaving the firm to form their own law partnership. Both Alan and Mary feel confident that during their tenures at BSM they have developed such good working relationships with their clients that the majority of their clients will follow them to the new firm.
- (1) Should Alan and Mary have any hesitation in quietly recruiting BSM clients to "follow them" to the new law firm?
- (2) Can the partners of BSM prevent such recruiting of clients based on the claim that these clients are BSM "property"?
- C.** Assume instead that the firm encounters difficulties from which it is unable to recover, and in April, the decision is made to liquidate the firm. It is discovered that Mr. Starns has (in violation of the partnership agreement) taken draws which reduced firm cash and his capital account by \$130,000. However, BSM owes Mr. Starns \$10,000 for a separate loan made to the firm some 10 years ago. As of May 1, the firm had unallocated profits of \$25,000, and cash had also increased by \$25,000.
- (1) Assuming that the provisions of UPA Section 40(b) are adhered to strictly, prepare entries to record the distributions. Assume that Mr. Starns is insolvent.
- (2) If the other 10 partners are aware that Starns' capital account will take on a debit balance, can they rightfully hold repayment of the balance due to Starns for the \$10,000 loan contingent on his reimbursement of his capital account's debit balance? Does this violate UPA Section 40(b)? On what basis can the partners justify their action (if challenged)?

## Chapter 16 – Review Questions

The review questions accompanying this course are designed to assist you in achieving the course learning objectives. The review section is not graded; do not submit it in place of your qualified assessment. While completing the review questions, it may be helpful to study any unfamiliar terms in the glossary in addition to course content. After completing the review questions, proceed to the review question answers and rationales.

104. Assuming the partnership agreement does not have explicit provisions for liquidation, when assets of the partnership are sold in liquidation:
- The resulting gain or loss must be immediately closed to the partner capital accounts.
  - The resulting gain or loss should be run through the normal allocation of salaries or interest and closed to the partner capital accounts.
  - The resulting gain or loss is part of the normal income statement preparation process so would follow the normal monthly close process.
  - The resulting gain or loss can be accumulated in one account and then closed to the partner capital accounts in the normal ratios for income distribution excluding any provisions for guaranteed payments, salary, or interest.
105. If a partner has a negative capital balance:
- There is no “right of offset” if there is also a loan outstanding to that partner.
  - The partner must contribute assets to the partnership in order to bring the capital account to zero prior to dissolution.
  - It is considered a liability of the partnership.
  - And cannot contribute assets to offset it, the other partners will have to absorb the realization loss in their normal profit/loss ratio.
106. The trial balance for the ABC Partnership before bankruptcy is:  
Cash \$20,000, noncash assets \$200,000, liabilities \$30,000, A capital \$100,000, B capital \$60,000, C capital \$30,000. The partners share profits and losses 40:40:20 for A, B and C respectively. If the noncash assets are sold for \$100,000 cash, determine the amount of cash payout (if any) or balance owed to the partnership for partner A.
- (\$40,000).
  - \$0.
  - \$20,000.
  - \$60,000.

107. The trial balance for the ABC Partnership before bankruptcy is: Cash \$20,000, noncash assets \$200,000, liabilities \$30,000, A capital \$100,000, B capital \$60,000, C capital \$30,000. The partners share profits and losses 40:40:20 for A, B and C respectively. If the noncash assets are sold for \$50,000 cash and the no partner is able to contribute additional cash to cover deficit balances, determine the amount of cash payout (if any) or balance owed to the partnership for partner A.
- a. (\$40,000).
  - b. \$0.
  - c. \$40,000.
  - d. \$60,000.

## Chapter 17 – Introduction to Fund Accounting

### Learning Objectives

After completing this section of the course, you will be able to:

- Recognize differences between a nonbusiness organization and a profit-oriented enterprise.
- Identify the role of fund accounting as well as the organizations which promulgate standards for the entities using fund accounting.
- Identify the basis of financial statements for government entities, noting the relevant Concepts Statements which underlie the financial statements.
- Recognize differences among the concepts of revenues, expenses, and expenditures as used in profit-oriented entities and as used for expendable fund entities.
- Identify the classification of funds within various organization and differentiate between revenues and other resource inflows and expenditures and other resource outflows for fund accounting.
- Note the critical events in the use of financial resources of an expendable fund.
- Identify how capital expenditures are recorded in an expendable fund.
- Cite the classifications of fund balance under GASB Statement No. 54.
- Note the role of the general fund.
- Compare and contrast the consumption and purchases methods of accounting for inventories (and other prepaid items).

# INTRODUCTION TO FUND ACCOUNTING

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## CHAPTER CONTENTS

- 17.1 CLASSIFICATIONS OF NONBUSINESS ORGANIZATIONS
- 17.2 DISTINCTIONS BETWEEN NONBUSINESS ORGANIZATIONS AND PROFIT-ORIENTED ENTERPRISES
- 17.3 FINANCIAL ACCOUNTING AND REPORTING STANDARDS FOR NONBUSINESS ORGANIZATIONS
- 17.4 FUND ACCOUNTING
- 17.5 COMPREHENSIVE ILLUSTRATION—GENERAL FUND
- 17.6 REPORTING INVENTORY AND PREPAYMENTS IN THE FINANCIAL STATEMENTS

For the seventeenth consecutive year, the Government Accountability Office (GAO) issued a disclaimer of opinion (inability to express an opinion) on the accrual-based government financial statements of the United States. Most of the 24 governmental agencies required to issue audited financial statements received unqualified audit opinions for 2013. The Department of Defense (DOD) received a disclaimer and the Department of Housing and Urban Development received a qualified opinion (indicating most matters have been dealt with adequately, but there are a few exceptions). This is an improvement over 2010, when four of the 24 agencies, including the Department of Homeland Security, received either disclaimers or qualified opinions. The GAO mentioned that disclaimers were issued to the DOD because of material weakness in internal control, preventing the GAO from determining whether property, plant, and equipment and inventory were properly recorded.

In contrast to the prior chapters in the textbook, the federal government's financial statements are not governed by the FASB and fall under the category of nonbusiness organizations. This is the focus of the three remaining chapters of the textbook.

Accounting for nonbusiness organizations is referred to as **fund accounting**. Nonbusiness organizations are economic entities that are organized to provide a socially desirable service without regard to financial gain. In contrast, business enterprises are designed to earn a return on investment for equity investors, operate in a competitive market, and face liquidity concerns.

The purpose of this chapter is to introduce the reader to fund accounting concepts and procedures. However, it is first necessary to present a brief introduction to the types and characteristics of organizations that use fund accounting concepts.

## 17.1 CLASSIFICATIONS OF NONBUSINESS ORGANIZATIONS

Nonbusiness organizations may be separated into five major classifications, as follows:

1. *Governmental units.* Governmental units include federal, state, and local governmental entities. Local governmental units include counties, townships, municipalities, school districts, and special districts. Special districts include organizational units such as port authorities, industrial development districts, sanitation districts, and soil and water conservation districts.
2. *Hospitals and other health care providers.*
3. *Colleges and universities.*
4. *Voluntary health and welfare organizations.* Voluntary health and welfare organizations are organizations that derive their revenue from voluntary contributions of the general public to be used for purposes connected with health, welfare, or community services. Examples of such organizations include heart associations, family planning councils, mental health associations, and foundations for the blind.
5. *All other nonbusiness organizations.* Other nonbusiness organizations take a variety of forms. They include such organizations as trade associations (Electrical Contractors Association), professional associations (State Society of Certified Public Accountants), performing arts organizations (the Tennessee Performing Arts Center), museums, religious organizations, and research and scientific organizations.

## 17.2 DISTINCTIONS BETWEEN NONBUSINESS ORGANIZATIONS AND PROFIT-ORIENTED ENTERPRISES

**LO 1** Nonbusiness organizations versus profit-oriented enterprises.

The most obvious characteristic that distinguishes a *nonbusiness* organization from a *profit-oriented* enterprise is the absence of a primary goal to earn a profit. The services performed by nonbusiness organizations are based on social need rather than on the profit motive. Thus, their financial statements are sometimes referred to as *not-for-profit*, or *nonprofit, financial statements*. Other characteristics of nonbusiness organizations also distinguish them from profit-oriented enterprises. For example, persons who contribute resources to a nonbusiness organization do not receive equity interests in the net assets of the organization. Nonbusiness organizations seldom finance their operations through charges to the individuals benefiting from the service. Thus, they must rely on political action (for example, tax levies) or fundraising campaigns to sustain their activities and replenish their financial resources.

In addition, tax levies and voluntary contributions cannot be justified based on the value of the nonbusiness organization's services to the individuals contributing the money. Those who contribute resources to nonbusiness organizations do not necessarily benefit proportionately or at all from the services provided by such organizations. Because of these characteristics, the net income concept cannot be used to measure the effectiveness of the management of resources dedicated to nonbusiness objectives. Therefore, the income determination model of accounting is generally not applicable to such organizations.

In profit-oriented enterprises, net income functions as an implicit regulator in the sense that (1) in the long run, the organization must operate profitably to survive and (2) in the short run, failure to operate profitably will affect management's decisions and actions and perhaps whether management will be replaced. In the absence of this implicit regulator, stringent controls are often imposed to regulate the allocation and utilization of the financial resources of nonbusiness organizations. Such controls may be legally imposed (as in the case of governmental activities) or they may be imposed through formal action of the governing board.

**IN THE NEWS**  
 "The government is like a baby's alimentary canal, with a healthy appetite at one end and no responsibility at the other."—Ronald Reagan<sup>1</sup>

<sup>1</sup> Quoted in *New York Times Magazine*. From *The Merriam-Webster Dictionary of Quotations*, Merriam-Webster, Inc.: 1996. *Infopedia*, SoftKey Multimedia Inc., 1996.

Restrictions or limitations on the use of resources may be directly imposed by the individuals or groups that contribute such resources. For example, most nonbusiness organizations receive gifts, grants, or endowments that are only used for specific purposes designated by the donor, such as construction of buildings, research activities, scholarships, operation of parks, recreation programs, or the acquisition of land. In addition, the donor may stipulate that the principal of the gift remain intact and that only the income on the invested principal can be used for the purposes designated by the donor.

*In order to account for these legally imposed, externally imposed, and self-imposed restrictions or limitations on the utilization of their resources, nonbusiness organizations have generally adopted the concepts of fund accounting. In essence, an organization that uses fund accounting separates the assets, liabilities, and residual equity (known as a fund balance) into distinct funds organized for specific activities or objectives. In fund accounting, each fund consists of a self-balancing set of accounts and constitutes a separate accounting entity created and maintained for a specific purpose. Accounting for the inflow and outflow of resources of each fund is designed so that they can be compared with the approved or stipulated resource flows for that fund.*

### 17.3 FINANCIAL ACCOUNTING AND REPORTING STANDARDS FOR NONBUSINESS ORGANIZATIONS

The potential users of the financial reports of nonbusiness organizations include taxpayers, contributors, grantors, creditors, employees, managers, directors and trustees, service beneficiaries, financial analysts and advisers, brokers, underwriters, economists, taxing authorities, regulatory authorities, legislators, the financial press and reporting agencies, labor unions, trade associations, researchers, teachers, and students.

Unlike for-profit organizations and depending on the type of nonbusiness organization, the accounting standards are not established by one unique standard-setting body.

Until 1980, the Financial Accounting Standards Board (FASB) and its predecessor bodies gave little, if any, attention to standards of reporting for nonbusiness organizations. In 1980, however, the FASB issued *Statement of Financial Accounting Concepts No. 4*, “Objectives of Financial Reporting by Nonbusiness Organizations.” In that statement, the Board identified providers such as members, taxpayers, contributors, and creditors as the most important users for purposes of establishing external financial reporting objectives for nonbusiness organizations.

In 1984, the Governmental Accounting Standards Board (GASB) was created. Like those of the FASB, the operations and financing of the GASB are overseen by the Financial Accounting Foundation. The GASB is responsible for establishing financial accounting standards for all state and local governmental bodies, and the FASB is responsible for establishing financial accounting standards for all other nonbusiness organizations. Accounting and reporting standards for governmental units are described and illustrated in this chapter and in Chapter 18. Accounting and reporting standards for nongovernment nonbusiness organizations are described and illustrated in Chapter 19.

Illustration 17-1 indicates the standard-setting body (the GASB or the FASB) primarily responsible for determining the accounting standards for various types of nonbusiness organizations. Having two separate bodies establishing accounting standards can be confusing for users of the financial statements. For instance, the financial statements of a state university, such as the University of Tennessee, are prepared using GASB rules, while a private university, such as Vanderbilt University, prepares its financial statements under the guidance of the FASB. Currently, there are significant accounting differences in rules between the FASB and the GASB. It is important for users of not-for-profit financial statements to have an understanding of the standards provided by both the GASB and the FASB. In this chapter and Chapter 18, the GASB rules are illustrated for governmental units; in Chapter 18, the hierarchy

#### IN THE NEWS

“It was once said that the moral test of government is how that government

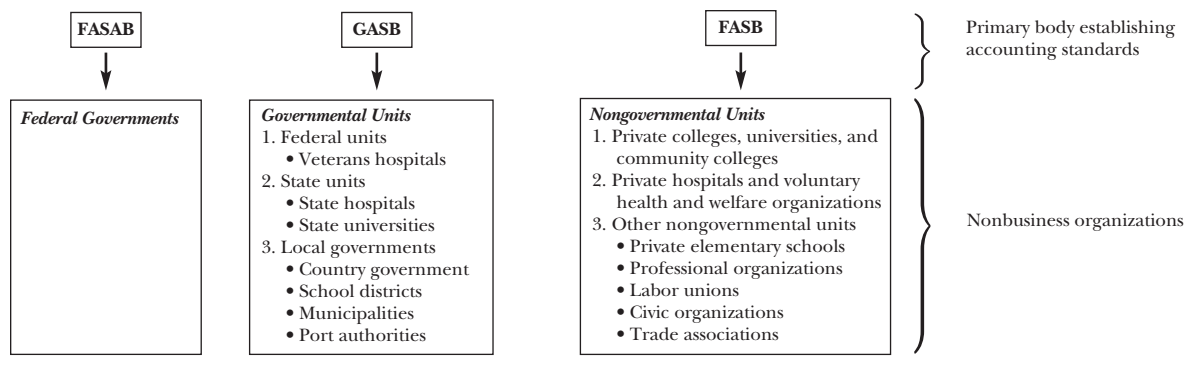
treats those who are in the dawn of life, the children; those who are in the twilight of life, the elderly; and those who are in the shadows of life—the sick, the needy and the handicapped.”—Hubert H. Humphrey<sup>2</sup>

<sup>2</sup> Excerpt from a 1977 speech. From *The Merriam-Webster Dictionary of Quotations*, Merriam-Webster, Inc.: 1996. Infopedia, SoftKey Multimedia Inc., 1996.



## ILLUSTRATION 17-1

## Financial Accounting Standards for Nonbusiness Organizations



of generally accepted reporting standards for governmental entities is described; and in Chapter 19, the FASB's standards for other nonbusiness organizations are presented.

The Federal Accounting Standards Advisory Board (FASAB) issued Statement of Federal Financial Accounting Standards 36, "Reporting Comprehensive Long-Term Fiscal Projections for the U.S. Government," on September 28, 2009. This standard has been given the title of the "sustainability project." FASAB is responsible for promulgating accounting standards for the U.S. government. Given the recent variability of the economy, readers of the financial statements of the federal government are interested in assessing whether future budgetary resources will be sufficient to sustain public services and to meet obligations as they become due (such as Medicare and Social Security). The FASAB believes that such an assessment is an important objective of financial reporting for the government. Thus, prospective information about receipts and spending are required. In addition, the impact of these receipts and spending on debt must be disclosed.

Specifically, the new standard requires:

1. A basic financial statement in the consolidated financial report of the U.S. government presenting for all the activities of the federal government:
  - a. The present value of projected receipts and non-interest spending under current policy without change
  - b. The relationship of these amounts to projected Gross Domestic Product (GDP)
  - c. Changes in the present value of projected receipts and non-interest spending from the prior year
2. Required Supplementary Information (RSI) that explains and illustrates
  - a. The projected trends in:
    - (1) The relationship between receipts and spending
    - (2) Deficits or surpluses
    - (3) Treasury debt held by the public as a share of GDP
  - b. Possible results using alternative scenarios
  - c. The likely impact of delaying corrective action when a fiscal gap exists
3. Disclosures that explain and illustrate:
  - a. The assumptions underlying the projections
  - b. Factors influencing trends
  - c. Significant changes in the projections from period to period

## GASB CONCEPTUAL FRAMEWORK

The GASB has issued five statements on the conceptual framework:

*Concepts Statement No. 1:* "Objectives of Financial Reporting"

*Concepts Statement No. 2:* "Service Efforts and Accomplishments Reporting"

*Concepts Statement No. 3:* "Communication Methods in General Purpose External Financial Reports That Contain Basic Financial Statements"

*Concepts Statement No. 4:* Elements of Financial Statements

*Concepts Statement No. 5:* Service Efforts and Accomplishments Reporting—an amendment of *GASB Concepts Statement No. 2*

*Concepts Statement No. 6:* Measurement of Elements of Financial Statements

In the first concepts statement, the stated objectives of financial reporting are:

- a. To assist in meeting the government's duty to be publicly accountable by providing information for users to assess if current-year revenues are sufficient to pay for current-year services.
- b. To determine if the government's resources are obtained and used in accordance with legal or contractual requirements.

Financial reporting should allow users to evaluate operating results by providing information about the sources and uses of resources and how the government's activities are financed. In addition, information should be provided about the impact of operations on the financial position of the government.

*Concepts Statement No. 2* develops the objective of clarifying the reporting of service efforts and accomplishments (SEA); it also identifies its elements and characteristics. The objective of SEA reporting is to provide more complete information about a governmental entity's performance than can be provided by the traditional financial statements. The elements of SEA reporting include categories of output and outcome indicators as well as efficiency and cost outcome indicators. SEA information should focus primarily on measures of service accomplishments and measures of the relationships between service efforts and service accomplishments. SEA information also should meet the characteristics of relevance, understandability, comparability, timeliness, consistency, and reliability.

In *Concepts Statement No. 3*, a conceptual basis for determining the methods to present information within general-purpose external financial reports is provided. Communication methods include recognition in basic financial statements, disclosure in the footnotes, and presentation of supplementary information (whether required or not). This Concepts Statement also addresses the necessary elements for the effective communication of relevant and reliable messages within financial reports. This includes a clarification of the roles and responsibilities of the preparer, the user, and the GASB for the effective communication of information.

In *Concepts Statement No. 4*, seven elements of *Statements of Financial Position* are defined. These are:

- *Assets*—resources with present service capacity that the entity presently controls
- *Liabilities*—present obligations to sacrifice resources or future resources that the entity has little or no discretion to avoid
- *A deferred outflow of resources*—a consumption of net resources by the entity that is applicable to a future reporting period
- *A deferred inflow of resources*—an acquisition of net resources by the entity that is applicable to a future reporting period
- *Net position*—the residual of all other elements presented in a statement of financial position
- *Outflow of resources*—a consumption of net resources by the entity that is applicable to the reporting period
- *Inflow of resources*—an acquisition of net resources by the entity that is applicable to the reporting period

In *Concepts Statement No. 5*, four sections of *Concept Statement No. 2* were modified and one section was deleted. *Concept No. 2* deals with service efforts and accomplishment reporting.

*Concepts Statement No. 6* addresses the measurement of elements of financial statements. The statement addresses the initial amount assigned when an asset was acquired or a liability incurred and the amount assigned if an asset or liability is remeasured as of the financial statement date. The four measurement attributes include historical cost, fair value, replacement cost, and settlement amount. The concepts statement addresses circumstances when one measurement attribute is more appropriate than the others.

### *The Structure of Fund Balance Sheets—Deferred Inflow/Outflow of Resources*

While Concept Statement No. 4 defined deferred outflows/inflows, no prior standard provided any guidance on these elements. GASB Statements No. 63 and 65 changed this and the structure of governmental balance sheets. GASB Statement No. 63 provided a standard format to incorporate deferred inflows/outflows. Deferred outflows are reported in a separate section following assets, while deferred inflows are reported in a separate section following liabilities. Thus, for government-wide balance sheet and government funds similar to business enterprises, assets plus deferred outflows less liabilities and deferred inflows equal net position. For all remaining government funds, assets plus deferred outflows less liabilities and deferred inflows equal fund balance. Net position replaces the term net assets, and the use of the term deferred is restricted for use in labeling deferred inflow/outflows of resources. Intuitively, deferred outflows are similar to deferred charges and deferred inflows are similar to unearned revenues.

#### IN THE NEWS

The City has deferred outflows and deferred inflows of resources. The deferred outflows of resources are a consumption of net assets by the City that is applicable to a future reporting period and include the accumulated decreases in fair value of derivative instruments and the unamortized amounts for losses on the refunding of bond debt. The deferred inflows of resources are an acquisition of net assets by the City that is applicable to a future reporting period and consist of the accumulated increases in fair value of derivative instruments.<sup>3</sup>

## 17.4 FUND ACCOUNTING

### LO 2 The role of fund accounting.

Fund accounting is designed primarily to meet internal reporting and control objectives; thus fund accounting may not be sufficient in itself to meet the objectives of financial reporting by nonbusiness organizations. Nevertheless, it does provide a basis for determining the fiscal responsibility and status of the organization and the compliance of administrators with the approved or stipulated receipt and utilization of financial resources. Therefore, fund accounting is an important means of meeting several of the accounting, control, and reporting objectives of most nonbusiness organizations.

Fund entities may be classified in a number of different ways. For example, they may be classified as expendable fund entities, fiduciary fund entities, and proprietary fund entities. *Expendable fund entities* are the funds most closely associated with basic fund accounting concepts, while *proprietary fund entities* are the nonbusiness funds that are most similar to business entities. *Fiduciary funds entities* are used to follow the activities in which the government acts as an agent or trustee for resources that belong to others, such as employee pension plans.

### Expendable Fund Entities

Expendable fund entities consist of net *financial resources* that are dedicated to a specified use. Thus, separate expendable fund entities are established based on the purpose for which financial resources may or must be used. Examples of funds set up for specific purposes include a capital projects fund created to account for new highway construction or a debt service fund created to account for interest and principal payments on long-term debt. Thus within a government, many funds are established. For instance, the city of Nashville reports 22 individual governmental funds, eight of which are considered major funds with the remaining funds aggregated for presentation.

### LO 3 Differences in applications of revenues, expenses, and expenditures.

Financial resources consist of cash and claims to cash such as receivables and investments in marketable securities. The difference between the financial resources of an expendable fund entity and claims against those resources is referred to as the fund balance. Thus, the statement of financial position, or balance sheet, for an expendable fund entity

<sup>3</sup> City of Atlanta, Comprehensive Annual Financial Statement (CAFR) 12-12-2013.

reflects the financial resources of the fund, the claims against those resources, and the fund balance. Typically, assets and liabilities are not subdivided into current and noncurrent assets and liabilities. At a particular time the fund balance represents the net financial resources that are available for expenditure for the specified purposes or objectives for which the fund was created.

The financial resources of an expendable fund entity are not intended to be maintained intact. Ordinarily it is intended that they will be expended annually or over some other specified time period in order to carry out the objectives for which the fund was created. The measurement focus is on the flow of current financial resources in contrast to proprietary fund accounting, where the measurement focus is on the flow of economic resources.

The relevant measures of the operations of expendable fund entities are not, therefore, revenue, expense, and net income, but rather increases in fund resources, decreases in fund resources, and the change in the fund balance. The accounting model for the operating statement of an expendable fund entity is:

$$\begin{array}{r} \text{Financial resources inflows (by source)} \\ - \text{Financial resources outflows (by function)} \\ \hline = \text{Change in fund balance} \end{array}$$

Thus, increases in fund resources include not only revenues, but also items such as proceeds from debt issuances and transfers from other funds. Decreases in fund resources include expenses, other expenditures, and transfers to other funds. However, the term “expense” as defined under GAAP is typically not used with fund accounting. Instead the term “expenditure” includes expenses as well as other items giving rise to cash (or other resource) outlays, without regard to timing or the matching with revenue that is an integral part of income determination under GAAP. Conversely, expenses may include items that are not current expenditures because of the timing of the outlay. The operating results of expendable fund entities are thus measured in terms of inflow, outflow, and balances of net current financial resources assigned to the fund. The appropriate operating statement for such entities is essentially a statement of changes in net financial resources. To provide a basis for comparison, both budgeted and actual resource flows may be presented in the operating statement or in related schedules. Later in this chapter, we describe the modified accrual basis commonly used in fund accounting, and the need for accrual-based reporting under *GASB Statement No. 34*.

In summary, in accounting for expendable funds, the emphasis is changed from matching revenues and expenses to a comparison of the *actual* inflows and outflows of financial resources with *stipulated* or *approved* resource flows. The objective in accounting for expendable fund entities is to measure the extent to which management has *complied* with the regulations or restrictions that govern the use of expendable fund resources. A secondary objective is to assist management with such compliance.

## Restricted and Unrestricted Fund Entities

Expendable fund entities may be further classified as restricted or unrestricted. This classification is usually applicable to nonbusiness organizations other than governmental units. The unrestricted expendable fund entity includes the net current financial resources of the nonbusiness organization that are available to carry out the primary or general activities of the organization at the discretion of the governing board. Current financial resources that are restricted by donors or other outside agencies for specific current operating purposes are included in restricted expendable fund entities. The term “restricted” refers to *resources that bear a legal restriction as to use imposed by parties outside the organization*. The primary purpose of this distinction is to assist in the determination of the current financial resources that are available for use at the discretion of the governing board and those over which the governing board has little, if any, discretion as to use because of *externally* imposed restrictions. As illustrated in Chapter 19, most nonbusiness organizations other than governmental units have one unrestricted fund and one or more restricted funds.

## Proprietary Fund Entities

Proprietary fund entities are used to account for the activities of nonbusiness organizations that are similar to those of business enterprises. Many nonbusiness organizations engage in quasi-commercial activities. The operation of an electric or water utility by a municipality and the rental of real estate by a religious organization are examples of such activities. Accordingly, even though these activities are accounted for in separate fund entities, relevant accounting measurements and reports are similar to those applicable to profit-oriented enterprises and focus on the determination of net income, financial position, and cash flows. The city of Nashville reports three major proprietary funds; two of these are Enterprise funds (the Department of Water and Sewage Services and District Energy Systems) and an Internal Service Fund (providing service to other agencies of the government such as fleet management, information systems, etc.)

The accounting model for the statement of financial position of a proprietary fund entity is as follows:

$$\text{Assets} + \text{Deferred outflows of resources} = \text{liabilities} + \text{Deferred inflows of resources} + \text{Net Position}$$

The accounting model for the statement of revenues, expenses, and changes in fund net position of a proprietary fund entity is presented as follows using the all-inclusive format:

$$\begin{aligned} & \text{Operating revenues} \\ & \text{Less: operating expenses} \\ = & \text{Operating income} \\ & \text{Plus (minus) : nonoperating revenues and expenses} \\ & \text{Income before contributions and transfers} \\ & \text{Plus (minus) : Contributions and transfers} \\ = & \text{Increases (decreases) in net position} \\ & \text{Plus : net position—beginning of period} \\ = & \text{Net position—end of period} \end{aligned}$$

## Fiduciary Fund Entities

Fiduciary funds include both trust and agency funds. Trust funds are funds where the government acts as trustee for an individual or organization. An example of a trust fund might be a pension trust fund in which the fund accounts for the accumulation of resources for pension benefit payments to employees, police, and firefighters of the city. An agency fund accounts for resources of various taxes, bonds, and other receipts held for individuals, outside organizations, and/or other funds.

The city of Nashville reports two fiduciary funds; the Pension (and other employee benefit) Trust funds (used to account for the assets and liabilities held by the government to provide retirement and disability benefits for employees and retirees) and an Agency Fund (used for various activities such as funds held by the Sheriff's Department for inmates, funds held by the Planning Commission for performance bonds for contractors).

## Budgetary Fund Entities (Governmental Funds)

In the traditional compliance model of reporting on the operations of governmental units, actual and approved (or stipulated) inflows and outflows of resources are compared. Approved resource flows are incorporated into annual budgets. In some instances the budget for an expendable fund entity is so important (often because of legal requirements) to management control of fund resources that entries for budgeted revenues and expenditures are recorded in the books. Fund entities in which the budget is formally incorporated into the accounting records are sometimes referred to as *budgetary funds*. (This is illustrated later in the chapter.)

The preparation, use, and importance of budgets for governmental units cannot be overemphasized. The annual budget for a governmental unit is usually prepared by the executive branch of the governmental unit. It is then presented to the legislative branch for consideration and enactment. In the case of annually levied taxes such as property taxes, adoption of budgeted revenue amounts may require the enactment of enabling legislation. In the case

of continually levied taxes such as sales taxes and income taxes, no new legislation authorizing the tax is ordinarily required for the adoption of the budgeted amounts of revenue.

When budgeted expenditures are enacted into law, they are referred to as **appropriations**. Appropriations represent the maximum expenditures that are authorized by the legislature. As such, they represent (by budget category) amounts that cannot be legally exceeded unless subsequently amended by the legislative body. Accordingly, the accounting system must provide administrators of governmental units with timely information as to actual expenditures and allowable expenditures (appropriations) by budget category. In addition, financial reports must be prepared in such a way that the legislature or its representatives can determine that the spending limits authorized by it have not been exceeded. The approved budget may, therefore, be formally recorded in the accounting records of the appropriate fund(s). Such formal budgetary account integration is useful in assisting in the control and administration of fund resources.

## Basis of Accounting

The basic financial statements of a government include two sections; government-wide financial statements and fund financial statements. Government-wide financial statements report on all the nonfiduciary activities of the government and provide both short- and long-run information about the financial status of the government. In addition to reporting the government funds statements on a modified accrual basis, a **government-wide Statement of Activities** and a **government-wide Statement of Net Position** are required.<sup>4</sup> The government-wide financial statements are prepared using the economic resources measurement concept and the accrual basis of accounting (this is also appropriate for proprietary and fiduciary fund entities.).

Governmental fund (expendable funds) financial statements are reported using the current financial resources concept and the **modified accrual basis** of accounting. Financial resources of an expendable fund entity include cash, receivables, and securities that can be converted into cash. Revenues are recognized when they are measurable and available. Revenues are available when they are collectible within the current period or soon enough to pay liabilities of the current period. Governments are required to disclose the length of time used to define “available for use” for purposes of defining revenues. The cash basis of accounting is not appropriate. Under the modified accrual approach, it is not sufficient for an economic event to occur to affect the operating statement. **Instead, the related cash flow must occur within a period short enough to have an effect on current spendable resources.** In other words, revenues must be both measurable and available to liquidate liabilities of the current period.

The term “expenditure” rather than “expense” is used for governmental funds. Expenditures are recorded when a liability is incurred, similar to accrual accounting. However, because governments generally do not attempt to allocate costs to periods benefited and because some expenditures of the expendable fund entities are not recognized in the period in which they are incurred, the term **modified accrual accounting** is also used. Therefore, expenditures are recognizable when an event is expected to use current spendable resources (rather than future resources).

Before proceeding further, it is useful to contrast the concepts of revenue, expense, and expenditure as they are used in relation to profit-oriented entities and to expendable fund entities.

### *Profit-Oriented Entities (Income Determination)*

**Revenues**—increases in net assets resulting from the sale of goods or services.

**Expenses**—costs of resources used to produce current period revenues.

**Unusual, Infrequent, and Extraordinary Items**—Extraordinary items are items that are *both* unusual in nature and infrequent of occurrence; they are reported net of taxes. Items that are either unusual or infrequent, but not both, are shown on a separate line, if material, but are not shown net of taxes.

### RELATED CONCEPTS

Government-wide financial statements are presented on an accrual basis. Accrual accounting better assists users in assessing whether the costs of services were shifted to future periods. Also, this information assists users in determining whether a government's *financial* position has improved or deteriorated.

<sup>4</sup> Governmental Accounting Standards Board (GASB), *GASB Statement No. 34*, “Basic Financial Statements— and Management’s Discussion and Analysis—for State and Local Governments” (Norwalk, CT: June 1999).

*Expendable Fund Entities*

**Revenues**—any increase in (source of) net current financial resources *other than* increases from *other financing sources* (as defined below).

**Expenditures**—any decrease in (use of) net current financial resources *other than* decreases from *other financing uses* (as defined below); or the amount of financial resources expended during the period to carry out the operations and activities of the fund entity.

**Other Financing Sources and Uses (and Transfers)**—proceeds from debt issuances and transfers of financial resources to and from other funds.

**Special and Extraordinary Items**—Extraordinary items are both unusual in nature and infrequent of occurrence. Special items are significant transactions within the control of management that are either unusual or infrequent.

In the remainder of this chapter, fund accounting concepts are developed within the framework of state and local governmental units.



IN  
THE  
NEWS

Do you ever wonder how long it takes to issue the financial reports after the year ends? When the GASB reviewed the reports for 50 states, for the largest hundred counties and localities, and for the 50 largest independent school districts and special districts for the periods 2006 through 2008, the results were astounding, and not in a good way. The average time between year-end and issue date was a full six months for the largest local and county governments and school districts, and state governments took even longer—nearly seven months. Two percent of the largest governments took over a year. Special districts rated the best, with their average around four months.

For smaller governments, the Board drew a random sample and found an average of 8 months between year-end and date of issuance for smaller county governments and an average of 6 months for smaller local governments, similar to their larger counterparts. Smaller special districts were a bit slower than larger special districts, coming in at an average of 6 months, while smaller independent schools were about 6 weeks faster than their larger counterparts. Overall, nearly half of the smaller governments examined issued reports within 6 months, with about 7% taking over a year.<sup>5</sup>

## Classification of Revenues

### LO 4 Classification of revenues.

Revenues are classified by fund and by major revenue source. Major sources of revenue for state and local governmental units are summarized in Illustration 17-2. As shown, the number of sources of revenue available to governmental units is impressive when compared with those available to business enterprises. The City of Nashville reports ten major sources of revenue on its Statement of Revenue, Expenditures, and Changes in Fund Balances with property taxes accounting for 59% of its total revenue for the year ending June 20, 2011. The City of Atlanta reported seven major sources of revenue with property taxes accounting for only around 38% of its total revenue.

#### ILLUSTRATION 17-2

##### Major Sources of Revenue for State and Local Governmental Units

|                            |   |
|----------------------------|---|
| Property taxes             | Grants from federal, state, or local government units                       |
| Income taxes               | Shared revenues from federal, state,<br>or local government units           |
| Sales and excise taxes     | Payments in lieu of taxes from federal, state,<br>or local government units |
| Gift and inheritance taxes | Interest earned on loans and investments                                    |
| Fines and penalties        |   |
| Gifts and donations        |   |
| Forfeits                   |   |
| Licenses and permits       |   |
| Sales of property          |   |
| Charges for services       |   |

<sup>5</sup> Research brief, “The Timeliness of Financial Reporting by State and Local Governments Compared with the Needs of Users,” [www.gasb.org](http://www.gasb.org).

## Other Financing Sources

**Debt Issue Proceeds** Governmental units may finance their operations through the issuance of bonds or other debt instruments. Although debt issue proceeds are sometimes classified as revenue of a particular fund entity, they are *not revenue* from the point of view of the issuing governmental unit because of the offsetting debt. Accordingly, debt issue proceeds should be classified separately from revenue for purposes of financial reporting. Debt issue proceeds are accounted for as “other financing sources.”

**Transfers of Resources from Other Funds** Transfers of resources from other fund entities within an organization do not represent an increase in the expendable financial resources of the organization as a whole. Accordingly, even though they represent an increase in the financial resources of the recipient fund entity, they should ordinarily *be classified separately from revenue* for financial reporting purposes. Interfund operating transfers are accounted for as “other financing sources,” or “uses.”

## Recognition of Revenue

In accounting for profit-oriented enterprises, revenue is ordinarily not recognized until (1) a transaction has taken place (that is, the amount of revenue can be objectively measured) and (2) the earnings process is complete or substantially complete. Criterion 2 is not applicable to expendable fund entities. The revenue-recognition criteria for expendable fund entities can be stated as follows: ***In accounting for expendable fund entities, revenue is ordinarily not recognized until (1) it can be objectively measured and (2) it is available to finance expenditures of the current period.***

Many sources of fund revenue do not meet the criteria of measurability and availability until they are received in cash. On the other hand, significant amounts of revenue (for example, property taxes, pledges, regularly billed charges for routine services, and some types of grants) meet both criteria and are recognized as revenue prior to the receipt of cash. The application of these criteria to several significant sources of revenue of governmental units may be illustrated as follows.

**Property Taxes** Property taxes usually meet both criteria when levied. The amount of property tax is precisely determinable when levied and the amount of uncollectible taxes ordinarily can be reasonably estimated on the basis of previous experience. Thus, the amount of property tax revenue is objectively determinable at the time the taxes are levied. Ordinarily, taxes are also considered to be **available** in the period levied, even though they are collectible in a period subsequent to the levy, because (1) they provide a basis for obtaining cash resources through the issuance of tax anticipation notes<sup>6</sup> and (2) they are usually collectible early in the subsequent period and thus are available to finance current period operations.

**Income Tax and Sales Tax** Self-assessed taxes such as the income tax and the sales tax usually are not objectively measurable or available until the tax returns are filed with payment. Where the tax returns have been filed but payment is delayed, revenue should be recognized when the returns are filed, assuming that a reasonable estimate can be made of noncollectible amounts, if any. In addition, sales taxes held by merchants may be recognized as revenue before they are received by the fund entity if the measurability and availability criteria are met.

**Fines and Forfeits** The amounts of fines, forfeits, inspection charges, parking meter receipts, and so on, are not objectively determinable or available until assessed or collected and are, therefore, not normally recognized as revenue until collected.

**Sales of Property** The entire amount of proceeds from the sale of property is treated as revenue at the time of sale because expendable assets are increased and are available to finance current expenditures in the same manner as any other revenues.

### IN THE NEWS

Did the U.S. deficit increase or decrease in 2005? The answer to

this question depends on how you measure the deficit. The commonly used definition (and the one used by President Bush) is based on cash accounting and is often quoted as being \$318.5 billion. Under this measure the deficit decreased for 2005. However, using the accrual basis (which is required of private-sector firms), the deficit was \$760 billion, which was significantly worse than the \$600 billion deficit in the prior year.<sup>7</sup>

<sup>6</sup> Tax anticipation notes are notes or warrants issued in anticipation of the collection of taxes and are usually retirable only from the proceeds of the tax levy whose collection they anticipate.

<sup>7</sup> *Financial Report of the United States* (with a foreword by Representative Jim Cooper), Nelson Current, 2006.



**Pledges and Grants** A pledge to contribute resources is considered revenue at the time it is made, so long as a reasonable estimate of uncollectible pledges can be made and there is no restriction on the time period in which the pledged resources can be expended. Grants may or may not be recognized as revenue at the time the grant is authorized. If the grant is dependent on the performance of services, or if the expenditure of funds is the prime factor for determining the eligibility for the grant funds, revenue should not be recognized until the time the services are performed or the expenditures are made. Grants that are not dependent on performance or expenditure of funds should be recognized in the period in which they are authorized.

## Classification of Expenditures and Other Resource Outflows

### Lo 5 Classification of expenditures.

As mentioned earlier, an expenditure is any decrease in net current financial resources other than transfers to other funds. Thus expenditures are not matched to the production of current revenues as are expenses for profit-seeking enterprises. Expenditures may be classified by fund, by function and/or activity, by organizational unit, by character (nature of the expenditure), or by object class. Since different classifications serve different purposes, multiple classification of expenditures is usually recommended. For example, the various classifications might be illustrated as follows:

Function—Public Safety  
 Organizational Unit—Fire Department or Police Department  
 Activity—Drug Control  
 Character—Current Operating  
 Object Class—Supplies or Salaries

**Classification by Function and Activity** Typical functional classifications of expenditures for state and local governmental units are presented in Illustration 17-3. Classification by function refers to the broad purposes for which expenditures are made. Classification by activity refers to the specific types of work performed to accomplish such purposes. For example, public safety is a major function of a municipality. The *function* of public safety may be divided into *subfunctions* such as police protection, fire protection, and protective inspection. The subfunction of police protection can be classified into *activities* such as criminal investigation, vice control, patrol, custody of prisoners, and crime laboratory.

Functional and activity classifications are particularly important and are the classifications ordinarily recommended for published financial reports. In addition, as noted by the National Council on Governmental Accounting:

*Activity* classification is particularly significant because it facilitates evaluation of the economy and efficiency of operations by providing data for calculating expenditures per unit of activity.

### ILLUSTRATION 17-3

#### Functional Classification of Expenditures for State and Local Governmental Units

|                           |  |
|---------------------------|--|
| <i>General Government</i> | <i>Health and Welfare</i>                  |
| Legislative               |  |
| Judicial                  | <i>Recreation—Cultural</i>                 |
| Executive                 | Playgrounds                                |
| Elections                 | Swimming pools                             |
| Financial administration  | Golf courses                               |
|                           | Parks                                      |
|                           | Libraries                                  |
| <i>Public Safety</i>      |  |
| Police                    |  |
| Fire                      | <i>Urban Redevelopment and Housing</i>     |
| Inspection                |  |
|                           | <i>Economic Development and Assistance</i> |
| <i>Public Works</i>       |  |
| Highways and streets      |  |
| Sanitation                |  |

**ILLUSTRATION 17-4****Classification of Expenditures by Object Class**

|  |                             |
|--|-----------------------------|
| <i>Personal Services</i>                 | Printing and publications   |
| Salaries                                 | Repairs and maintenance     |
| Employee health and retirement benefits  | Insurance                   |
| Payroll taxes, etc.                      | Miscellaneous               |
| <i>Supplies</i>                          | <i>Capital Expenditures</i> |
| Office supplies                          | Land                        |
| Operating supplies                       | Buildings                   |
| Small tools                              | Improvements                |
| <i>Other</i>                             | Machinery and equipment     |
| Professional services                    | Motor vehicles              |
| Telephone and telegraph                  | Furniture and furnishings   |
| Travel                                   | Office machines             |
| Rental (equipment, buildings, machinery) |                             |
| Postage and shipping                     |                             |

That is, the expenditure requirements of performing a given unit of work can be determined by classifying expenditures by activities and providing for performance measurement where such techniques are practicable. These expenditure data, in turn, can be used in preparing future budgets and in setting standards against which future expenditure levels can be evaluated. Further, activity expenditure data provide a convenient starting point for calculating total and/or unit expenses of activities where desired, e.g., for “make or buy” and “do or contract out” decisions. Current operating expenditures (total expenditures less those for capital outlay and debt service) may be adjusted by depreciation and amortization data . . . to determine activity expense.<sup>8</sup>

**Classification by Organizational Unit and by Object Class** Classification of expenditures by organizational unit is important for management, control, and internal reporting purposes including responsibility accounting. Classification of expenditures by organizational unit is based on the departments, divisions, bureaus, or other administrative units that make expenditures to carry out their designated functions. Examples include police department, attorney general’s office, corporation commission, city planning, and the like. Each organizational unit may have responsibility for several functions or activities. In some instances a function or activity may cross organizational unit lines.

Classification of expenditures by object class identifies what is acquired in return for the expenditure (i.e., the types of items purchased or services obtained). Typical object classifications are presented in Illustration 17-4. Classification by object is useful primarily for internal management and may be omitted from published financial reports.

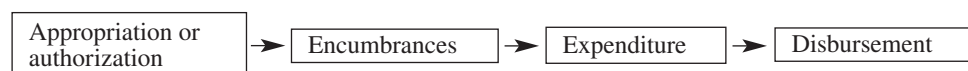
## Transfers to Other Funds

Transfers of resources to other fund entities within an organization do not represent decreases in the expendable financial resources of the organization as a whole. Accordingly, even though they represent a decrease in the financial resources of a particular fund, they ordinarily should be classified separately from expenditures for financial reporting purposes.

## Recognition of Expenditures

**LO 6** Critical events in the use of financial resources.

An expenditure is one of four critical events in the use of the financial resources of an expendable fund entity. The sequence of events is as follows:



<sup>8</sup> National Council on Government Accounting, *Statement 1: Governmental Accounting and Financial Reporting Principles* (Chicago: Municipal Finance Officers Association of the United States and Canada, 1979), pp. 16–17.

**Appropriation** Appropriations represent the maximum amount of expenditures that entities are authorized to spend. Administrators are responsible for expending fund resources only in the amounts and for the purposes prescribed in the appropriations act. In the case of governmental units, administrators are held strictly accountable for the provisions of the appropriation act, and stiff penalties are provided by law for those who fail to follow them. Thus, an important function of financial statements is to let administrators know how they stand relative to their appropriation authority. Furthermore, accounting safeguards must be in place to prevent the misuse of fund resources.

**Encumbrance** Since the amount of an appropriation cannot be legally exceeded, the placing of purchase orders and the signing of contracts are critical events in controlling the expenditures of expendable fund entities. The financial resources of a fund are said to be encumbered when a transaction is entered into that requires performance by another party before the governmental unit becomes liable to perform its part of the transaction by spending financial resources. An encumbrance reduces the remaining portion of appropriations encumbered and is formally recorded in the accounting records. Thus, at any particular time the accounting records will reflect management's remaining available appropriation authority as follows:

$$\text{Appropriations} - (\text{Encumbrances} + \text{Expenditures}) = \text{Unencumbered balance}$$

The unencumbered balance is the amount of resources that can still be obligated or expended without exceeding the legal or authorized limit.

Encumbrances are recorded as follows:

**Purchase Order (Encumbrance)**

|   |        |        |
|---|--------|--------|
| (1) Encumbrance (appropriately classified)              | 10,000 |        |
| Fund Balance (appropriately classified)                 |        | 10,000 |
| To record an order for goods in the amount of \$10,000. |        |        |

**Expenditures** An expenditure is a decrease in fund resources or an increase in fund liabilities that occurs when the vendor or supplier performs on a contract or purchase order and goods or services are received. Expenditures are recognized in the accounting period in which the fund liability is incurred, except for unmatured interest on long-term debt, which is recognized when due, and certain compensated absences and claims and judgments, which are recognized when obligations are expected to be liquidated with expendable available resources. Thus, an expenditure and a corresponding liability or cash disbursement is recorded at the time goods or services are received or at the time funds are granted to an authorized recipient. When the goods ordered in (1) above are received, the following entries are made:

**Receipt of Goods (Expenditure)**

|   |        |        |
|---|--------|--------|
| (2) Expenditures (appropriately classified)   | 12,000 |        |
| Vouchers Payable  |        | 12,000 |
| To record the receipt of goods invoiced at \$12,000.  |        |        |
| (3) Fund Balance (appropriately classified)   | 10,000 |        |
| Encumbrance   |        | 10,000 |
| To remove the encumbrance recorded in (1) for goods received and recorded as an expenditure in (2). |        |        |

In this case, the goods cost \$2,000 more than was estimated when the order was placed.

**Disbursements** Disbursements represent the payment of cash for expenditures. Such payments may precede the expenditure (an advance), coincide with the expenditure (a direct payment), or follow the expenditure (the payment of a liability). The payment for the goods purchased in (2) above is recorded as follows:

**Payment of Goods**

|  |        |        |
|--|--------|--------|
| (4) Vouchers Payable                   | 12,000 |        |
| Cash                                   |        | 12,000 |
| To record payment of vouchers payable. |        |        |

## ILLUSTRATION 17-5

**Subsidiary Ledger Control Card for One Budget Category****Function: Sanitation; Activity: Sanitary Sewer Cleaning; Object: Operating Supplies**

| <i>Budget Line 103</i>          | (A)<br><i>Appropriation</i> | (B)<br><i>Encumbrance</i> | (C)<br><i>Expenditure</i> | (D)<br><i>Total<br/>(B) + (C)</i> | (E)<br><i>Unencumbered<br/>Balance<br/>(A) - (D)</i> |
|---------------------------------|-----------------------------|---------------------------|---------------------------|-----------------------------------|--|
| Prior Balance                   | \$50,000                    | \$ —                      | \$15,000                  | \$15,000                          | \$35,000   |
| Purchase Order [entry (1)]      | <u>          </u>           | <u>10,000</u>             | <u>          </u>         | <u>10,000</u>                     | <u>(10,000)</u>                                      |
| Balance                         | 50,000                      | 10,000                    | 15,000                    | 25,000                            | 25,000   |
| Expenditure [entries (2) & (3)] | <u>          </u>           | <u>(10,000)</u>           | <u>12,000</u>             | <u>2,000</u>                      | <u>(2,000)</u>                                       |
| Balance                         | <u>\$50,000</u>             | <u>\$ —</u>               | <u>\$27,000</u>           | <u>\$27,000</u>                   | <u>\$23,000</u>                                      |

Encumbrances and expenditures are classified on the same basis (by fund, function, organizational unit, activity, character, or object class) as appropriations. The effect on appropriation control of incorporating appropriations, encumbrances, and expenditures into the accounting records is demonstrated in Illustration 17-5 for an imaginary budget line item number 103.

In Illustration 17-5, it is assumed that the appropriation for budget category 103 is \$50,000 and that the amount of expenditures in this category prior to the entries illustrated above was \$15,000. The effects of entries (1), (2), (3), and (4) on the subsidiary ledger card for budget category 103 are to reduce the unencumbered balance by \$12,000 (the amount of the actual expenditure). The most important thing to note is that at any particular time, information is available to administrators concerning their unexpended and unused appropriation authority.

**LO 7** Capital expenditures.

**Capital Expenditures** In accounting for profit-oriented enterprises, capital expenditures are recorded as assets and are distinguished from expenses. The costs of such assets are recognized in the operating statements (income statement) of such enterprises through depreciation.

In accounting for an expendable fund entity, capital expenditures, like other expenditures, are treated as an outflow of financial resources. The assets acquired do not represent expendable financial resources but rather reflect the purposes for which financial resources have been used. Thus, they are not recorded or reported as assets of the fund entity. This treatment is consistent with the primary purpose of fund accounting, which is to provide accounting control over the collection and expenditure of financial resources and to assure that no violations of authorized limits on expenditures occur. The operating statements of expendable fund entities are therefore designed to reflect *all* the sources and uses of its financial resources. The position statement of the expendable fund entity is designed to present the status of its *financial resources*, the related liabilities, and the *net financial resources* available for subsequent appropriation and expenditure. This emphasis on the status and flow of net financial resources requires that capital expenditures be treated the same as any other classification of expenditures and that they not be reflected as assets of the fund entity. This is not to say that controls are not maintained over fixed assets acquired by means of expendable fund resources. The organization establishes records and controls beyond the records of the expendable fund entity. Accounting for and reporting on fixed assets is illustrated in Chapter 18 for governmental units and in Chapter 19 for nongovernment nonbusiness organizations. General capital assets are assets associated with and arising from governmental activities. Although they are not reported as assets in government funds, they are reported as assets in government-wide statements required under *GASB Statement No. 34* (illustrated in the next chapter).

Depreciation is not accounted for in the records of an expendable fund entity for the same reason that fixed assets are excluded from the records of such entities. However, depreciation is recognized in the government-wide statement of assets and statement of activities. As stated previously, expenditures, not expenses, are generally measured in accounting for expendable fund entities. Acquisitions of fixed assets require the *use* of financial resources

and are accounted for as expenditures. Proceeds from the sale of fixed assets *provide* financial resources and are accounted for as revenues. Depreciation expense is neither a source nor a use of the financial resources of an expendable fund entity, and thus is not properly recorded in the accounts of such entities. Inclusion of depreciation expense in the operating statement of an expendable fund entity would confuse two fundamentally different measurements—expenditures and expense—and would result in misleading inferences relative to the operating activities of the expendable fund entity. This does not mean that the concept or measurement of depreciation is not important from the point of view of the organization as a whole. Indeed, if meaningful cost/benefit analysis is to be attempted for a particular activity, the operating expenditures of the activity must be adjusted for depreciation to determine total activity cost. For this reason, depreciation expense is required on the government-wide statements (see Chapter 18). However, the primary objective of fund accounting is not to provide information relative to the costs and benefits of activities but to control the collection and expenditure of financial resources. Accounting for and reporting on depreciation are further discussed in Chapter 18 for state and local governmental units and in Chapter 19 for nongovernment nonbusiness organizations.

## Fund Balance and Classification

*GASB Statement No. 54* significantly changed how fund balances are reported on governmental fund financial statements. A fund balance is reported from the perspective of the underlying resources within the fund balance. Fund balances are determined using a hierarchy of fund balance classifications based upon the extent to which governments are bound by constraints on resources reported in the funds.

*GASB Statement No. 54* does not affect the government-wide or accrual-based statement presentations, and it does not change the amount of total fund balance on any fund statements.

The fund balance classifications apply to all governmental funds—general funds, special revenue funds, debt service funds, capital projects funds, and permanent funds.

| <i>Classification</i> | <i>Definition</i>  |
|-----------------------|--|
| <b>Nonspendable</b>   | This classification includes amounts that cannot be spent because they are either: <ol style="list-style-type: none"> <li>1. Not in a spendable form (inventories or prepaid items)</li> <li>2. Legally or contractually required to be maintained intact (principal of a permanent fund)</li> </ol>   |
| <b>Restricted</b>     | This fund balance is reported as restricted when constraints placed on the use of resources are either: <ol style="list-style-type: none"> <li>1. Externally imposed by creditors (such as debt covenants), grantors, contributors, or laws and regulations of other governments.</li> <li>2. Imposed by law through constitutional provisions or enabling legislation (state constitutions or the federal government).</li> </ol>   |
| <b>Committed</b>      | Amounts that can only be used for specific purposes subject to constraints imposed by formal action of the state's highest level of decision-making authority (the State Legislature) are reported as committed fund balance (for instance, these might be imposed by an ordinance of the City Council).   |
| <b>Assigned</b>       | For the general fund, amounts constrained for the intent to be used for a specific purpose by a governing board or by a body or official that has been delegated authority to assign amounts. (For instance, the Chief Financial Officer may recommend assignment of fund balances subject to approval of the City Council.) Amounts reported as assigned should not result in a deficit in unassigned fund balance.<br>For all governmental funds other than the general fund, any remaining positive amounts not classified as nonspendable, restricted, or committed. |
| <b>Unassigned</b>     | This is the residual classification for the general fund. The net resources of the general fund in excess of nonspendable, restricted, committed, and assigned fund balances (a surplus fund balance) are classified as unassigned fund balance. The general fund is the only governmental fund that can have a positive unassigned fund balance.<br>In all other governmental funds, the excess of nonspendable, restricted, and committed fund balances over total fund balance (a deficit fund balance) is classified as unassigned.                                  |

Governments should establish a policy on the order in which unrestricted resources are used when any of these amounts are available for expenditure. If a government does not establish a policy, the default approach assumes that committed amounts should be reduced first, followed by the assigned amounts, and then the unassigned amounts. For instance, the City of Atlanta states their policy in footnote D to the financial statements as: Fund expenditures are from restricted fund balance to the extent of the restricted fund revenue followed by committed then assigned and unassigned fund balance.

Reporting a negative (deficit) *restricted*, *committed* or *assigned* balance is not permitted. If the total fund balance is negative, the negative fund balance is assigned to the unassigned fund balance.

A positive (surplus) *assigned* fund balance cannot result in a negative (deficit) *unassigned* fund balance. If this occurs, reduce the *assigned* fund balance. If the *assigned* fund balance is not sufficient to absorb the negative amount, reduce any *committed* fund balance and then any *restricted* fund balance. If these balances are not sufficient to absorb the negative amount, report the net fund balance (deficit) as *unassigned* with all other categories (*restricted*, *committed*, and *assigned*) showing a zero balance.

Governments must disclose, either on the face of the statement or in the notes), the nonspendable fund balance by type, the restricted fund balance by purpose, and the commitments and assignments by major purpose.

## Encumbrances and Fund Balance

At the end of the year, the fund balance constraint specific to encumbrances (not yet incurred) referred to as “reserved for encumbrances” is no longer reported as a part of the fund balance. Instead, the encumbered funds should be classified in the restricted, committed or assigned category based on the constraints placed on them. The City of Atlanta reports prior year encumbrances of the general fund as part of the *assigned* fund balance.

## Recording Budgeted and Actual Revenue and Expenditures

Consider an expendable fund with a beginning balance of \$100,000 in the fund balance. For the year, revenues and appropriations for expenditures were estimated to be \$800,000 and \$780,000, respectively. During the year, commitments for expenditures were \$775,000 and revenues were \$850,000. Notice that commitments were within the appropriation limit of \$780,000 and that commitments were less than the expected revenues. However, for the year, actual expenditures were \$600,000. (These expenditures were related to \$605,000 worth of commitments for expenditures.) The following seven journal entries reflect the information recorded in the fund. The statement of changes in fund balance for the expendable fund entity is presented in Illustration 17-6.

In the first journal entry, the difference between budgeted revenue (\$800,000) and budgeted expenditures (\$780,000 of appropriations) is recorded as an increase or decrease in the unassigned fund balance (\$20,000). In this case, since estimated revenues exceed estimated expenditures, the difference increases the fund balance by \$20,000. In addition to this entry, postings would be made to subsidiary accounts for each source of revenue and each appropriation expenditure category.

|  |         |         |
|--|---------|---------|
| (1) Estimated Revenue (classified)   | 800,000 |         |
| Appropriations (classified)  |         | 780,000 |
| Fund Balance—Unassigned  |         | 20,000  |
| To record budgeted revenues and expenditures adopted by legislative body or governing board. |         |         |

The second journal entry records the revenue recognized for the year. As commitments are made, encumbrances are recorded. The third journal entry records encumbrances. These amounts would then be posted to the various appropriation expenditure subsidiary accounts. This posting provides information as to the amount of each appropriation category that

## ILLUSTRATION 17-6

**Condensed Financial Statements of Expendable Fund Entity**  
**Balance Sheet—January 1, 2014**

|  |                  |
|--|------------------|
| Net Financial Resources (Assets minus Liabilities) | <u>\$100,000</u> |
| Fund Balance—Unassigned                            | <u>\$100,000</u> |

**Statement of Changes in Fund Balance**  
**For Period Ended December 31, 2014**

|                                       | <i>Budget</i>    | <i>Actual</i>    | <i>Actual Over<br/>(under)<br/>Budget</i> |
|---------------------------------------|------------------|------------------|---|
| Fund Balance—1/1                      | \$100,000        | \$100,000        | \$0                                       |
| Revenue                               | 800,000          | 850,000          | 50,000                                    |
| Total Resources Available             | <u>\$900,000</u> | <u>\$950,000</u> | <u>\$50,000</u>                           |
| Appropriations                        | 780,000          |                  |   |
| Expenditures (current year)           |                  | 600,000          |   |
| Total Resources Expended or Committed | <u>780,000</u>   | <u>600,000</u>   | <u>(180,000)</u>                          |
| Fund Balance—12/31                    | <u>\$120,000</u> | <u>\$350,000</u> | <u>\$230,000</u>                          |

**Balance Sheet—December 31, 2014**

|   |                  |
|---|------------------|
| Net Financial Resources (Assets minus Liabilities)  | <u>\$350,000</u> |
| Fund Balance:                                       |                  |
| Assigned (List encumbrances outstanding by purpose) | \$170,000        |
| Unassigned  | <u>\$180,000</u> |
|   | <u>\$350,000</u> |

remains available for encumbrance or expenditure. In this third journal entry, the credit for encumbrances, in the general fund, will usually be to Fund Balance-Assigned. However, based on the level of constraint placed on the expenditure, this amount could be credited to restricted or committed fund balance as well. Some cities have decided to credit the amount to a 'reserve for encumbrance' account. The GASB no longer permits this account to be displayed as part of fund balance; thus, if this account is used, it can be reclassified into the appropriate fund balance classification.

- |     |  |         |         |
|-----|--|---------|---------|
| (2) | Receivables or Cash  | 850,000 |         |
|     | Revenue (classified)   |         | 850,000 |
|     | To record revenues recognized during the year.   |         |         |
| (3) | Encumbrances (classified)  | 775,000 |         |
|     | Fund Balance—Assigned (Encumbrances)   |         | 775,000 |
|     | To record commitments made against appropriations ( <i>\$775,000 is an assumed amount</i> ). |         |         |

Two journal entries are required to record expenditures for goods or services that have been previously encumbered. One entry is needed to record the actual expenditure amount, and one entry is needed to reverse the encumbrance made when the commitment was recorded. Since the amount expended will not necessarily equal the amount encumbered, the dollar amounts in the two entries may not be the same. The reversal of the encumbrance is for the amount of the original encumbrance, which is assumed to be \$605,000 in this example. The amount of expenditure is for the approved invoice price of the goods or services received.

- |      |   |         |         |
|------|---|---------|---------|
| (4a) | Expenditures (classified)   | 600,000 |         |
|      | Vouchers Payable or Cash  |         | 600,000 |
|      | To record receipt of encumbered goods and services.   |         |         |
| (4b) | Fund Balance—Assigned (Encumbrances)  | 605,000 |         |
|      | Encumbrances  |         | 605,000 |
|      | To remove encumbrances on goods and services that have been recorded as expenditures and reverse the amount recorded into fund balance ( <i>\$605,000 is an assumed figure</i> ). |         |         |

Two closing entries are needed. The first closing entry is used to close actual revenues and estimated revenues against fund balance-unassigned. The excess of actual revenue over

(under) budgeted revenue is recorded as an increase (decrease) in the unassigned fund balance. (Note that all subsidiary revenue and expenditure accounts would also be closed.)

|  |         |         |
|--|---------|---------|
| (5) Revenue                                    | 850,000 |         |
| Estimated Revenue                              |         | 800,000 |
| Fund Balance—Unassigned                        |         | 50,000  |
| To close budgeted and actual revenue accounts. |         |         |

The second closing entry is to close the appropriations account against expenditures and the amount of outstanding commitments remaining in the encumbrance account. The excess (short) of appropriations over (under) expenditures minus (plus) encumbrances is recorded as an (a) increase (decrease) in the fund balance-unassigned. The balance of encumbrances at year-end is matched against appropriations because, although they are not expenditures, encumbrances do represent commitments made against the current year's appropriations and therefore represent the use of the appropriation authority of the current year. Notice that there should be a balance in the fund balance-assigned account (equal to the remaining balance in the encumbrance account) which is carried forward to the next year.

|   |         |         |
|---|---------|---------|
| (6) Appropriations  | 780,000 |         |
| Expenditures  |         | 600,000 |
| Encumbrances (\$775,000 – \$605,000)                              |         | 170,000 |
| Fund balance—Unassigned   |         | 10,000  |
| To close appropriations, expenditures, and encumbrances accounts. |         |         |

As mentioned earlier, the entry to record encumbrances, under prior standards, would have been to record a reserve for encumbrance account. GASB no longer permits governments to display a reserve account as part of fund balance. In this textbook, we have assumed the offsetting entry to encumbrance for the general fund is to increase Fund Balance—Assigned. Notice that after the closing entry (6) is recorded, encumbrances have a zero balance, but the Fund Balance-Assigned account has a remaining \$170,000 balance representing encumbrances outstanding at the end of the year. The GASB requires the balance to be included in either the restricted, committed, or assigned classification of fund balance along with the stated purpose. In general, only the general fund will report encumbrances in assigned fund balance and only to the extent that unassigned fund balance remains positive. If the constraint placed on the outstanding encumbrance is either restricted or committed, an adjusting entry would be needed to reclassify the fund balance from assigned to either restricted or committed.

The balance in the fund balance may be calculated as follows:

|  | <i>Fund Balance</i> |                  |                  |
|--|---------------------|------------------|------------------|
|  | <i>Unassigned</i>   | <i>Assigned</i>  | <i>Total</i>     |
| Fund Balance—January 1, 2014   | \$100,000           | \$—0—            | \$100,000        |
| Excess of estimated revenue over appropriations—entry (1)                    | 20,000              |                  | 20,000           |
| Excess of actual revenue over estimated revenue—entry (5)                    | 50,000              |                  | 50,000           |
| Excess of Appropriations over expenditures and encumbrances—entry (6)        | 10,000              |                  | 10,000           |
| Excess of Total Encumbrances over Total Encumbrances expended—entries (3)(4) |                     | 170,000          | 170,000          |
| Fund Balance—December 31, 2014   | <u>\$180,000</u>    | <u>\$170,000</u> | <u>\$350,000</u> |

The \$170,000 balance in the assigned fund balance account at December 31, 2014, represents the estimated amount of the net financial resources of the fund entity needed in the next year to pay the obligations authorized in the current year's appropriation. Thus, it represents a restriction on the availability of fund resources for future appropriation rather than a liability and is properly considered as a reserved portion of the total fund balance. Note that the increase in the *total* fund balance (\$100,000 to \$350,000, or \$250,000 in this example) is always equal to the excess of *actual* revenues



(\$850,000; inflows of net financial resources) over *actual* expenditures (\$600,000; outflows of net financial resources).

In the next year the remaining balance in the Fund Balance—Assigned from encumbrances will be charged by means of a separate expenditures account with the actual expenditures arising from the year-end commitments that are incurred in the subsequent year. A difference between the amount encumbered at the end of the year and the actual amount of the related expenditures that are incurred in the subsequent year is debited or credited to the unassigned fund balance.

Suppose that in 2015, the fund incurs \$160,000 of expenditures on these commitments. The entries to record the expenditures would be:

|                   |         |         |
|-------------------|---------|---------|
| Expenditures—2014 | 160,000 |         |
| Cash              |         | 160,000 |

There is not a second entry to reverse the encumbrance account, since the encumbrance account for 2014 was closed at the end of 2014. Thus at the end of 2015, this expenditure account is closed against the Fund Balance—Assigned account of \$170,000. This closing entry is:

|   |         |         |
|---|---------|---------|
| Fund Balance—Assigned (encumbrances – 2014) | 170,000 |         |
| Expenditure—2014                            |         | 160,000 |
| Fund Balance—Unassigned                     |         | 10,000  |

Encumbrances resulting from the issuance of purchase orders as a result of normal purchasing activity approved by appropriate officials will be classified as Fund Balance—Assigned. The City of Atlanta, classifies \$8.8 million of encumbrances as Fund Balance—Assigned. In the City of Atlanta’s footnotes, it is stated that “Encumbrances are commitments to unfilled purchase orders or unfilled contracts. Funds have been committed to a specific order, but the goods or services have not been billed or received.” The \$8.8 million reported as fund balance assigned includes contract services, supplies, capital, and other.

**TEST YOUR KNOWLEDGE** 17.1

**NOTE:** Solutions to *Test Your Knowledge* questions are found at the end of each chapter before the end-of-chapter questions.

Short Answer

1. On January 1, 2014, Stale City reported an unassigned fund balance of \$50,000. During the year, estimated revenues were \$400,000 and actual revenues were \$425,000. Appropriations for the year were \$350,000, while expenditures were \$250,000 and encumbrances outstanding at December 31, 2014, were \$80,000. Compute the unassigned fund balance at December 31, 2014.

enues were \$400,000 and actual revenues were \$425,000. Appropriations for the year were \$350,000, while expenditures were \$250,000 and encumbrances outstanding at December 31, 2014, were \$80,000. Compute the unassigned fund balance at December 31, 2014.



In 2009, the U.S. will have its second “trillion-dollar deficit,” with 2008’s deficit being the first. However, the budget deficit for 2008 was officially reported as being \$455 billion. How is this possible? Just borrow money from the Social Security trust fund, record it as an “intragovernmental transfer” and exclude it from the calculation of the deficit. Corporate managers have gone to jail for less than this.<sup>9</sup>

**17.5 COMPREHENSIVE ILLUSTRATION—GENERAL FUND**

**Lo 8** Understanding the general fund.

The General Fund of Model City is now used to illustrate the principles of fund accounting developed in this chapter.

The general fund of a municipality is used to account for most of the current operations of a municipality other than those required to be accounted for in other funds. It is established at the inception of the municipality and is continued as long as the municipality exists. A government never reports more than one general fund. Other government funds are established

<sup>9</sup> *WSJ*, February 17, 2009, “A Short History of the National Debt,” by John Gordon.

to account for specific municipality activities, such as a capital projects fund to build new highways or a debt services fund to service debt and interest payments. The general ledger trial balance of the General Fund of Model City on January 1, 2014, is as follows:

**Model City  
The General Fund  
General Ledger Trial Balance  
January 1, 2014**

|   |               |                  |
|---|---------------|------------------|
| Cash  |               | \$ 45,000        |
| Certificates of Deposit                     |               | 100,000          |
| Property Tax Receivable                     |               | 190,000          |
| Total Debits                                |               | <u>\$335,000</u> |
| Estimated Uncollectible Taxes               |               | \$ 20,000        |
| Vouchers Payable                            |               | 65,000           |
| Fund Balance:                               |               |                  |
| Assigned Fund Balance (encumbrances – 2013) | 155,000       |                  |
| Unassigned Fund Balance                     | <u>95,000</u> |                  |
| Total Fund Balance                          |               | <u>250,000</u>   |
| Total Credits                               |               | <u>\$335,000</u> |

The budget adopted by the City Council for the General Fund for the fiscal year ending December 31, 2014, is presented in summary form below.

**Model City  
The General Fund  
2014 Fiscal-Year Budget**

|   |  |                    |
|---|--|--------------------|
| Estimated Revenue   |  |                    |
| Licenses and Permits  |  | \$ 188,250         |
| Property Tax  |  | 1,158,750          |
| State Grant—Education   |  | 300,000            |
| Charges for Services  |  | 135,000            |
| Interest Revenue  |  | 6,000              |
| Proceeds from Sales of Equipment  |  | 78,000             |
| Total   |  | <u>\$1,866,000</u> |
| Appropriations  |  |                    |
| Public Safety   |  | 516,000            |
| General Government  |  | 293,500            |
| Highways and Streets  |  | 135,500            |
| Sanitation  |  | 75,000             |
| Health  |  | 148,500            |
| Cultural—recreation   |  | 88,500             |
| Education   |  | 687,000            |
| Total   |  | <u>\$1,944,000</u> |
| Excess of Appropriations over Estimated Revenue   |  | (\$78,000)         |
| Transfer from Enterprise Fund   |  | 150,000            |
| Less Transfers to: Debt Service Fund  |  | (96,000)           |
| Excess (deficiency) of Revenue and Transfers from Other Funds<br>over Appropriations and Transfers to Other Funds |  | <u>(\$24,000)</u>  |

Summary entries to record the activities and transactions of the General Fund during 2014 are presented below. Remember, each entry to these general ledger control accounts also requires detailed postings by appropriate classifications to the related subsidiary accounts. The assignment to specific subsidiary accounts of amounts credited to revenue or appropriations and of amounts debited to encumbrances, expenditures, or estimated revenue is shown in parentheses for these summary entries.

|  |           |           |
|--|-----------|-----------|
| (1) Estimated Revenue                        | 1,866,000 |           |
| Fund Balance—Unassigned                      | 78,000    |           |
| Appropriations                               |           | 1,944,000 |
| To record budgeted revenue and expenditures. |           |           |

|  |         |         |
|--|---------|---------|
| (2) Due from Enterprise Fund   | 150,000 |         |
| Transfers from Other Funds   |         | 150,000 |
| To record authorization for transfer of resources from other fund entities incorporated in budget adopted by City Council. |         |         |

For financial reporting purposes, transfers of resources from other fund entities of the same organization are distinguished from revenue of the recipient fund entity. Interfund transfers are properly recognized (accrued) in the period in which they are authorized. Control over authorized transfers from other fund entities may be achieved by recording them as a receivable at the beginning of the year for which they are authorized (budgeted).

|  |        |        |
|--|--------|--------|
| (3) Transfer to Other Funds  | 96,000 |        |
| Due to Debt Service Fund   |        | 96,000 |
| To record authorization for transfer of resources to another fund entity incorporated in budget adopted by city council. |        |        |

Although authorized transfers to other fund entities may be viewed as appropriation expenditures from the point of view of the General Fund entity, for purposes of financial reporting they are distinguished from expenditures. Control over authorized transfers to other fund entities may be achieved by recording them as liabilities at the beginning of the period for which they are authorized (budgeted).

|   |           |           |
|---|-----------|-----------|
| (4) Property Tax Receivable                       | 1,287,500 |           |
| Estimated Uncollectible Taxes                     |           | 128,750   |
| Revenue   |           | 1,158,750 |
| To record property taxes at time they are levied. |           |           |

The estimate for uncollectible taxes is determined on the basis of collection policy and prior years' experience. It is recorded as a direct reduction of revenue, however, rather than as an expenditure, since the failure to collect taxes is not an outflow of net financial resources. Accordingly, there is no appropriation for the amount of estimated uncollectible taxes and it is, therefore, properly accounted for as a reduction of revenue rather than as an expenditure.

|  |         |         |
|--|---------|---------|
| (5) Other Receivables  | 80,000  |         |
| Revenue  |         | 80,000  |
| To record billings for routine services.   |         |         |
| (6) Expenditures—2013  | 148,000 |         |
| Vouchers Payable   |         | 148,000 |
| To record receipt of goods and services ordered in 2013 and originally authorized for \$155,000. |         |         |

A separate expenditure control account (and subsidiary ledger) is used to record expenditures during the current year that were encumbered (authorized) in the prior year. At the end of the year, this expenditure account will be closed out and any difference taken to the fund balance unassigned [see entry (26) below].

|   |           |           |
|---|-----------|-----------|
| (7) Encumbrances  | 1,291,000 |           |
| Fund balance—Assigned   |           | 1,291,000 |
| To record encumbrances (commitments) on goods and services ordered during current year.   |           |           |
| (8) Cash  | 1,281,000 |           |
| Property Tax Receivable   |           | 1,201,000 |
| Other Receivables   |           | 80,000    |
| To record collection of \$170,500 of property taxes levied in 2013 and \$1,030,500 of property taxes levied in 2014, and to record collection of \$80,000 in other receivables. |           |           |
| (9) Estimated Uncollectible Taxes   | 19,500    |           |
| Property Tax Receivable   |           | 19,500    |
| To record write-off of uncollected 2013 property taxes authorized by City Council (\$190,000 – \$170,500 = \$19,500).   |           |           |

|   |           |           |
|---|-----------|-----------|
| (10) Cash   | 221,000   |           |
| Revenue   |           | 221,000   |
| To record collection of licenses, permits, fees, service charges, etc.  |           |           |
| (11) Expenditures   | 1,050,000 |           |
| Vouchers Payable  |           | 1,050,000 |
| Fund balance—Assigned   | 1,100,000 |           |
| Encumbrances  |           | 1,100,000 |
| To record receipt of goods and services that had been previously encumbered [entry (7) above] in the amount of \$1,100,000. |           |           |
| (12) Expenditures   | 210,000   |           |
| Vouchers Payable  |           | 210,000   |
| To record receipt of goods and services that had <i>not</i> been previously encumbered.                                     |           |           |

Not all expenditures go through the encumbrance process. Encumbrances are formally recognized in the accounts only when there is an extended period of time between the date the commitment is made and the date the expenditure is incurred. For example, routine payroll expenditures are not encumbered.

|  |         |         |
|--|---------|---------|
| (13) Receivable from State Government                                | 275,000 |         |
| Revenue  |         | 275,000 |
| To record municipal education grant authorized by state legislature. |         |         |

The amount of revenue recognized is based on an approved grant application filed with the Department of Education and is not dependent on the future performance of specific services or specified expenditures of financial resources.

|  |         |         |
|--|---------|---------|
| (14) Encumbrances  | 250,000 |         |
| Fund balance—Assigned  |         | 250,000 |
| To record a contract to acquire office furnishings and equipment.                |         |         |
| (15) Cash  | 100,000 |         |
| Due from Enterprise Fund   |         | 100,000 |
| To record receipt of a cash transfer from the Enterprise Fund.                   |         |         |
| (16) Expenditures  | 250,000 |         |
| Vouchers Payable   |         | 250,000 |
| Fund balance—Assigned  | 250,000 |         |
| Encumbrances   |         | 250,000 |
| To record receipt of office equipment and furnishings and to remove encumbrance. |         |         |

Capital expenditures, like other expenditures, represent the approved utilization of the financial resources of the General Fund and therefore are recorded as expenditures and not as assets in the records of the General Fund. However, general capital assets (and related depreciation expense) are required to be reported in the government-wide financial statements.

|   |           |           |
|---|-----------|-----------|
| (17) Vouchers Payable   | 1,650,000 |           |
| Cash  |           | 1,650,000 |
| To record payment of liabilities.                             |           |           |
| (18) Cash   | 87,250    |           |
| Revenue   |           | 87,250    |
| To record proceeds from sale of used furniture and equipment. |           |           |

Since the proceeds from the sale of Model City assets constitute expendable financial resources, they are recorded as revenue by the recipient general fund.

**IN  
THE  
NEWS**

Under *GASB Statement No. 34*, a government-wide Statement of

Activities prepared on an accrual basis is required, in addition to the funds statements prepared on the modified accrual basis. One entry that is affected is the sale of an asset such as entry (18) above. The proceeds from the sale of an asset are not reported as revenue; instead the difference between the carrying value of the asset (after considering depreciation) and the cash received is reported as a gain or loss on the government-wide statement of activities.<sup>10</sup>

<sup>10</sup> Governmental Accounting Standards Board (GASB), *GASB Statement No. 34*, "Basic Financial Statements— and Management's Discussion and Analysis—for State and Local Governments" (Norwalk, CT: June 1999).

|  |         |         |
|--|---------|---------|
| (19) Cash  | 275,000 |         |
| Receivable from State Government   |         | 275,000 |
| To record collection of grant from state legislature.  |         |         |
| (20) Due to Debt Service Fund  | 96,000  |         |
| Cash   |         | 96,000  |
| To record authorized transfers of cash to other Model City fund entities.                          |         |         |
| (21) Certificates of Deposit   | 6,000   |         |
| Revenue  |         | 6,000   |
| To record interest earned on certificates of deposit that has been reinvested in the certificates. |         |         |
| (22) Estimated Uncollectible Taxes   | 76,000  |         |
| Property Tax Receivable  |         | 76,000  |
| To record write-off of 2014 property taxes authorized by City Council.                             |         |         |
| (23) Expenditures  | 200,000 |         |
| Cash (to internal service fund)  |         | 200,000 |
| To record interfund services provided by the internal service fund.                                |         |         |

### *Summary of Expendable Fund Entries*

1. At the beginning of the period, estimated revenues are debited against appropriations (estimated expenditures), with the difference recorded to Fund Balance—Unassigned.
2. At the beginning of the period, transfers to and from other funds are recorded against “due from” or “to other funds.”
3. During the period, revenues are recorded against an increase in assets (i.e., against receivables, cash, etc.).
4. During the period, when the firm makes a commitment for goods or services, the account encumbrances is debited and Fund Balance—Assigned is credited. (Encumbrances are future expenditures.)
5. During the period, when goods that have been ordered (and encumbered) are received or contracted services are performed, two entries are prepared:
  - a. Expenditures are debited against a decrease in assets or an increase in liabilities. This may or may not equal the amount of the original encumbrance.
  - b. When the expenditure is recorded, the entry to record the encumbrance (item 4 above) is reversed. (This may or may not be equal to the actual expenditure.)
6. Purchases of capital assets are recorded in the same manner as any expenditure. An expenditure is debited and either cash or a liability is credited.
7. Gross proceeds from the sale of capital assets are recorded as revenues.



IN  
THE  
NEWS

In 2004, GASB issued *Statement 45*, “Accounting and Financial Reporting for Post-Employment Benefits Other Than Pensions” (OPEB). This statement requires that local governments report OPEB on an accrual basis rather than on a “pay-as-you-go” basis. OPEB might include such health benefits (including spouses) as dental, vision, or life insurance. The dollar amount of the liability included on the financial statements can be incredibly significant and underlies the potential cost to local governments. For instance, in one extreme example, for the city of Duluth, this liability amounted to \$180 million, which was twice the total annual budget of the city.<sup>11</sup>

***Preclosing Trial Balance*** The transactions summarized in the journal entries above are reflected in the December 31, 2014, general ledger trial balance for the General Fund of Model City presented below.

<sup>11</sup> *FedGazette*, Federal Reserve Bank of Minneapolis, May 2006.

**Model City  
The General Fund  
General Ledger Trial Balance  
December 31, 2014**

|   | <i>Dr.</i>         | <i>Cr.</i>         |
|---|--------------------|--------------------|
| Cash  | \$ 63,250          |                    |
| Certificates of Deposit                     | 106,000            |                    |
| Property Taxes Receivable                   | 181,000            |                    |
| Due from Enterprise Fund                    | 50,000             |                    |
| Estimated Revenue                           | 1,866,000          |                    |
| Expenditures                                | 1,710,000          |                    |
| Encumbrances                                | 191,000            |                    |
| Transfers to Other Funds (debt service)     | 96,000             |                    |
| Expenditures—2013                           | 148,000            |                    |
| Estimated Uncollectible Taxes               |                    | \$ 53,250          |
| Vouchers Payable                            |                    | 73,000             |
| Fund Balance—Assigned (191,000 + 155,000)   |                    | 346,000            |
| Fund Balance—Unassigned                     |                    | 17,000             |
| Appropriations                              |                    | 1,944,000          |
| Revenue                                     |                    | 1,828,000          |
| Transfer from Other Funds (enterprise fund) |                    | 150,000            |
| <b>Total</b>                                | <b>\$4,411,250</b> | <b>\$4,411,250</b> |

**Closing Entries** December 31, 2014, closing entries for the General Fund are as follows:

|  |           |           |
|--|-----------|-----------|
| (24) Fund Balance—Unassigned   | 38,000    |           |
| Revenue  | 1,828,000 |           |
| Estimated Revenue  |           | 1,866,000 |
| To close out actual and budgeted revenue accounts.                                     |           |           |
| (25) Appropriations  | 1,944,000 |           |
| Expenditures (for 2014)  |           | 1,710,000 |
| Encumbrances   |           | 191,000   |
| Fund Balance—Unassigned  |           | 43,000    |
| To close out appropriations and current year's expenditures and encumbrances accounts. |           |           |

Note that the Fund Balance—Assigned includes \$191,000 of encumbrances.

|  |         |         |
|--|---------|---------|
| (26) Fund Balance—Assigned   | 155,000 |         |
| Expenditures—2013  |         | 148,000 |
| Fund Balance—Unassigned  |         | 7,000   |
| To close out expenditures for goods and services <i>ordered</i> and encumbered in prior year. See entry (6). |         |         |
| (27) Transfers from Other Funds  | 150,000 |         |
| Fund Balance—Unassigned  |         | 54,000  |
| Transfers to Other Funds   |         | 96,000  |
| To close out interfund transfers to the unassigned fund balance.   |         |         |

*Summary of Closing Entries for Expendable Funds*

1. Revenues are closed against estimated revenues. The difference is recorded in unassigned fund balance.
2. Recall that appropriations are approved expenditures for the year. Appropriations are closed against expenditures (actual for the current year) and encumbrances (current year commitments). Any difference is reported in the Fund Balance—Unassigned. Recall that the expenditures made for prior year's encumbrances are closed against Fund Balance—Assigned.
3. Transfers to and from other funds are closed against the Fund Balance—Unassigned.

## Financial Statements

The two basic statements prepared for expendable fund entities are (1) a balance sheet and (2) a statement of revenue, expenditures, and changes in fund balance. Revenue should be classified by major sources and expenditures by major functions in the statement of

**ILLUSTRATION 17-7**
**Model City  
The General Fund  
Balance Sheet  
December 31, 2014 and 2013**

| <i>Assets</i>  | <i>2014</i>      | <i>2013</i>      |
|--|------------------|------------------|
| Cash   | \$ 63,250        | \$ 45,000        |
| Certificate of Deposit   | 106,000          | 100,000          |
| Property Tax Receivable (less allowance for uncollectible amounts, 2014—\$53,250; 2013—\$20,000) | 127,750          | 170,000          |
| Due from Other Funds   | 50,000           | —                |
| Total  | <u>\$347,000</u> | <u>\$315,000</u> |
| <b><i>Liabilities and Fund Balance</i></b>   |                  |                  |
| Vouchers Payable   | \$ 73,000        | \$ 65,000        |
| Fund Balance   |                  |                  |
| Assigned   | 191,000          | 155,000          |
| Unassigned   | 83,000           | 95,000           |
| Total Fund Balance   | <u>274,000</u>   | <u>250,000</u>   |
| Total Liabilities and Fund Balances  | <u>\$347,000</u> | <u>\$315,000</u> |

**ILLUSTRATION 17-8**
**Statement of Revenues, Expenditures, and Changes in Fund Balance  
The General Fund  
for Years Ended December 31, 2014, and December 31, 2013**

|   | <i>2014</i>      | <i>2013</i>      |
|---|------------------|------------------|
| <b><i>Revenues</i></b>                            |                  |                  |
| Property Taxes                                    | 1,158,750        | 1,105,000        |
| Licenses and Permits                              | 170,500          | 175,000          |
| State Grant—education                             | 275,000          | 250,000          |
| Charges for Services                              | 130,500          | 130,000          |
| Interest  | 6,000            | —                |
| Total Revenue                                     | <u>1,740,750</u> | <u>1,660,000</u> |
| <b><i>Expenditures</i></b>                        |                  |                  |
| Public Safety                                     | 480,000          | 360,000          |
| General Government                                | 289,000          | 175,000          |
| Highways and Streets                              | 128,000          | 130,000          |
| Sanitation  | 70,000           | 71,000           |
| Health  | 141,000          | 132,000          |
| Cultural—recreation                               | 80,000           | 82,000           |
| Education   | 670,000          | 640,000          |
| Total Expenditures                                | <u>1,858,000</u> | <u>1,590,000</u> |
| Excess (deficiency) of Revenues over Expenditures | <u>(117,250)</u> | <u>70,000</u>    |
| <b><i>Other Financing Sources (Uses)</i></b>      |                  |                  |
| Operating Transfers In—Enterprise Fund            | 150,000          | —                |
| Operating Transfers Out—Debt Service Fund         | <u>(96,000)</u>  | <u>(60,000)</u>  |
| Total Other                                       | <u>54,000</u>    | <u>(60,000)</u>  |
| <b><i>Special Items</i></b>                       |                  |                  |
| Proceeds from Sales of Equipment                  | <u>87,250</u>    | —                |
| Net Change in Fund Balance                        | 24,000           | 10,000           |
| Fund Balance—Beginning                            | <u>250,000</u>   | <u>240,000</u>   |
| Fund Balance—Ending                               | <u>274,000</u>   | <u>250,000</u>   |

revenue, expenditures, and changes in fund balance. In addition, comparative information for the prior year should be presented both in that statement and in the balance sheet. For the general fund, these statements are presented in Illustrations 17-7 and 17-8.

For budgetary fund entities, a financial statement that compares budgeted and actual operating results should also be prepared. Budgeted comparison statements should be

## ILLUSTRATION 17-9

**Model City**  
**Budgetary Comparison Schedule**  
**General Fund**  
**for the Year Ended December 31, 2014**

|                                      | <i>Budgeted Amounts</i> |                    | <i>Actual Amounts</i> | <i>Variance with Final Budget Favorable (Unfavorable)</i> |
|--------------------------------------|-------------------------|--------------------|-----------------------|---|
|                                      | <i>Original*</i>        | <i>Final</i>       |                       |   |
| Budgetary Fund Balance, January 1    | \$ 250,000              | \$ 250,000         | \$ 250,000            | —   |
| Resources                            |                         |                    |                       |   |
| Property Tax                         | 1,158,750               | 1,158,750          | 1,158,750             | —   |
| Licenses and Permits                 | 190,000                 | 188,250            | 170,500               | (17,750)  |
| Grants                               | 300,000                 | 300,000            | 275,000               | (25,000)  |
| Charges for Services                 | 131,000                 | 135,000            | 130,500               | (4,500)   |
| Sale of Equipment                    | 83,000                  | 78,000             | 87,250                | 9,250   |
| Interest                             | 6,000                   | 6,000              | 6,000                 | —   |
| Transfers from Other Funds           | 150,000                 | 150,000            | 150,000               | —   |
| Amounts Available for Appropriations | <u>\$2,268,750</u>      | <u>\$2,266,000</u> | <u>\$2,228,000</u>    | <u>\$(38,000)</u>   |
| Charges to Appropriations            |                         |                    |                       |   |
| Public Safety                        | 510,000                 | 516,000            | 480,000               | 36,000  |
| General Government                   | 290,000                 | 293,500            | 289,000               | 4,500   |
| Highways and Streets                 | 135,000                 | 135,500            | 128,000               | 7,500   |
| Sanitation                           | 73,000                  | 75,000             | 70,000                | 5,000   |
| Health                               | 140,000                 | 148,500            | 141,000               | 7,500   |
| Cultural—recreation                  | 90,000                  | 88,500             | 80,000                | 8,500   |
| Education                            | 690,000                 | 687,000            | 670,000               | 17,000  |
| Transfers to Other Funds             | 96,000                  | 96,000             | 96,000                | —   |
| Total Charges to Appropriations      | <u>2,024,000</u>        | <u>2,040,000</u>   | <u>1,954,000</u>      | <u>86,000</u>   |
| Budgetary Fund Balance, December 31  | <u>\$ 244,750</u>       | <u>\$ 226,000</u>  | <u>\$ 274,000</u>     | <u>\$ 48,000</u>  |

\* assumed values.

presented as required supplementary information (RSI). The purpose of budgetary comparison reporting is to show whether resources were obtained and used in accordance with the entity's legally adopted budget. Since amounts encumbered (encumbrances) against the current year's appropriation authority (budget) must be treated in the same manner as expenditures in budgeted statements, the "actual" data may be different from those presented in accordance with generally accepted accounting principles in the statement of revenue, expenditures, and other changes in fund balance. In that case, the difference between the budgetary basis and generally accepted accounting principles should be explained in the notes to the financial statements. An example of the Budgetary Comparison Schedule is shown in Illustration 17-9 and the Budget-to-GAAP Reconciliation schedule is shown in Illustration 17-10.

**Analysis of the Financial Statements** The balance sheet of the General Fund can be used to assess the short-term financing needs of the government and perhaps the ability to meet these needs. In Illustration 17-7, note that total assets equal \$347,000 and that payables related to expenditures are \$73,000. However, the fund balance is composed of \$191,000 assigned for encumbrances. This is the amount of the fund balance set aside for commitments made by the government prior to the end of the year. Thus only \$83,000 is available for general purposes for the next year ( $\$347,000 - 73,000 - 191,000 = \$83,000$ ).

The statement of revenues, expenditures, and changes in fund balance (Illustration 17-8) focuses on cash and other current resources that flow in and out of the government. Approximately 66.6%—of revenues come from property taxes. The largest expenditure is due to education, which comprises about 36% of total expenditures.



**ILLUSTRATION 17-10****Model City  
Budgetary Comparison Schedule  
Budget-to-GAAP Reconciliation**

|   | <i>General Fund</i> |
|---|---------------------|
| <b>Sources/inflows of resources:</b>  |                     |
| Actual amounts (budgetary basis) “available for appropriation” from the Budget to Actual Comparison Statement (see Illustration 17-9)                     | \$2,228,000         |
| <i>Differences—budget to GAAP</i>   |                     |
| The fund balance at the beginning of the year is a budgetary resource and is not a current year revenue for financial reporting purposes                  | (250,000)           |
| Transfers from other funds are inflows of budgetary resources but are not revenues for financial reporting purposes                                       | (150,000)           |
| The proceeds from the sale of equipment are budgetary resources but are regarded as a special item, rather than revenue, for financial reporting purposes | (87,250)            |
| Total revenues as reported on the Statement of Revenues, Expenditures, and Changes in Fund Balances—General Fund (see Illustration 17-8)                  | <u>\$1,740,750</u>  |
| <b>Uses/outflows of resources:</b>  |                     |
| Actual amounts (budgetary basis) total charges to appropriation from the Budget to Actual Comparison Statement (see Illustration 17-9)                    | \$1,954,000         |
| <i>Differences—budget to GAAP</i>   |                     |
| Transfers to other funds are outflows of budgetary resources but are not expenditures for financial reporting purposes                                    | (96,000)            |
| Total expenditures as reported on the Statement of Revenues, Expenditures, and Changes in Fund Balance—General Fund (See Illustration 17-8)               | <u>\$1,858,000</u>  |

Note that even though the fund balance increased during the year, expenditures exceeded revenues by \$117,250. After considering other transfers and financing sources, you can see that the deficit is still \$63,250. The only reason that the fund balance increased during the year is because the government sold equipment. Is this a cause for concern? Keep in mind that the timing of cash flows is very important for these statements. Recall that purchased assets are expenditures and that these purchases may be financed from activities in previous years.

## Lapsing of Appropriations

The treatment illustrated in this chapter for encumbrances outstanding at the end of the period was based on the assumption (and generally followed practice) that encumbered appropriations do not lapse at the end of the fiscal year. It is possible, however, for the legislative body or governing board to impose a provision that causes unexpended appropriations to lapse at the end of the year. In this case, the Fund Balance—Assigned must be reclassified at the end of the year, and if the encumbered items are to be purchased in the next year, the appropriation for the next year must contain authority for such expenditures.

If appropriations lapse, the closing entry for appropriations at the end of the year takes the following form:

|                         |           |           |
|-------------------------|-----------|-----------|
| Fund Balance—Assigned   | 191,000   |           |
| Appropriations          | 1,944,000 |           |
| Expenditures            |           | 1,710,000 |
| Encumbrances            |           | 191,000   |
| Fund Balance—Unassigned |           | 234,000   |

The subsequent year’s appropriation should include authorization for the purchase of the encumbered items. Therefore, the Fund Balance—assigned would be reestablished at the beginning of the next year by a debit to encumbrances, and subsequent expenditures for the items would be accounted for the same as any other expenditures in that year.

## 17.6 REPORTING INVENTORY AND PREPAYMENTS IN THE FINANCIAL STATEMENTS

### Inventory

**Lo 9** Consumption and purchases Methods.

There are two methods of accounting for and reporting inventory in the financial statements of expendable fund entities: the *consumption method* and the *purchases method*. Under *GASB Statement No. 34*, the consumption method is consistent with the government-wide approach, and the purchases method is not acceptable. Both are acceptable for fund purposes, however, and are illustrated here. Under the consumption method, inventory is considered to be a financial resource (asset), and expenditures for inventory are reported on the operating statement in the period in which the inventory is used. Under the purchases method, inventory is not considered to be a financial resource (asset) and expenditures are recognized in the period the inventory is purchased whether it is used or not. The City of Atlanta uses the purchase method for materials and supplies and uses the consumption method for prepaid items.

To illustrate, assume that \$20,000 in inventory is on hand at the beginning of the period, that \$50,000 in inventory is purchased during the period, and that inventory at the end of the period is \$24,000. Entries under each method are as follows:

|                 | <i>Consumption Method</i> |        |        | <i>Purchases Method</i> |        |        |
|-----------------|---------------------------|--------|--------|-------------------------|--------|--------|
| When Purchased: | Expenditures              | 50,000 |        | Expenditures            | 50,000 |        |
|                 | Cash                      |        | 50,000 | Cash                    |        | 50,000 |
| End of Year:    | Inventory                 | 4,000  |        | NO ENTRY                |        |        |
|                 | Expenditures              |        | 4,000  |                         |        |        |

The entry at the end of the year under the consumption method adjusts the inventory account from its beginning of year balance, \$20,000, to the correct ending inventory amount, \$24,000. If inventory decreases, expenditures would be debited and inventory credited. Under this method, inventories are automatically reported as an asset in the financial statements. As compared to the purchases method, the current year's financial statements prepared under the consumption method reflect \$4,000 less expenditures and result in a \$ 24,000 larger fund balance.

The Fund Balance for the governmental funds should classify any amounts for inventory as Fund Balance – Nonspendable. The following entries classify the amounts for inventory in fund balance under these methods:

|             | <i>Consumption Method</i> |       |       | <i>Purchases Method</i>   |  |       |
|-------------|---------------------------|-------|-------|---------------------------|--|-------|
| End of year | Fund Balance—Unassigned   | 4,000 |       | Inventory                 |  | 4,000 |
|             | Fund Balance—Nonspendable |       | 4,000 | Fund Balance—Nonspendable |  | 4,000 |

Under the consumption method, the entry has no overall impact on fund balance, but reclassifies the increase in inventory from unassigned to nonspendable fund balance. The entry for the purchases method, on the other hand, does change fund balance. After the entry, the amount reported for total fund balance will now equal the total fund balance if the consumption method were used (although the amount reported for expenditures will still differ by \$4,000). The fund balance – nonspendable should include any amounts reported for inventory on the balance sheet.

### Prepayments

Prepayments for items such as insurance or rent that cover more than one accounting period may also be reported using the consumption or purchases methods. Under the purchases method the cost is reported as an expenditure in the period when the insurance premium or rent is paid without regard to the period benefited (there is no allocation among accounting periods). Under the consumption method, a prepaid asset would be recorded and expenditures reduced to the extent that the premium or rent payment is for a subsequent period. Fund Balance—Nonspendable should also include prepaid amounts.


**SUMMARY**

- 1 *Distinguish between a nonbusiness organization and a profit-oriented enterprise.* The primary goal of a profit-oriented enterprise is to earn a profit. Nonbusiness organizations provide services based on social need. Persons who contribute to nonbusiness organizations receive no equity in the organization and do not necessarily benefit proportionally or at all from the services provided.
- 2 *Explain the role of fund accounting.* Resources received by nonbusiness organizations typically have restrictions or are limited by use. In many cases, the nonbusiness organization has self-imposed restrictions on the use of resources. In order to account for these restrictions, nonbusiness organizations use fund accounting. In essence, the organization separates the assets, liabilities, and residual equity into distinct funds organized for specific objectives. Each fund is treated as a separate accounting entity consisting of a self-balancing set of books.
- 3 *Distinguish among the concepts of revenues, expenses, and expenditures as used in profit-oriented entities and as used for expendable fund entities.* Profit-oriented entities recognize revenues on an accrual basis and expenses using the matching principle. Expendable fund entities typically treat any increase in financial resources as revenues, such as from property taxes or sales of equipment (except debt issuances and transfers from other funds). Also, expendable funds treat any decrease in resources as an expenditure (except transfers to other funds).
- 4 *Understand the classification of revenues and other resource inflows for fund accounting.* Revenues are classified by source, such as property taxes, fines and penalties, and licenses and permits.
- 5 *Understand the classification of expenditures and other resource outflows for fund accounting.* Expenditures are classified by function, by activity, by organizational unit, by object, or by character (nature of the item). For government-wide reporting, the statement of activities classifies expenses by function.
- 6 *Describe the critical events in the use of financial resources of an expendable fund.* Before resources can be spent, they must follow a series of events. First, the amount must be authorized (appropriated) by proper authorities. Second, since the amounts spent cannot exceed the appropriations, when a purchase order is placed (or a contract is signed), an encumbrance is recorded. Any unencumbered balance indicates the amount of resources not yet committed. When a contract is performed or a service received, an expenditure is recorded and the encumbrance reduced. At year-end, appropriations, encumbrances, and expenditures are closed to fund balance.
- 7 *Explain how capital expenditures are recorded in an expendable fund.* In profit-oriented firms, capital expenditures are recorded as assets and depreciated over their useful lives. In an expendable fund, capital expenditures are treated as expenditures (as an outflow of resources), but are not depreciated. Funds are set up to properly account for the source and use of resources during a particular period and to ensure that the fund does not spend more than its limit (appropriation).
- 8 *Understand the role of a general fund.* The general fund is used to account for all externally *unrestricted* financial resources. In other words, the general fund is used to account for all resources that have not been set aside for specific activities. Funds typically divide governments into categories based on the restrictions of the resources.
- 9 *Contrast the consumption and the purchases methods of accounting for inventories (and other prepaid items).* The consumption method treats inventory as an asset until used, while the purchases method treats all inventory purchases as expenditures of the period. Therefore, inventory is not recorded on the balance sheet if the purchases method is used. Both methods are acceptable for fund purposes, but in the government-wide statements, only the consumption method is acceptable.

**TEST YOUR KNOWLEDGE SOLUTIONS**

|   |                  |
|---|------------------|
| Beginning unassigned fund balance                           | \$50,000         |
| Excess of estimated revenue over appropriations             | 50,000           |
| Excess of actual revenue over estimated revenue             | 25,000           |
| Excess of appropriations over expenditures and encumbrances | 20,000           |
| Unassigned fund balance—December 31                         | <u>\$145,000</u> |

Appendix 17A, “City of Atlanta Partial Financial Statements” is available online at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter).

## QUESTIONS

The letter A indicated for a question, exercise, or problem refers to the appendix.)

- LO 1** 1. What characteristics distinguish nonbusiness organizations from profit-oriented enterprises?
- LO 2** 2. Define a fund as the term is applied in accounting for the activities of governmental units and other nonbusiness organizations.
- LO 6** 3. What is the significance of the “unassigned fund balance” of an expendable fund entity?
- LO 4 LO 5** 4. What are the major classifications of increases and decreases in expendable fund resources?
- LO 3** 5. What are the revenue-recognition criteria for expendable fund entities? How do these criteria differ from revenue-recognition criteria for profit-oriented enterprises?
- LO 5** 6. Expenditures may be classified by function, activity, object, or organizational unit. Give an example of each classification for a municipality. Which classification is the most appropriate for external financial reporting?
- LO 3** 7. Distinguish between an appropriation, an encumbrance, an expenditure, and a disbursement.
- LO 3** 8. Distinguish between an expense and an expenditure.
- LO 3** 9. Explain and justify the difference between the treatment of estimated uncollectible taxes in fund accounting and the treatment of estimated bad debts in commercial accounting.
- LO 6** 10. Explain the purposes of encumbrance accounting. Might encumbrance accounting be used by commercial enterprises?
- LO 6** 11. Is the year-end balance in the Encumbrances account a liability? Explain.
- LO 6** 12. What columns would you suggest for a subsidiary ledger account in order that it might be a subsidiary not only to the “appropriations” control account but also the “encumbrances” and the “expenditures” control accounts?
- LO 7** 13. Why is depreciation on fixed assets not recorded in the records of expendable fund entities?
- LO 8** 14. How does the adoption of a budget for a general fund entity differ from the adoption of a budget by a commercial unit?
- LO 8** 15. Describe the principal financial statements used to report on the activities and status of expendable fund entities.
- LO 5** 16. Why may it be difficult or impossible for a governmental unit to determine the total cost of performing a particular activity or function?

### Business Ethics

At State College, where football has long reigned as king and fans are near fanatical in their attendance, the frenzy for football tickets has recently reached an all-time high. With requests for home game tickets at an unprecedented level, prices on everything from parking passes to hotel rooms to home rentals have soared beyond belief. Parking passes were going for \$500 on eBay, and hotel rates have doubled—and in some cases nearly tripled—reaching as high as \$650 per night at some hotels.

1. What are the moral or ethical issues in charging what people will pay for rooms and tickets to attend a State College football game?
2. Why not let the economic forces of supply and demand determine prices in our capitalistic system?

## ANALYZING FINANCIAL STATEMENTS

### AFS17-1 Balance Sheet

In the appendix to this chapter, the balance sheet for the General Fund for the City of Atlanta is reported.

1. How is the format used on the balance sheet for the general fund different from the format used by for-profit organizations? Which categories of the balance sheet seem to be missing for government funds?
2. What is the largest asset reported in the General Fund? Is this surprising?
3. For the General Fund, the assigned fund balance includes \$8,865 for encumbrances. What does this balance represent?

### AFS17-2 Statement of Revenues, Expenditures, and Changes in Fund Balances

In the appendix to this chapter, the Statement of Revenues, Expenditures, and Changes in Fund Balances for the General Fund for the City of Atlanta is reported.

1. How is the format used on the Statement of Revenues, Expenditures, and Changes in Fund Balances for the general fund different from the format on Income Statements used by for-profit organizations? Which items appear on the government fund’s statements that do not appear on Income Statements used by for-profit companies?
2. What is the largest expenditure of the General Fund on the Statement of Revenues, Expenditures, and Changes in Fund Balances?
3. What is the largest source of revenue for the General Fund on the Statement of Revenues, Expenditures, and Changes in Fund Balances?
4. Evaluate the performance of the General Fund using the Statement of Revenues, Expenditures, and Changes in Fund Balances.

**AFS17-3 Pension and OPEB Funding Status**

Go online and find the City of Atlanta's Comprehensive Annual Financial Report for the year ended June 30, 2013. Find the footnotes related to defined pensions and other post-employment benefits (OPEB).

**Required:**

1. Determine the amount of unfunded pension obligations for all defined pension plans.
2. Determine the amount of unfunded OPEB obligations.
3. Is this likely to cause problems in the future? What changes has the City of Atlanta made with regard to pensions that might help mitigate future problems?

**EXERCISES****EXERCISE 17-1 General Fund Journal Entries LO 8**

Several independent financial activities of a governmental unit are given below.

1. Revenue from the sale of licenses and permits for the first two months totaled \$15,000.
2. Land that had been donated previously was sold for \$100,000.
3. An order was placed for the purchase of a new fire engine at a price of \$130,000.
4. Bonds with a face value of \$500,000 were issued at par value to finance a new park.
5. A \$250,000 grant was received from the federal government to help improve the local schools.
6. The new fire engine was received and accepted. The approved price, however, was \$140,000 rather than \$130,000.

**Required:**

Prepare the journal entries needed to account for each transaction in the General Fund.

**EXERCISE 17-2 General Fund Journal Entries LO 8**

Listed are typical financial activities of a local governmental unit.

1. The legislative unit approved the budget for the general operating fund. Estimated revenues are \$4,000,000, and appropriations for expenditures are \$3,800,000.
2. Statements of property tax assessments totaling \$3,000,000 were mailed to property owners. It is estimated that 4% of the assessed taxes will be uncollectible.
3. Notification was received from the state that this unit's share of sales tax revenues from the fourth quarter of the previous year will be \$500,000.
4. The manager signed a contract to purchase equipment costing \$250,000.
5. The equipment ordered above was received and paid for.
6. Employees were paid their biweekly wages of \$36,000.
7. Property taxes in the amount of \$2,050,000 were collected.

**Required:**

Prepare the necessary journal entries to record the transactions listed above in the records of the General Fund.

**EXERCISE 17-3 General Fund Journal Entries LO 8**

Listed are transactions of the Town of Jackson.

1. A budget consisting of estimated revenues of \$1,950,000 and appropriations for expenditures of \$1,800,000 was passed by the town council.
2. Property taxes of \$1,150,000 were assessed; \$1,115,000 are expected to be collectible.
3. Property taxes in the amount of \$1,080,000 were collected.
4. Equipment costing \$200,000 was purchased, and the old equipment was sold at the end of its estimated useful life for \$24,000.
5. A contract was signed with an independent company to do the trash collecting for the year. The contract price was \$96,000.
6. The first monthly bill of \$8,000 was received from the trash collector.
7. The \$8,000 bill was paid.

**Required:**

Prepare the journal entries needed in the records of the General Fund to account for these transactions.

**EXERCISE 17-4 General Fund Closing Entries LO 8**

Following is the preclosing trial balance for the General Fund of the City of Doyle.

**Doyle City  
The General Fund  
General Ledger Trial Balance  
December 31, 2016**

|                                |                    |                    |
|--------------------------------|--------------------|--------------------|
| Cash                           | \$ 400,000         |                    |
| Certificates of Deposit        | 350,000            |                    |
| Due from State Government      | 112,000            |                    |
| Due from Other Funds           | 30,000             |                    |
| Taxes Receivable               | 774,000            |                    |
| Estimated Revenue              | 3,110,000          |                    |
| Expenditures                   | 1,960,000          |                    |
| Encumbrances                   | 734,000            |                    |
| Transfers to Other Funds       | 90,000             |                    |
| Expenditures—2015              | 55,000             |                    |
| Estimated Uncollectible Taxes  |                    | \$ 30,000          |
| Vouchers Payable               |                    | 64,000             |
| Due to Other Funds             |                    | 27,000             |
| Fund Balance—Unassigned        |                    | 760,000            |
| Fund Balance—Assigned (Note 1) |                    | 784,000            |
| Appropriations                 |                    | 2,700,000          |
| Revenue                        |                    | 3,210,000          |
| Transfers from Other Funds     |                    | 40,000             |
|                                | <u>\$7,615,000</u> | <u>\$7,615,000</u> |

Note 1: Includes \$50,000 of encumbrances from 2015.

**Required:**

Prepare in general journal form the closing entries for the General Fund of Doyle City.

**EXERCISE 17-5 General Fund Closing Entries LO 8**

The preclosing trial balance for the General Fund of the City of Springfield is presented below.

**City of Springfield  
The General Fund  
General Ledger Trial Balance  
December 31, 2015**

|                                |                    |                    |
|--------------------------------|--------------------|--------------------|
| Cash                           | \$ 90,000          |                    |
| Certificates of Deposit        | 120,000            |                    |
| Property Taxes Receivable      | 175,000            |                    |
| Estimated Revenue              | 1,690,000          |                    |
| Expenditures                   | 1,310,000          |                    |
| Expenditures—2014              | 32,000             |                    |
| Encumbrances                   | 165,000            |                    |
| Estimated Uncollectible Taxes  |                    | \$ 51,000          |
| Vouchers Payable               |                    | 65,000             |
| Fund Balance—Unassigned        |                    | 41,000             |
| Fund Balance—Assigned (Note 1) |                    | 200,000            |
| Reserve for Encumbrances—2014  |                    | 35,000             |
| Appropriations                 |                    | 1,550,000          |
| Revenue                        |                    | 1,675,000          |
|                                | <u>\$3,582,000</u> | <u>\$3,582,000</u> |

Note 1: Includes \$35,000 of encumbrances from 2014.

**Required:**

Prepare the closing entries for the General Fund.

**EXERCISE 17-6 Accounting for Supplies LO 9**

In 2015, Bay City purchased supplies valued at \$350,000. At the end of the year, \$65,000 of the supplies were still in the inventory. No supplies were on hand at the beginning of the year. The city uses the purchases method to account for supplies.

**Required:**

- A. Prepare the journal entry necessary to report the supplies as an asset in the balance sheet of Bay City.
- B. What amount of expenditures for supplies will be shown in the statement of revenues, expenditures, and changes in fund balance?

**EXERCISE 17-7 Purchases versus Consumption Methods LO 9**

At the beginning of 2015, the City of Fairview reported an Unassigned Fund Balance of \$555,000 and a supplies inventory balance of \$175,000. During the year, Fairview purchased \$225,000 in supplies and used supplies of \$220,000. The city reports inventory amounts of Fund Balance—Nonspendable.

**Required:**

- A. Prepare the necessary journal entries under the purchases method.
- B. Prepare the journal entries needed to account for the supplies under the consumption method.
- C. What would the 12/31/15 balance in the Unassigned Fund Balance be under each method, assuming that the only transactions of the fund are those involving the supplies?

**EXERCISE 17-8 Journal Entries LO 8**

During 2015, the City of Greenfield engaged in the following financial activities:

1. The City Council approved the budget for the general operating fund. The budget shows estimated revenues of \$1,900,000 and appropriations for expenditures of \$1,850,000.
2. Property tax assessments for 2015 were compiled and statements mailed to property owners. Assessments total \$955,000. Past collection experience indicates that approximately 5% of assessed property taxes are delinquent or uncollectible during the year of billing.
3. A low bid of \$15,000 was accepted for a new vehicle for the fire chief. A purchase order was issued providing for additional costs for painting and ancillary equipment (negotiated after the bid) prior to delivery. The estimate of additional costs is \$1,400.
4. Additional purchase orders placed during the year amount to \$140,000.
5. City employees are issued paychecks for the month of April. The total payroll amounts to \$90,000.
6. The City received a statement from the State Treasurer that the City's portion of the state sales tax for the first half-year is \$375,000.
7. Vouchers for expenditures totaling \$135,000 are approved for payment. Encumbrances against these vouchers were recorded at a total of \$137,000.
8. The vehicle for the fire chief was delivered and accepted. The invoice in the amount of \$16,200 was approved for payment.
9. Property tax collections for the month of June amounted to \$450,000.
10. The City Treasurer issued checks in payment of the vouchers totaling \$135,000 and for the invoice for the fire chief's vehicle.
11. A purchase order previously issued for an electric typewriter (estimated price \$650) was canceled when the vendor indicated a three-month delay in delivery.

**Required:**

Prepare journal entries to record and account for the foregoing transactions.

**EXERCISE 17-9 General Fund Journal Entries LO 8**

The following events relate typical activities in a municipality that affect the General Fund.

1. The Meadville City Council passed an ordinance approving a general operating budget of \$580,000 for fiscal year 2015. The city's only source of revenue is from property taxes. For 2015, these revenues are estimated at \$565,000.
2. A property tax levy of \$1 per \$100 assessed valuation (total assessed valuation equals \$60,000,000) is billed to property owners. Taxes are due in the current fiscal year. Experience indicates that 3% of taxes billed will be uncollectible.
3. A motorcycle for the Department of Public Safety is ordered by the purchasing department on the basis of a low bid of \$4,200.

4. The motorcycle in (3) above is received and the invoice is approved for payment. Extra accessories not included in the bid price amount to \$425.
5. Salaries and wages in the amount of \$20,000 are paid by check to city employees for the two-week period ending on May 15.
6. The property division sold used typewriters and other office equipment at a public auction. Total receipts were \$8,225.
7. Property taxes in the amount of \$540,000 were collected.

**Required:**

Prepare the necessary journal entries to record each event in the accounts of the General Fund.

**EXERCISE 17-10 Multiple Choice LO 2 LO 6 LO 8 LO 9**

Select the best answer for each of the following items:

1. When used in fund accounting, the term “fund” usually refers to
  - (a) A sum of money designated for a special purpose.
  - (b) A liability to other governmental units.
  - (c) The equity of a municipality in its own assets.
  - (d) A fiscal and accounting entity having a set of self-balancing accounts.
2. Authority granted by a legislative body to make expenditures and to incur obligations during a fiscal year is the definition of an
  - (a) Appropriation.
  - (b) Authorization.
  - (c) Encumbrance.
  - (d) Expenditure.
3. What type of account is used to earmark the fund balance to liquidate the contingent obligations of goods ordered but not yet received?
  - (a) Appropriations.
  - (b) Encumbrances.
  - (c) Obligations.
  - (d) Reserve for encumbrances.
4. A city’s General Fund budget for the forthcoming fiscal year shows estimated revenues in excess of appropriations. The initial effect of recording this will result in an increase in
  - (a) Taxes receivable.
  - (b) Fund balance—unassigned.
  - (c) Fund balance—nonspendable.
  - (d) Encumbrances.
5. In preparing the General Fund budget of Dover City for the forthcoming fiscal year, the City Council appropriated a sum greater than expected revenues. This action of the Council will result in
  - (a) A cash overdraft during that fiscal year.
  - (b) An increase in encumbrances by the end of that fiscal year.
  - (c) A decrease in the fund balance.
  - (d) A necessity for compensatory offsetting action in the Debt Service Fund.
6. What would be the effect on the General Fund balance in the current fiscal year of recording a \$150,000 purchase for a new fire truck out of General Fund resources, for which a \$146,000 encumbrance had been recorded in the General Fund in the previous fiscal year?
  - (a) Reduce the General Fund balance by \$150,000.
  - (b) Reduce the General Fund balance by \$146,000.
  - (c) Reduce the General Fund balance by \$4,000.
  - (d) Have no effect on the General Fund balance.

(AICPA adapted)

**EXERCISE 17-11 Classification of Fund Balance LO 8**

For each of the items listed below, determine how the amount would be classified in Fund Balance (either nonspendable, restricted, committed, assigned, or unassigned fund balance).

1. Inventory costing \$17,000 was purchased to be used for highway repair within the city.
2. The city council voted to erect a statue in a round-a-bout at a cost of \$100,000. The cash was expected to come from unassigned cash accounts.
3. A former mayor died and left the city \$10 million dollars. The donor specified that only the income could be used to repair pot holes in the suburban areas of the city.



4. The Chief Financial Officer of the city set aside \$20,000 to purchase bicycles that would be placed at the entrance to city parks for its citizens to use.
5. The governing board for a public university set aside \$20 million to build a new business school.
6. The Chief Financial Officer set aside adoption fees for purchases of animal control equipment.

**ASC Exercises:** For all ASC exercises indicate as part of your answer: the Codification topic, subtopic, section, and paragraph upon which your answer is based (unless otherwise specified). All ASC questions require access to the FASB Codification.

**ASC17-1** **Scope** Does the Codification apply to both governmental and nongovernmental entities?

**ASC17-2** **Implementation** Suppose a not-for-profit entity purchases short-term highly liquid investments using resources that have donor-imposed restrictions that restrict their use to long-term investment purposes. In preparing the statement of cash flows, can these highly liquid investments be classified as cash equivalents?

**ASC17-3** **Industry** Blood River Productions enters into a sale agreement for its recent film. A sale occurs when the entity transfers control of the master copy of a film and all the associated rights that go along with it (that is, an entity sells and gives up all rights to a film). What conditions must exist so that Blood River Productions can recognize revenue from the sale?

## PROBLEMS

### PROBLEM 17-1 Journal Entries, Closing Entries, and Trial Balance LO 8

The general ledger trial balance of the General Fund of the City of Bedford on January 1, 2015, shows the following:

|  | <i>Dr.</i>       | <i>Cr.</i>       |
|--|------------------|------------------|
| Cash   | \$100,000        |                  |
| Taxes Receivable                               | 75,000           |                  |
| Allowance for Uncollectible Taxes              |                  | \$ 35,000        |
| Fund Balance—Assigned (encumbrances from 2014) |                  | 30,000           |
| Fund Balance—Unassigned                        |                  | 110,000          |
| Total  | <u>\$175,000</u> | <u>\$175,000</u> |

A summary of activities and transactions for the General Fund during 2015 is presented here:

1. The City Council adopted a budget for the General Fund with estimated revenues of \$1,560,000 and authorization for appropriated expenditures of \$1,400,000. The budget authorized the transfer of \$50,000 from the Water Fund to the General Fund for operating expenses as a payment in lieu of taxes. Cash for the payment of interest due for the year on the \$1,000,000, 8% bond issue for the Civic Center is approved for transfer from the General Fund to the Debt Service Fund.
2. The annual property tax levy of 10% on assessed valuation (\$11,000,000) is billed to property owners. Two percent is estimated to be uncollectible.
3. Goods and services amounting to \$1,150,000 were ordered during the year.
4. Invoices for all goods ordered in 2014 amounting to \$29,000 were approved for payment.
5. Funds for bond interest on Civic Center bonds were transferred to the Debt Service Fund.
6. Invoices for goods and services received during the year totaling \$1,155,000 were recorded. These were encumbered previously [see (3) above].
7. Transfer of funds from the Water Company was received in lieu of taxes.
8. Taxes were collected from property owners in the amount of \$1,050,000.
9. Past-due tax bills of \$17,000 were charged off as uncollectible.
10. Checks in payment of invoices for goods and services ordered in 2014 and 2015 were issued [see items (4) and (6) above].
11. Revenues received from miscellaneous sources, other than property taxes, of \$455,000 were recorded.
12. Purchase order for two trash collection vehicle systems complete with residence trash containers for automatic pickup of trash was issued. Bid price per system was \$120,000.

**Required:**

- A. Prepare journal entries to record the summary transactions. You may find it necessary or convenient to post journal entries to ledger t-accounts before the preparation of the required trial balances.
- B. Prepare a preclosing trial balance.
- C. Prepare closing entries.
- D. Prepare a postclosing trial balance.

**PROBLEM 17-2 Unassigned Fund Balance—Adjusting and Closing Entries LO 6**

The following account balances, among others, were included in the preclosing trial balance of the General Fund of the City of Lynchburg on December 31, 2016.

|  |           |
|--|-----------|
| Estimated Revenue                                      | \$630,000 |
| Expenditures   | 468,000   |
| Encumbrances   | 120,000   |
| Expenditures—2015                                      | 43,000    |
| Supplies Inventory (Note 2)                            | 72,000    |
| Appropriations   | 672,000   |
| Revenue  | 696,000   |
| Fund Balance—Assigned (for Encumbrances, Note 1)       | 162,000   |
| Fund Balance—Nonspendable (Supplies Inventory, Note 2) | 72,000    |
| Fund Balance—Unassigned                                | 24,000    |

Note 1: The balance in this account was \$42,000 on January 1, 2016.

Purchase orders outstanding on December 31, 2016, total \$120,000.

Note 2: Supplies on hand on December 31, 2016, amount to \$60,000.

**Required:**

- A. What was the balance in the Fund Balance—Unassigned account on December 31, 2015? What was the total Fund Balance on December 31, 2015?
- B. Prepare the necessary adjusting and closing entries for the year ended December 31, 2016. Supplies inventory is accounted for using the purchases method.
- C. Prepare a schedule to calculate the Fund Balance—Unassigned and the total Fund Balance on December 31, 2016.

**PROBLEM 17-3 Computing Unassigned Fund Balance and Closing Entries LO 6**

The following account balances, among others, were included in the preclosing trial balance of the General Fund of the City of Madison on December 31, 2016.

|                                      |             |
|--------------------------------------|-------------|
| Appropriations                       | \$3,488,000 |
| Cash                                 | 270,000     |
| Due to Other Funds                   | 100,000     |
| Due from Other Funds                 | 250,000     |
| Encumbrances                         | 382,000     |
| Estimated Revenue                    | 3,720,000   |
| Expenditures                         | 3,020,000   |
| Expenditures—2015                    | 296,000     |
| Fund Balance—Assigned (Encumbrances) | 692,000*    |
| Revenue                              | 3,656,000   |
| Taxes Receivable                     | 600,000     |
| Transfers from Other Funds           | 300,000     |
| Transfers to Other Funds             | 520,000     |
| Fund Balance—Unassigned              | 422,000     |
| Vouchers Payable                     | 400,000     |

\* \$310,000 are for encumbrances from 2015

**Required:**

- A. Prepare the necessary closing entries on December 31, 2016.
- B. Calculate the amount of both the fund balance—unassigned and the total fund balance in the balance sheet (1) on December 31, 2015 and (2) on December 31, 2016.
- C. Prepare a schedule reconciling the December 31, 2015, total fund balance with the December 31, 2016, total fund balance by reference to actual inflows and outflows of financial resources.

**PROBLEM 17-4** Entries, Balance Sheet, Statement of Revenues, Expenditures, and Changes in Fund Balance **LO 8**

The trial balance for the General Fund of the City of Monte Vista as of December 31, 2015, is presented here:

|  | <i>Debit</i>     | <i>Credit</i>    |
|--|------------------|------------------|
| Cash   | \$300,000        |                  |
| Supplies Inventory                             | 75,000           |                  |
| Fund Balance—Unassigned                        |                  | \$300,000        |
| Fund Balance—Nonspendable (supplies inventory) |                  | 75,000           |
|  | <u>\$375,000</u> | <u>\$375,000</u> |

Transactions of the General Fund for the year ended December 31, 2016, are summarized as follows:

1. The City Council adopted the following budget for 2016:

|                               |             |
|-------------------------------|-------------|
| Estimated revenue             | \$1,600,000 |
| Transfer from trust fund      | 50,000      |
| Appropriations                | 1,530,000   |
| Transfer to debt service fund | 80,000      |

2. Property taxes of \$1,500,000 were levied, of which it is estimated that \$30,000 will not be collected.

3. Purchase orders in the amount of \$1,400,000 were placed with suppliers and other vendors.

4. Property taxes in the amount of \$1,450,000 were collected.

5. Cash was received from the Trust Fund in the amount of \$50,000.

6. Invoices in the amount of \$1,380,000 were approved for payment. The amount originally encumbered for these invoices was \$1,360,000. The invoices included \$25,000 net of trade-in allowance for the purchase of a new minicomputer and \$400,000 for supplies. The City received a trade-in-allowance of \$4,000 on its old minicomputer, which had been purchased three years earlier for \$16,000. At the time the old minicomputer was purchased, it was estimated that it would have a useful life of four years. The new minicomputer is expected to last at least six years. The City of Monte Vista uses the purchase method to account for supplies inventory.

7. Licenses and fees in the amount of \$48,000 were collected.

8. Vouchers in the amount of \$1,300,000 were paid.

9. Cash in the amount of \$80,000 was transferred to the Debt Service Fund.

10. Supplies on hand at the end of the year amount to \$100,000.

**Required:**

A. Prepare entries in general journal form to record the transactions of the General Fund for the year ended December 31, 2016.

B. Prepare a preclosing trial balance for the General Fund as of December 31, 2016.

C. Prepare the necessary closing entries for the General Fund for the year ended December 31, 2016.

D. Prepare a balance sheet and a statement of revenues, expenditures, and changes in fund balance for the General Fund for the year ended December 31, 2016.

**PROBLEM 17-5** Balance Sheet, Statement of Revenues, Expenditures, and Changes in Fund Balance **LO 8**

The trial balance for the General Fund of the City of Fairfield as of December 31, 2015, is presented here:

**City of Fairfield  
The General Fund  
Adjusted Trial Balance  
December 31, 2015**

|                                      | <i>Debit</i>     | <i>Credit</i>    |
|--------------------------------------|------------------|------------------|
| Cash                                 | \$430,000        |                  |
| Property Tax Receivable              | 45,000           |                  |
| Estimated Uncollectible Taxes        |                  | \$ 20,000        |
| Due from Trust Fund                  | 50,000           |                  |
| Vouchers Payable                     |                  | 60,000           |
| Fund Balance—Assigned (encumbrances) |                  | 30,000           |
| Fund Balance—Unassigned              |                  | 415,000          |
|                                      | <u>\$525,000</u> | <u>\$525,000</u> |

Transactions for the year ended December 31, 2016, are summarized as follows:

1. The City Council adopted a budget for the year with estimated revenue of \$735,000 and appropriations of \$700,000.
2. Property taxes in the amount of \$590,000 were levied for the current year. It is estimated that \$24,000 of the taxes levied will prove to be uncollectible.
3. Proceeds from the sale of equipment in the amount of \$35,000 were received by the General Fund. The equipment was purchased 10 years ago with resources of the General Fund at a cost of \$150,000. On the date of purchase, it was estimated that the equipment had a useful life of 15 years.
4. Licenses and fees in the amount of \$110,000 were collected.
5. The total amount of encumbrances against fund resources for the year was \$642,500.
6. Vouchers in the amount of \$455,000 were authorized for payment. This was \$15,000 less than the amount originally encumbered for these purchases.
7. An invoice in the amount of \$28,000 was received for goods ordered in 2015. The invoice was approved for payment.
8. Property taxes in the amount of \$570,000 were collected.
9. Vouchers in the amount of \$475,000 were paid.
10. Fifty thousand dollars was transferred to the General Fund from the Trust Fund.
11. The City Council authorized the write-off of \$30,000 in uncollected property taxes.

**Required:**

- A. Prepare entries in general journal form to record the transactions for the year ended December 31, 2016.
- B. Prepare a preclosing trial balance for the General Fund as of December 31, 2016.
- C. Prepare the necessary closing entries for the year ended December 31, 2016.
- D. Prepare a balance sheet and a statement of revenues, expenditures, and changes in fund balance for the General Fund for the year ended December 31, 2016.

**PROBLEM 17-6 Balance Sheet, Statement of Revenues, Expenditures, and Changes in Fund Balance LO 8**

Hunington Township's adjusted trial balance for the General Fund at the close of its fiscal year ended June 30, 2016, is presented here:

**Hunington Township  
General Fund Trial Balance  
June 30, 2016**

|  |             |             |
|--|-------------|-------------|
| Cash                                     | \$ 11,000   |             |
| Property Tax Receivable—current (Note 1) | 82,000      |             |
| Estimated Uncollectible Taxes—current    |             | \$ 1,500    |
| Property Tax Receivable—delinquent       | 25,000      |             |
| Estimated Uncollectible Taxes—delinquent |             | 16,500      |
| Accounts Receivable (Note 1)             | 40,000      |             |
| Allowance for Uncollectible Accounts     |             | 4,000       |
| Due from Internal Service Fund (Note 5)  | 50,000      |             |
| Expenditures (Note 2)                    | 755,000     |             |
| Encumbrances                             | 37,000      |             |
| Revenue (Note 3)                         |             | 60,000      |
| Due to Enterprise Fund (Note 5)          |             | 10,000      |
| Vouchers Payable                         |             | 20,000      |
| Surplus Receipts (Note 4)                |             | 7,000       |
| Appropriations                           |             | 720,000     |
| Fund Balance—Assigned (Note 6)           |             | 81,000      |
| Fund Balance—Unassigned                  |             | 80,000      |
|  | \$1,000,000 | \$1,000,000 |

Note 1: The current tax roll and accounts receivable, recorded on the accrual basis as sources of revenue, amounted to \$500,000 and \$200,000, respectively.

Note 2: Includes \$42,500 paid during the fiscal year in settlement of all purchase orders outstanding at the beginning of the fiscal year.

Note 3: Represents the difference between the budgeted (estimated) revenue of \$700,000 and the actual revenue realized during the fiscal year.

Note 4: Represents the proceeds from the sale of equipment damaged by fire. The equipment originally cost \$40,000 and had been held for 80% of its useful life prior to the fire.

Note 5: The interfund payable and receivable resulted from cash advances (loans) to and from the respective funds.

Note 6: Includes \$44,000 of encumbrances from prior year.

**Required:**

A. Prepare a statement of revenues, expenditures, and changes in fund balance.

B. Prepare a balance sheet for the General Fund at June 30, 2016. (AICPA adapted)

**PROBLEM 17-7 Complete Accounting Cycle—General Fund LO 8**

The January 1, 2015, trial balance, the calendar-year 2015 budget, and the 2015 transactions of the City of Roseburg are presented here:

**City of Roseburg  
Trial Balance  
January 1, 2015**

|                                       | <i>Debit</i>     | <i>Credit</i>    |
|---------------------------------------|------------------|------------------|
| Cash                                  | \$155,450        |                  |
| Certificates of Deposit               | 200,000          |                  |
| Accounts Receivable                   | 28,675           |                  |
| Supplied Inventory                    | 37,600           |                  |
| Due from Federal Government           | 58,000           |                  |
| Property Taxes Receivable             | 75,600           |                  |
| Allowance for Uncollectible Taxes     |                  | \$ 32,150        |
| Vouchers Payable                      |                  | 181,000          |
| Fund Balance—Unassigned               |                  | 226,075          |
| Fund Balance—Nonspendable (inventory) |                  | 37,600           |
| Fund Balance—Assigned (encumbrances)  |                  | 78,500           |
|                                       | <u>\$555,325</u> | <u>\$555,325</u> |

**City of Roseburg  
Budget for General Fund  
Calendar Year 2015**

|   |                   |
|---|-------------------|
| Estimated Revenue                               |                   |
| City vehicle and retail license fees            | \$ 252,000        |
| Property taxes                                  | 1,448,000         |
| City sales tax                                  | 327,000           |
| Collections for trash service                   | 153,000           |
| Sale of city-owned property                     | 88,000            |
| Total estimated revenue                         | <u>2,268,000</u>  |
| Appropriations                                  |                   |
| General government                              | 261,000           |
| Public safety and security                      | 875,000           |
| Health and welfare                              | 434,000           |
| Recreation and parks                            | 126,000           |
| Street maintenance                              | 367,000           |
| Sanitation                                      | 162,000           |
| Total appropriations                            | <u>2,225,000</u>  |
| Excess of Revenues over Appropriations          | 43,000            |
| Transfer from Water and Sewer Fund              | 118,000           |
| Less Payments (transfers) to Debt Service Funds | <u>(55,000)</u>   |
| Excess of Revenue and Fund Transfers to         |                   |
| General Fund over Appropriations and Fund       |                   |
| Transfers out of General Fund                   | <u>\$ 106,000</u> |

Transactions of the City of Roseburg that affected the General Fund during the year are summarized below:

1. The City Council approved the budget and it was recorded.
2. Orders for goods and services were issued for a total of \$1,202,000 during the year.
3. Goods and services were delivered against all orders placed with a total invoice amount of \$1,165,600. Of this, \$80,000 was for orders placed in the prior year.
4. The City accepted a low bid of \$78,000 for a new street sweeper for the sanitation department. A purchase order was issued.
5. The City received \$92,500 from the sale of an old street sweeper and one obsolete fire engine at public auction. The street sweeper cost \$60,000 7 years ago, at which time it was estimated to have a useful life of 10 years. The fire engine cost \$200,000 8 years ago, at which time it was estimated to have a useful life of 12 years.
6. Property tax statements were issued. The tax levy was 8% of the assessed valuation of \$18,500,000. An estimated 2% of the tax levy will be uncollectible.
7. Payment was received from the federal government. This was a grant to be used for upgrading sanitation department equipment.
8. The amount of \$55,000 was transferred to the Debt Service Fund for the payment of interest on the outstanding bond issue.
9. The city billed residents for trash service. Total billings amounted to \$155,675.
10. Property taxes totaling \$1,438,455 were collected, of which \$34,200 was past-due collections from the prior year; \$18,250 of past-due taxes was charged off as uncollectible.
11. Wages paid to employees during the year amounted to \$998,765.
12. City retail establishments remitted a total of \$333,650 in sales tax collections for the year.
13. Other cash receipts during the year were:
 

|   |           |
|---|-----------|
| Vehicle license fees and parking fines                              | \$ 98,682 |
| Retail license fees   | 130,000   |
| For trash services (including \$28,675<br>due at end of prior year) | 148,720   |
| Transfer from Water and Sewer Fund                                  | 118,000   |
14. Cash purchases of printed forms and other office supplies for the year amounted to \$57,680.
15. The street sweeper was delivered and an invoice for \$78,000 plus freight charges of \$1,280 was received. The invoice was approved for payment and a check issued.
16. Checks were issued in payment of outstanding vouchers totaling \$1,207,100.
17. End-of-year activities: (adjustments)
  - Supplies Inventory 12/31/15: \$38,250
  - Accrued interest on CDs at 5%

The city uses the purchases method to account for supplies expenditures.

**Required:**

- A. Enter the opening trial balance data in t-accounts.
- B. Prepare journal entries for the year's transactions. Do not include entries for year-end adjustments. Post entries to t-accounts.
- C. Prepare a preclosing trial balance.
- D. Prepare journal entries to adjust the Supplies Inventory and record the interest on the CDs.
- E. Prepare journal entries to close the revenue, expenditures, and encumbrance accounts.
- F. Prepare a comparative balance sheet for 2014–2015.
- G. Prepare a statement of revenues, expenditures, and changes in fund balance for 2015.

**PROBLEM 17-8 Reconstructing Journal Entries LO 8**

The following summary of transactions was taken from the accounts of the Madras School District General Fund before the books were closed for the fiscal year ended June 30, 2016:

|                                      | <i>Postclosing<br/>Balances<br/>June 30, 2015</i> | <i>Preclosing<br/>Balances<br/>June 30, 2016</i> |
|--------------------------------------|---|--|
| Cash                                 | \$400,000   | \$ 700,000                                       |
| Property tax receivable              | 150,000   | 170,000  |
| Estimated uncollectible taxes        | (40,000)  | (70,000)   |
| Estimated revenue                    |   | 3,000,000  |
| Expenditures                         |   | 2,842,000  |
| Expenditures—prior year              |   |  |
| Encumbrances                         |   | 91,000   |
|                                      | <u>\$510,000</u>                                  | <u>\$6,733,000</u>                               |
| Vouchers payable                     | \$ 80,000   | \$ 408,000                                       |
| Due to other funds                   | 210,000   | 142,000  |
| Fund Balance—Assigned (encumbrances) | 60,000  | 91,000   |
| Fund Balance—Unassigned              | 160,000   | 182,000  |
| Revenue from taxes                   |   | 2,800,000  |
| Miscellaneous revenue                |   | 130,000  |
| Appropriations                       |   | 2,980,000  |
|                                      | <u>\$510,000</u>                                  | <u>\$6,733,000</u>                               |

*Additional Information:*

- Property taxes in the amount of \$2,870,000 were assessed for the year. Taxes collected during the year totaled \$2,810,000.
- An analysis of the transactions in the vouchers payable account for the year ended June 30, 2016, follows:

|                                     | <i>Debit (Credit)</i> |
|-------------------------------------|-----------------------|
| Current expenditures                | \$ (2,700,000)        |
| Expenditures for prior year         | (58,000)              |
| Vouchers for payment to other funds | (210,000)             |
| Cash payments during year           | <u>2,640,000</u>      |
| Net change                          | <u>\$ (328,000)</u>   |

- During the year the General Fund was billed \$142,000 for services performed on its behalf by other city funds.
- On May 2, 2016, commitment documents were issued for the purchase of new textbooks at a cost of \$91,000.

**Required:**

On the basis of the data presented, reconstruct the original detailed journal entries that were required to record all transactions for the fiscal year ended June 30, 2016, including the recording of the current year's budget. Do not prepare closing entries at June 30, 2016.

*(AICPA adapted)*

# Chapter 17

## APPENDIX 17A – CITY OF ATLANTA PARTIAL FINANCIAL STATEMENTS (ONLINE)

### CITY OF ATLANTA, GEORGIA

#### Balance Sheet Governmental Funds June 30, 2013 (Dollars in Thousands)

|   | <i>General Fund</i> | <i>Municipal<br/>Option Sales Tax<br/>(MOST)</i> | <i>Other<br/>Governmental<br/>Funds</i> | <i>Total<br/>Governmental<br/>Funds</i> |
|---|---------------------|--|---|---|
| <b>ASSETS</b>   |                     |  |   |   |
| Cash and cash equivalents   | \$ 1,277            | \$ —   | \$ 381                                  | \$ 1,658                                |
| Cash and cash equivalents, restricted                             | —                   | 483  | 388,347                                 | 388,830                                 |
| Equity in cash management pool                                    | 128,943             | —  | 48,888                                  | 177,831                                 |
| Investments   | —                   | —  | 286                                     | 286                                     |
| Receivables:  |                     |  |   |   |
| Taxes   | 12,680              | 9,836  | 15,464                                  | 37,980                                  |
| Accounts  | 17,016              | —  | 6,558                                   | 23,574                                  |
| Due from other governments  | —                   | —  | 16,699                                  | 16,699                                  |
| Due from other funds  | 90,280              | —  | 4                                       | 90,284                                  |
| Investments in escrow   | 17,188              | —  | —                                       | 17,188                                  |
| <b>TOTAL ASSETS</b>   | <u>\$ 267,384</u>   | <u>\$ 10,319</u>                                 | <u>\$ 476,627</u>                       | <u>\$ 754,330</u>                       |
| <b>LIABILITIES, DEFERRED INFLOWS, AND FUND BALANCES</b>           |                     |  |   |   |
| <b>Liabilities:</b>   |                     |  |   |   |
| Accounts payable  | \$ 32,777           | \$ —   | \$ 26,312                               | \$ 59,089                               |
| Accrued expenses  | 7,644               | —  | 740                                     | 8,384                                   |
| Contract retentions   | 50                  | —  | 1,542                                   | 1,592                                   |
| Due to other governments  | —                   | —  | 10,293                                  | 10,293                                  |
| Due to other funds  | 1,018               | 10,319   | 33,561                                  | 44,898                                  |
| Advance due to other funds  | 76,199              | —  | —                                       | 76,199                                  |
| Unearned revenue  | —                   | —  | 633                                     | 633                                     |
| <b>Total Liabilities</b>  | <u>117,688</u>      | <u>10,319</u>                                    | <u>73,081</u>                           | <u>201,088</u>                          |
| <b>Deferred inflows of resources</b>                              |                     |  |   |   |
| Deferred inflows of property taxes                                | 11,532              | —  | 9,535                                   | 21,067                                  |
| <b>Total liabilities and deferred inflows of resources</b>        | <u>129,220</u>      | <u>10,319</u>                                    | <u>82,616</u>                           | <u>222,155</u>                          |
| <b>Fund Balances:</b>   |                     |  |   |   |
| Nonspendable  | 4,972               | —  | —                                       | 4,972                                   |
| Restricted  | 14,159              | —  | 408,501                                 | 422,660                                 |
| Assigned  | 20,516              | —  | —                                       | 20,516                                  |
| Unassigned  | 98,517              | —  | (14,490)                                | 84,027                                  |
| <b>Total fund balances</b>  | <u>138,164</u>      | <u>—</u>   | <u>394,011</u>                          | <u>532,175</u>                          |
| <b>TOTAL LIABILITIES, DEFERRED INFLOWS,<br/>AND FUND BALANCES</b> | <u>\$ 267,384</u>   | <u>\$ 10,319</u>                                 | <u>\$ 476,627</u>                       | <u>\$ 754,330</u>                       |



## CITY OF ATLANTA, GEORGIA

**Statement of Revenues, Expenditures and Changes in Fund Balances**  
**Governmental Funds**  
**For the Year Ended June 30, 2013**  
**(Dollars in Thousands)**

|  | <i>General Fund</i> | <i>Municipal<br/>Option Sales Tax<br/>(MOST)</i> | <i>Other<br/>Governmental<br/>Funds</i> | <i>Total<br/>Governmental<br/>Funds</i> |
|--|---------------------|--|---|---|
| <b>REVENUES</b>                                    |                     |  |   |   |
| Property taxes                                     | \$ 180,229          | \$ —   | \$ 97,690                               | \$ 277,919                              |
| Local and municipal option sales taxes             | 99,872              | 118,751  | —                                       | 218,623                                 |
| Public utility, alcoholic beverage and other taxes | 96,781              | —  | 59,446                                  | 156,227                                 |
| Licenses and permits                               | 55,641              | —  | 832                                     | 56,473                                  |
| Charges for current services                       | 5,293               | —  | 18,611                                  | 23,904                                  |
| Fines, forfeitures and penalties                   | 22,202              | —  | 2,091                                   | 24,293                                  |
| Investment income                                  | (312)               | —  | 1,011                                   | 699                                     |
| Intergovernmental revenues and contributions:      |                     |  |   |   |
| Federal revenues                                   | —                   | —  | 53,278                                  | 53,278                                  |
| State and local grants and contributions           | —                   | —  | 22,379                                  | 22,379                                  |
| Building rentals and concessions                   | 6,600               | —  | 800                                     | 7,400                                   |
| Other  | 2,958               | —  | 6,427                                   | 9,385                                   |
| Total revenues                                     | <u>469,264</u>      | <u>118,751</u>                                   | <u>262,565</u>                          | <u>850,580</u>                          |
| <b>EXPENDITURES</b>                                |                     |  |   |   |
| Current:   |                     |  |   |   |
| General government:                                | 110,733             | —  | 113,719                                 | 224,452                                 |
| Police   | 159,943             | —  | 35,074                                  | 195,017                                 |
| Fire   | 72,730              | —  | 9,748                                   | 82,478                                  |
| Corrections  | 25,311              | —  | 3,892                                   | 29,203                                  |
| Public Works                                       | 25,515              | —  | 14,001                                  | 39,516                                  |
| Parks, recreation and cultural affairs             | 32,237              | —  | 16,944                                  | 49,181                                  |
| Debt Service:                                      |                     |  |   |   |
| Principal payments                                 | 18,492              | —  | 41,457                                  | 59,949                                  |
| Interest payments                                  | 8,957               | —  | 35,454                                  | 44,411                                  |
| Paying agent fees                                  | 9                   | —  | 24                                      | 33                                      |
| Total Expenditures                                 | <u>453,927</u>      | <u>—</u>   | <u>270,313</u>                          | <u>724,240</u>                          |
| Excess (deficiency) of revenues over expenditures  | <u>15,337</u>       | <u>118,751</u>                                   | <u>(7,748)</u>                          | <u>126,340</u>                          |
| <b>OTHER FINANCING SOURCES (USES)</b>              |                     |  |   |   |
| Proceeds from sale of assets                       | 109                 | —  | 14                                      | 123                                     |
| Proceeds from Capital Leases                       | —                   | —  | 2,198                                   | 2,198                                   |
| Transfers in                                       | 36,457              | —  | 22,193                                  | 58,650                                  |
| Transfers out                                      | <u>(40,459)</u>     | <u>(118,751)</u>                                 | <u>(13,871)</u>                         | <u>(173,081)</u>                        |
| Total Other Financing Sources (Uses)               | <u>(3,893)</u>      | <u>(118,751)</u>                                 | <u>10,534</u>                           | <u>(112,110)</u>                        |
| Net change in fund balances                        | 11,444              | —  | 2,786                                   | 14,230                                  |
| Fund Balance:                                      |                     |  |   |   |
| Beginning of the period                            | <u>126,720</u>      | <u>—</u>   | <u>391,225</u>                          | <u>517,945</u>                          |
| FUND BALANCE, END OF PERIOD                        | <u>\$ 138,164</u>   | <u>\$ —</u>                                      | <u>\$ 394,011</u>                       | <u>\$ 532,175</u>                       |

## Chapter 17 – Review Questions

The review questions accompanying this course are designed to assist you in achieving the course learning objectives. The review section is not graded; do not submit it in place of your qualified assessment. While completing the review questions, it may be helpful to study any unfamiliar terms in the glossary in addition to course content. After completing the review questions, proceed to the review question answers and rationales.

108. All of the following statements about fund accounting are accurate with the **EXCEPTION** of:
- Management seeks to create a positive fund flow for each fund in order to sustain the organization.
  - A fund is organized for specific activities or objectives which is unique and distinct from other funds within the same organization.
  - A fund is a self-balancing set of assets, liabilities, and equity.
  - Fund equity is known as fund balance.
109. Which of the following statements is accurate?
- GASB regulates only federal, state, and local governments.
  - The accounting standards issued by GASB and FASB for nonbusiness entities are generally similar.
  - FASB governs all colleges and universities.
  - Users of financial statements must have a good understanding of the standard applicable to the financial statements that they are using.
110. Statement 36, *Reporting Comprehensive Long-Term Fiscal Projections for the U.S. Government*:
- Has been termed “the disclosure project.”
  - Lays out the plan for repayment of federal debt.
  - Presentation of prospective information about receipts and spending.
  - Requires presentation of information more in alignment with a “net income” approach to help users better understand the financial flows.
111. GASB Concepts Statement No. 2:
- Describes the objectives of financial reporting for governmental entities.
  - Introduces the “SEA concept” of Service Efforts and Accomplishments.
  - Outlines the required supplementary information which must be reported.
  - Provides the conceptual basis for determining the methods to present information within general-purpose external financial reports.

112. Which of the following is accurate regarding the presentation of deferred inflows and outflows on the fund balance sheet?
- Deferred outflows are shown as a component of assets.
  - Deferred inflows are shown in a separate section following liabilities.
  - Deferred outflows are shown as a component of liabilities.
  - Deferred inflows are shown as a component of assets.
113. All of the following are classifications of fund entities with the **EXCEPTION** of:
- Expendable fund entity.
  - Fiduciary fund entity.
  - Proprietary fund entity.
  - Reserved fund entity.
114. Which of the following is accurate regarding revenue recognition principles for governments?
- Property taxes are considered measurable and available in the period levied even if collected subsequently.
  - Debt issue proceeds should be classified as revenue in a governmental entity.
  - Tax return revenue is not recognized until collected.
  - Pledges and grants are not considered revenue until collected.
115. The acquisition of capital assets:
- Is accounted for in a manner similar to that used by for-profit entities.
  - Requires future recognition of depreciation.
  - Is another use of financial resources in the current period.
  - Requires the elimination of capital asset reserves.
116. All of the following are classifications of fund balances under GASB Statement No. 54 with the **EXCEPTION** of:
- Reserved.
  - Nonspendable.
  - Assigned.
  - Committed.

## **Chapter 18 – Introduction to Accounting for State and Local Government Units**

### **Learning Objectives**

After completing this section of the course, you will be able to:

- Identify the broad categories of government fund entities, noting issues related to developing standards for nonprofit organizations.
- Differentiate between the various funds used by governments, noting how their revenues are accounted for and the difference between these funds and proprietary funds.
- Identify the appropriate financial reporting requirements as well as the reporting requirements for capital assets and long-term obligations by governments.
- Identify the types of inter-fund transfers.

# INTRODUCTION TO ACCOUNTING FOR STATE AND LOCAL GOVERNMENTAL UNITS

## CHAPTER CONTENTS

- 18.1 THE HISTORY OF GENERALLY ACCEPTED GOVERNMENTAL ACCOUNTING STANDARDS
- 18.2 THE STRUCTURE OF GOVERNMENTAL ACCOUNTING
- 18.3 GOVERNMENTAL FUND ENTITIES
- 18.4 PROPRIETARY FUNDS
- 18.5 FIDUCIARY FUNDS
- 18.6 CAPITAL ASSETS AND LONG-TERM DEBT
- 18.7 EXTERNAL REPORTING REQUIREMENTS
- 18.8 GOVERNMENT FUND-BASED REPORTING
- 18.9 GOVERNMENT-WIDE REPORTING
- 18.10 MANAGEMENT'S DISCUSSION AND ANALYSIS (MD&A)
- 18.11 INTERFUND ACTIVITY

### IN THE NEWS

"I don't make jokes—I just watch the government and report the facts."  
—Will Rogers<sup>1</sup>

Since GASB voted in 2012 to put unfunded pension liabilities on the balance sheets of state and local governments, a host of cities have struggled with the new rule. Pension liabilities are under scrutiny in several cities across the nation including Detroit, Chicago, and New York City. With Detroit declaring bankruptcy, pension cuts were challenged by city employees because the Michigan state constitution prohibits cutting accrued pension benefits. The suit to be decided in federal court could set the precedent for other cities facing similar problems.

<sup>1</sup>Quoted in *Saturday Review*. From *The Merriam-Webster Dictionary of Quotations*, Merriam-Webster, Inc., 1996; *Infopedia*, SoftKey Multimedia Inc., 1996.


 IN  
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NEWS

Governments traditionally have focused their reporting on groupings of

'funds' rather than on the government 'taken as a whole.' The newer financial reporting model retains this traditional focus on funds, but at the same time insists that fund financial statements be accompanied for the first time by financial statements that focus on the overall government (i.e., 'government-wide' financial statements).<sup>2</sup>


 IN  
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NEWS

A 24-foot boat. A \$74,000 piece of radio equipment.

More than 150 handguns and rifles. These are just a few of the nearly 1,500 items that the Texas Department of Public Safety (the state's premier law enforcement agency) reported lost or stolen. It is estimated that the agency has lost track of items estimated to be valued at over \$3.2 million. The agency is working with the IT department to improve the software needed to track inventory (especially when the state is facing a huge budget deficit).<sup>5</sup>

One report suggests 30 of the United States's 50 most debt-ridden cities have pension liabilities greater than their revenues. Chicago, for instance, had pension liabilities in 2011 of 678% of its revenue. On a related point, liabilities from other post-employment benefits (OPEB) might even be larger than unfunded pension liabilities. The City of Nashville reported unfunded pension obligations of \$83 million dollars, while obligations for unfunded post-retirement benefits were \$2.2 billion. Nashville's OPEB obligation is completely unfunded and is paid on a pay-as-you-go basis.

The lifestyles and well-being of all people are significantly affected by the activities of both profit-oriented enterprises and nonbusiness organizations. Of these, probably none is more important and pervasive in its impact on our daily lives than government. Today there are more than 70 thousand state and local governmental units, which employ more than 20 million people and collect annual revenues in excess of 500 billion dollars. The well-publicized problems of some city governments have attracted great interest and concern in the past. These problems focused attention on the need for (among other things) adequate accounting and financial reporting practices by cities and other governmental units as a basis for evaluating the extent of such problems and potential solutions.

As a consequence, the Governmental Accounting Standards Board (GASB) has reexamined the methods of accounting for state and local governments with significant changes being implemented. The GASB's *Statement No. 34*, "Basic Financial Statements—and Management's Discussion and Analysis—for State and Local Governments,"<sup>3</sup> issued in June 1999, affects all governmental units and is considered to be one of the most important statements issued by a governing accounting body. The rules require governments to provide basic financial statements using a government-wide (entity-wide) approach. This does not eliminate traditional fund accounting because governments are required to report statements emphasizing their major funds.<sup>4</sup> In addition, for the first time, financial managers are required to provide a management's discussion and analysis (MD&A) that gives readers an objective and easily readable analysis of the government's financial performance for the year. Thus, MD&A provides an analysis of the government's overall financial position and the results of the previous year's operations to assist users in assessing whether the government's finances have improved or deteriorated. Each analysis includes a comparison of the current year to the prior year based on the government-wide statements. In addition, the analysis explains significant variations in fund-based financial results and budgetary information, and describes capital assets and long-term debt activity during the year. The MD&A concludes with a description of currently known facts, decisions, or conditions that are expected to have a material impact on the government's future financial position and operations.

Generally, fund accounting rules in the past have followed a *flow of current financial resources* concept. Basically, this implies that each year is treated as a distinct event and the principal measurement of importance is the source and use of funds (where funds are usually defined on a modified accrual basis). The simplicity of this concept, unfortunately, leaves room for inadequacies. For example, a city that borrows to balance a current period budget deficit, must consider the future financial consequences of this decision. This example raises such questions as: Does fund accounting information alone provide users of governmental statements with sufficient information to evaluate the government? Therefore, *GASB Statement No. 34* requires "full accrual" accounting for all government-wide statements (i.e., *flow of economic resources approach*). Under this approach, governments would not be able to defer payment of expenses into the future and avoid recognition in the

**LO 1** Issues in developing standards.

<sup>2</sup> "The GASB's New Financial Reporting Model: An Overview for Finance Officers," July 1999, Government Finance Officers Association.

<sup>3</sup> Governmental Accounting Standards Board, *Statement No. 34*, "Basic Financial Statements—and Management's Discussion and Analysis—for State and Local Governments." (Financial Accounting Foundation and Government Accounting Standards Board: Norwalk, CT, 1999).

<sup>4</sup> Major funds as defined by the GASB are discussed later in this chapter.

<sup>5</sup> *New York Times*, "Missing Inventory Plagues Dept. of Public Safety, but Only Some of It Is Theft," by Brandi Grissom, January 20, 2011.

**ILLUSTRATION 18-1****Financial Reporting Model: Minimum Information Required for Fair Presentation in Conformity with Generally Accepted Accounting Principles (GAAP)**

| <i>Government-wide<br/>Financial Statements</i> | <i>Fund Financial<br/>Statements</i>   |
|---|--|
| Statement of net position (Illustration 18-17)  | <i>Governmental funds:</i>   |
| Statement of activities (Illustration 18-18)    | Balance sheet (Illustration 18-14)   |
|   | Statement of revenues, expenditures, and changes in fund balances (Illustration 18-15) |
|   | Reconciliation to government-wide statements (Illustrations 18-16 and 18-17)           |
|   | <i>Proprietary funds:</i>  |
|   | Balance sheet or statement of net position (Illustration 18-10)                        |
|   | Statement of revenues, expenses, and changes in net position (Illustration 18-11)      |
|   | Statement of cash flows—direct format  |
|   | <i>Fiduciary funds:</i>  |
|   | Statement of fiduciary net position  |
|   | Statement of changes in fiduciary net position   |

**Notes to the Financial Statements**

1. Schedule of changes in capital assets (Illustration 18-12)
2. Schedule of changes in long-term liabilities (Illustration 18-13)

**Required Supplemental Information (RSI)**

1. Management's Discussion and Analysis
2. Budgetary Comparison schedules (see Chapter 17)

current year (e.g., avoiding payment of pension obligations). Under accrual accounting, the accountability of politicians for economic decisions made during the current period may be more readily assessed. The fund-based reports will still maintain the flow of current financial resources concept showing the short-term performance of the individual funds (as opposed to the long-term focus of the *full accrual-based government-wide statements*).

The reporting requirements are listed above in Illustration 18-1 for the financial reporting model, along with the illustration number used in this chapter.

## 18.1 THE HISTORY OF GENERALLY ACCEPTED GOVERNMENTAL ACCOUNTING STANDARDS

Like generally accepted accounting standards for profit-oriented enterprises, standards of accounting and reporting for governmental units are in a constant state of evolution and change. The pioneer organization in promulgating standards of accounting and reporting for state and local governmental units was the Municipal Finance Officers Association (MFOA). Such standards were formulated by its National Committee on Governmental Accounting, which in 1974 was reconstituted as the National Council on Governmental Accounting (NCGA). In 1979 the NCGA issued *Statement 1: Government and Financial Reporting Principles*. Until 1984 this and subsequent statements and interpretations of the NCGA, along with the AICPA Industry Audit Guide: *Audits of State and Local Governmental Units* (1974) as amended by subsequently issued AICPA Statements of Position, constituted the primary sources of generally accepted governmental accounting standards.

In 1984 the GASB was established as a separate board under the oversight of the Financial Accounting Foundation (FAF), the same foundation that oversees the activities of the Financial Accounting Standards Board (FASB). The GASB is composed of one full-time

member (the chairman) and six part-time members supported by an administrative, technical, and research staff. Funding for the GASB is separate from that of the FASB.

The GASB is the body responsible for establishing financial accounting and reporting standards for governments. With its first pronouncement, *Authoritative Status of NCGA Pronouncements and AICPA Industry Audit Guide*, the GASB endorsed prior statements and interpretations of the NCGA, as well as the accounting and financial reporting standards embodied in the 1974 *AICPA Industry Audit Guide* as amended. Pronouncements of the GASB include GASB Statements (GASBS), GASB Interpretations (GASBI), GASB Concept Statements (GASBCS), and GASB Technical Bulletins (GASBTB). Pronouncements of the GASB are codified in the GASB's *Codification of Governmental Accounting and Financial Reporting Standards* (cited as *GASB Cod.*). This codification is updated annually.

## Hierarchy of Generally Accepted Reporting Standards for Governmental Entities

The hierarchy used to establish generally accepted reporting standards for all state and local governmental-owned entities, including government-owned colleges and universities, health care providers, and utilities, is included in *GASB Statement No. 55*, "The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments." The GAAP hierarchy governs what constitutes GAAP for all state and local governmental entities. It lists the order of priority of pronouncements that a governmental entity should look to for accounting and financial reporting guidance. The sources of accounting principles that are generally accepted are categorized as follows:

- (a) Officially established accounting principles—Governmental Accounting Standards Board (GASB) Statements and Interpretations.
- (b) GASB Technical Bulletins and, if specifically made applicable to state and local governmental entities by the American Institute of Certified Public Accountants (AICPA) and cleared by the GASB, AICPA Industry Audit and Accounting Guides, and AICPA Statements of Position.
- (c) AICPA Practice Bulletins if specifically made applicable to state and local governmental entities and cleared by the GASB, as well as consensus positions of a group of accountants organized by the GASB that attempts to reach consensus positions on accounting issues applicable to state and local governmental entities.
- (d) Implementation guides (Q&As) published by the GASB staff, as well as practices that are widely recognized and prevalent in state and local government.

If the accounting treatment for a transaction or other event is not specified by a pronouncement in category (a), a governmental entity should consider whether the accounting treatment is specified by an accounting principle from *a source in another category*. In such cases, if categories (b)–(d) contain accounting principles that specify accounting treatments for a transaction or other event, the governmental entity should follow the accounting treatment specified by the accounting principle from the source in the highest category—for example, follow category (b) treatment over category (c) treatment.

If the accounting treatment for a transaction or other event is not specified by a pronouncement or established in practice in *any* of the above categories ((a)–(d)), then the governmental entity should consider accounting principles for *similar transactions or other events* within categories (a)–(d) and may consider other accounting literature. A governmental entity should *not* follow the accounting treatment specified in accounting principles for similar transactions or other events in those cases where accounting principles either *prohibit* the application of the accounting treatment to the particular transaction or event or where they indicate that the accounting treatment should not be applied by analogy.

This hierarchy distinguishes the authority of the GASB and the FASB with regard to state and local governmental entities and implements the FAF trustees' jurisdictional determination of the respective roles of the two boards. The GASB and the FASB each has



primary responsibility for setting standards for entities under its jurisdiction, but pronouncements of one Board should not be mandatory for entities under the jurisdiction of the other Board *unless designated as such by the primary Board*.

## 18.2 THE STRUCTURE OF GOVERNMENTAL ACCOUNTING

A governmental unit, although a separate *legal* entity, consists of a number of separate fund and other *accounting* entities. There are eleven broad categories of fund entities. The eleven categories of fund entities fall under three subheadings: (I) governmental funds, (II) proprietary funds, and (III) fiduciary funds, as shown below.

### Fund Entities

(I) **Governmental Funds (expendable)**—reporting focuses on the sources, use, and balances of current financial resources. The accounting and reporting emphasis for these types of funds is on the inflow, outflow, and unexpended balance of net financial resources and on compliance with detailed legal provisions that specify the types of revenue to be raised and the purposes for which financial resources may be expended (the flow of current financial resources measurement basis). The different types of government funds are distinguished by the sources of their financial resources or the types of activities financed by the resources of the fund (per *GASB Statement No. 54*).

- (1) **General Fund**—The general fund should be used to account for and report all financial resources not accounted for and reported in another fund.
- (2) **Special Revenue Funds**—Special revenue funds are used to account for and report the proceeds of specific revenue sources that are *restricted* or *committed* to expenditure for specified purposes other than debt service or capital projects. The term *proceeds of specific revenue sources* establishes that one or more specific restricted or committed revenues should be the foundation for a special revenue fund.
- (3) **Capital Projects Funds**—Capital projects funds are used to account for and report financial resources that are *restricted*, *committed*, or *assigned* to expenditure for capital outlays, including the acquisition or construction of capital facilities and other capital assets. Capital projects funds exclude those types of capital-related outflows financed by proprietary funds or for assets that will be held in trust for individuals, private organizations, or other governments.
- (4) **Debt Service Funds**—Debt service funds are used to account for and report financial resources that are *restricted*, *committed*, or *assigned* to expenditure for principal and interest. Debt service funds should be used to report resources if legally mandated (i.e., debt payable from property taxes). Financial resources that are being accumulated for principal and interest maturing in future years also should be reported in debt service funds.
- (5) **Permanent Funds**—Permanent funds should be used to account for and report resources that are *restricted* to the extent that only earnings, and not principal, may be used for purposes that support the reporting government's programs—that is, for the benefit of the government or its citizenry. Permanent funds do not include private-purpose trust funds, which should be used to report situations in which the government is required to use the principal or earnings for the benefit of individuals, private organizations, or other governments.

(II) **Proprietary Funds (nonexpendable)**—reporting focuses on the determination of operating income, changes in net position financial position, and cash flows. Government operations that are similar to commercial business operations such as a water utility, an electric utility, or a central garage or central computer facility are accounted for in the *proprietary fund* category. Financial accounting and reporting for these

#### RELATED CONCEPTS

*GASB Statement 45* is expected to provide a better foundation for *decision making* about the level and types of benefits and the financing of those benefits.

#### LO 2 Broad categories of funds.

entities closely parallel accounting and reporting for profit-oriented enterprises. Thus both current and fixed assets and current and noncurrent liabilities are accounted for in the records of proprietary funds. In addition, revenue, expenses (including depreciation and amortization expense), and net income are determined and reported for these fund entities.

(6) **Enterprise Funds**—to account for any activity for which a fee is charged to external users for goods or services.

(7) **Internal Service Funds**—to report any activity that provides goods or services to other funds, departments, or agencies of the primary government and its component units, or to other governments, on a cost-reimbursement basis.

(III) **Fiduciary Funds**—reports assets held in a trustee or agency capacity for others and that cannot be used to support the government's own programs. Fiduciary fund reporting focuses on net position and changes in net position. These include:

(8) **Pension (and Other Employee Benefit) Trust Funds**—used to report resources that are required to be held in trust for the members and beneficiaries of defined benefit pension plans, defined contribution plans, other postemployment benefit plans, or other employee benefit plans.

(9) **Investment Trust Funds**—used to report the external portion of investment pools reported by the sponsoring government.

(10) **Private-Purpose Trust Funds**—used to report escheat property and to report all other trust agreements under which principal and income benefit individuals, private organizations, or other governments.

(11) **Agency Funds**—used to report resources held by the reporting government in a purely custodial capacity (assets equal liabilities). Agency funds typically involve only the receipt, temporary investment, and remittance of fiduciary resources to individuals, private organizations, or other governments.



IN  
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NEWS

Following its near-bankruptcy scare of 1975, New York City took measures to curb “creative” accounting. By requiring that the city balance its budget according to GAAP, the state averted NYC financial crises for several decades. However, Mayor Bill de Blasio’s inaugural budget has the city borrowing for the first time since the 1970s to fund new obligations, debt the city has freely chosen to incur. The city’s comptroller pointed out deferred accounting for over \$700 million in retroactive pay raises for soon-to-retain teachers. Moving this obligation to the 2015 budget, as required by GAAP, would only take care of about a sixth of the future cost of retroactive raises for all teachers (not just the soon-to-retain crowd).<sup>6</sup>

## 18.3 GOVERNMENTAL FUND ENTITIES

### General Fund

All revenues and expenditures of a governmental unit not accounted for in other governmental or proprietary funds are accounted for in the general fund. The variety of revenue sources available to the general fund and the variety of functions and activities financed by the resources of the general fund are ordinarily more numerous than are those for any other fund. Accounting entries and reports for the general fund of a governmental unit were illustrated in Chapter 17.

We continue the example for the Model City for the remainder of the government funds. Model City discloses the following footnote concerning encumbrances and fund balances.

<sup>6</sup> “More Detroiters Are on the Way,” Richard Ravitch, *WSJ*, 5-16-2014 and “Taking New York Back to the Bad Old Days,” Fred Siegel and N. Gelinas, *WSJ*, 5-21-2014.

## Footnote for Model City Example

For the general fund, outstanding encumbrances are reported as assigned fund balances. For other governmental funds, encumbrances are reported as either restricted or committed. These balances do not constitute expenditures or liabilities for GAAP purposes since the goods and services have not been received.

The City Council is the City's highest level of decision-making authority and the formal action that is required to be taken to establish, modify, or rescind a fund balance commitment is a resolution approved by the City Council. This can also be done through adoption or amendment of the budget. The resolution must either be approved or rescinded, as applicable, prior to the last day of the fiscal year for which the commitment is made. The amount subject to the constraint may be determined in the subsequent period.

The City Council has authorized the Finance Director as the official authorized to assign fund balance \$50 to \$100 thousand, depending on the type of goods or services by administrative action. Such assignments cannot exceed the available (spendable, unrestricted, uncommitted) fund balance in any particular fund.

## Special Revenue Funds

Special revenue funds are used to account for the proceeds of specific revenue sources that are required by statute, charter provisions, or local ordinance to be used to finance particular functions or activities of the governmental unit. Special revenue funds require that a specific source of revenue must at least be committed. Most local governments can only do what is authorized in State statute (restricted), so the ability to commit unrestricted general fund revenue may not exist. Municipalities may be able to commit, by ordinance, a specific source of revenue to a specific purpose. Thus, most special revenue funds will be restricted. Of the nine (nonmajor) special revenue funds, the City of Nashville reports six restricted, two committed, one nonspendable, and one negative unassigned fund balance amount. The specific source of revenue must be disclosed for each special revenue fund. Examples of special revenue funds are those established to finance the operations of special facilities, such as parks or museums, or of particular activities, such as the licensing and regulation of professions. Although the sources of revenue for special revenue funds in general are similar to those for the general fund, a typical special revenue fund will have only a single revenue source such as a single tax, or specified portion thereof, or a license fee, the proceeds of which are legally restricted to be expended for a specific purpose, function, or activity.

Accounting entries and financial reports for special revenue funds are analogous in all respects to the accounting entries and financial reports for the general fund illustrated in Chapter 17, and no further illustration is presented here beyond a brief summary. In special revenue funds, as in the general fund, the following steps are taken:

1. A budget is established and recorded in the accounts.
2. Encumbrances are used to control budgeted expenditures.
3. Fixed assets acquired by the expenditure of special revenue fund resources are not reported as assets of the special revenue fund but rather are recorded on a schedule of capital assets and reported on the government-wide statement of net position.
4. Depreciation of fixed assets is not recorded or reported by the special revenue fund. (Depreciation expense on these assets is reported on the government-wide statements.)
5. The liability for long-term debt of the specific revenue fund is not recorded or reported as a liability of the special revenue fund but is reported as a liability on the government-wide statement of net position. The proceeds are recorded in the special revenue fund.

Under *GASB Statement No. 34*, expendable trust funds are reported with special revenue funds. Assume, for example, that Model City has an ordinance that requires all licensed contractors to deposit funds with the city to guarantee performance on their contracts. The deposits must be returned to the contractors when they relinquish their licenses. When a deposit is received, cash is debited and the fund balance is credited. When deposits

### RELATED CONCEPTS

Because nonprofit organizations are typically not self-sustaining or profit oriented, and because they rely heavily on its resource providers, stewardship information is very important for full disclosure.

**LO 3** Distinguish between the general fund and special revenue fund.

are refunded, the fund balance is debited and cash is credited. Since the deposits may be held by the city for substantial periods of time, the resources of the trust fund are usually invested, and modest amounts of revenue may be earned.

## Capital Projects Funds

**LO 4** Explain the use of a capital projects fund.

Capital projects funds can exist from transfers from other funds rather than a specific source of funds. If a capital projects fund exists because of a transfer and the governing body has identified a specific purpose by ordinance or resolution, then the fund balance is committed. However, if the governing body has not identified a purpose, the fund balance is assigned. The City of Nashville reports two major capital projects funds, and both of these have restricted fund balance. For instance, the Education Capital Projects Fund is used to account for the use of bond proceeds for the construction and equipping of various school facilities. Capital projects funds are established to account for the *resources* to acquire or construct major capital facilities (i.e., permanent assets with long lives). Major capital facilities include assets such as buildings, streets and highways, and storm drain systems. The primary purpose of accounting for the acquisition of major capital facilities in a separate capital projects fund is to show that the resources designated for such purposes were used for authorized purposes only and that any unexpended balances of such resources or resource deficits have been treated properly. *Resources* for the acquisition of major capital facilities include (1) proceeds of long-term debt issues, (2) grants or payments from other governmental units and agencies, (3) funds from private sources, (4) transfers of current revenues from other governmental funds, (5) special assessments, and (6) other sources.

Not all major capital facilities acquisitions are accounted for in capital project funds. Construction and acquisition of capital facilities financed by enterprise funds are accounted for in the enterprise fund. In addition, in some instances the resources of the general fund or a special revenue fund are appropriated for the acquisition of a major capital facility. So long as such acquisitions do not involve the issuance of general obligation long-term debt securities, they may be accounted for in the fund that appropriates the resources rather than in a separate capital projects fund.

The operations of a capital projects fund may extend over several accounting periods. Separate capital projects funds are ordinarily created for each major capital project. When the project is completed, the associated capital projects fund is closed out.

**Capital Projects Fund Example** To illustrate accounting and reporting procedures for a capital projects fund, assume that Model City authorizes the construction of a combination library and civic center that will be financed from the following sources (one from within the local government and one from the state):

|                                      |                    |
|--------------------------------------|--------------------|
| General obligation bonds (par value) | \$2,000,000        |
| State government grant               | 1,000,000          |
| Total authorized for construction    | <u>\$3,000,000</u> |

The state grant restricts the use of the funds for construction and a debt covenant on the debt also restricts the use of the funds for construction. Construction is to begin on September 1, 2014, and the bonds are to be issued on October 1, 2014.

**Entries—2014** Entries to record the transactions of the capital projects fund during 2014 are summarized and explained as follows:

|                                |           |           |
|--------------------------------|-----------|-----------|
| (1) Due from State Government  | 1,000,000 |           |
| Grant Revenue                  |           | 1,000,000 |
| To open Capital Projects Fund. |           |           |

There is no budget entry to record estimated revenue and appropriations into the accounting records. Sources of estimated revenues for a capital project are few and predictable in amount. Thus, it serves no useful purpose to record them. Likewise, an appropriation account is not required as a formal control device, since the funds can be expended only for the single authorized project. Thus, the fund balance itself serves as an adequate measure of, and control over, unexpended appropriation authority.

|  |           |           |
|--|-----------|-----------|
| (2) Cash   | 2,100,000 |           |
| Bond Issue Proceeds—Other Financing Sources  |           | 2,100,000 |
| To record receipt of proceeds from issuance of long-term debt securities.<br>The bonds were issued at a market rate of 6.787%. |           |           |

The Bond Issue Proceeds account is closed to the Fund Balance at the end of the year.

#### EFFECT OF A TRANSACTION ON DIFFERENT FUNDS

Each fund is a set of self-balancing accounts. The previous entry, to record the issuance of the bond, is a source of funds for the capital projects fund. Yet, the debt is not recorded as a liability of the fund. This transaction illustrates that one transaction can, and often does, affect several other funds at the same time. The liability will be reported on the government-wide statement of net position.

When bonds are issued at a premium, the difference between the bond issue proceeds and the par value of the bonds represents an interest adjustment and is usually transferred to the debt service fund that is used to service the principal and interest on the debt.

|  |         |         |
|--|---------|---------|
| (3) Transfer to Debt Service Fund  | 100,000 |         |
| Cash   |         | 100,000 |
| To record transfer of cash in amount of bond premium to Debt Service Fund. |         |         |

#### TRANSFERS BETWEEN FUNDS

It is not unusual for resources to be transferred between funds. Most transfers, like the one in Entry (3), are recurring nonreciprocal transfers (also known as operating transfers) and are reported separately from revenues and expenditures on the statement of revenues, expenditures, and changes in fund balance as “other financing sources and uses.” Transfers are discussed later in the chapter.

|  |           |           |
|--|-----------|-----------|
| (4) Certificates of Deposit  | 1,000,000 |           |
| Cash   |           | 1,000,000 |
| To record investment of excess cash in temporary investments.  |           |           |
| (5) Encumbrances   | 2,500,000 |           |
| Fund Balance—Restricted  |           | 2,500,000 |
| To record encumbrance created by signing construction contract with<br>Lloyd-Jones Construction Company.     |           |           |
| (6) Cash   | 750,000   |           |
| Due from State Government  |           | 750,000   |
| To record collection of part of grant from State Government.   |           |           |
| (7) Expenditures   | 200,000   |           |
| Vouchers Payable   |           | 200,000   |
| To record unencumbered expenditures for architect and legal fees.<br>Payment is recorded in entry (9).       |           |           |
| (8) Fund Balance—Restricted  | 1,300,000 |           |
| Encumbrances   |           | 1,300,000 |
| Expenditures   | 1,300,000 |           |
| Contracts Payable  |           | 1,300,000 |
| To record approved contract billings on construction completed to date and to remove<br>encumbrance thereon. |           |           |
| (9) Vouchers Payable   | 150,000   |           |
| Contracts Payable  | 1,300,000 |           |
| Cash   |           | 1,450,000 |
| To record payment of liabilities (includes a portion of (7) and all of (8)).                                 |           |           |
| (10) Interest Receivable   | 12,500    |           |
| Interest Revenue   |           | 12,500    |
| To record interest earned on certificate of deposit to December 31, 2014.                                    |           |           |

The treatment of interest income on temporary investments depends on legal provisions or established policy. One alternative is to transfer such earnings to the debt service fund. A second alternative is to treat such earnings as revenue of the capital projects fund. The latter treatment is justified on the grounds that resources allocated to the project are restricted exclusively

to that project and, accordingly, any earnings on such resources are also restricted resources and should not be diverted to any other use.

**December 31, 2014, Trial Balance** The December 31, 2014, trial balance for the capital projects fund presented below reflects the transactions recorded in 2014.

|   | <i>Debit</i>       | <i>Credit</i>      |
|---|--------------------|--------------------|
| Cash  | \$ 300,000         |                    |
| Interest Receivable                               | 12,500             |                    |
| Certificates of Deposit                           | 1,000,000          |                    |
| Due from State Government                         | 250,000            |                    |
| Encumbrances                                      | 1,200,000          |                    |
| Expenditures                                      | 1,500,000          |                    |
| Vouchers Payable                                  |                    | \$ 50,000          |
| Contracts Payable                                 |                    | —0—                |
| Fund Balance—Restricted                           |                    | 1,200,000          |
| Grant Revenue                                     |                    | 1,000,000          |
| Interest Revenue                                  |                    | 12,500             |
| Bond Issue Proceeds—Other Financing Sources       |                    | 2,100,000          |
| Transfer to Debt Service Fund—Other Financing Use | 100,000            |                    |
|   | <u>\$4,362,500</u> | <u>\$4,362,500</u> |

*Closing Entries—December 31, 2014*

|      |  |           |           |
|------|--|-----------|-----------|
| (11) | Bond Issue Proceeds  | 2,100,000 |           |
|      | Grant Revenue  | 1,000,000 |           |
|      | Interest Revenue   | 12,500    |           |
|      | Transfer to Debt Service Fund                                    |           | 100,000   |
|      | Fund Balance—Restricted  |           | 3,012,500 |
|      | To close revenue and related accounts to fund balance.           |           |           |
| (12) | Fund Balance—Restricted  | 2,700,000 |           |
|      | Encumbrances   |           | 1,200,000 |
|      | Expenditures   |           | 1,500,000 |
|      | To close expenditures and encumbrances accounts to fund balance. |           |           |

Since no budget accounts were formally recorded in the accounting records, there are no budget accounts to be closed at year-end. Hence, the nominal accounts are closed directly to the fund balance.

At the end of each year, the cost of construction in progress represented by expenditures incurred by the capital projects fund during the year will be reported on the government-wide statement of net position.

**Completion of Project** Entries in 2015 to record the completion of the project are presented and explained below.

|      |   |           |           |
|------|---|-----------|-----------|
| (13) | Encumbrances  | 1,200,000 |           |
|      | Fund Balance—Restricted   |           | 1,200,000 |
|      | To reestablish the contract encumbrance closed out at end of previous year. |           |           |

Since capital projects funds are project oriented rather than period oriented, there is no need, as there is in accounting for the general fund or a special revenue fund, to identify expenditures with appropriation authority of a particular year. Thus, expenditures for amounts encumbered in prior years are not segregated from other expenditures of the current year. Entry (13) reestablishes the encumbrance equal to the beginning of year balance.

|      |                                      |         |         |
|------|--------------------------------------|---------|---------|
| (14) | Expenditures                         | 225,000 |         |
|      | Vouchers Payable                     |         | 225,000 |
|      | To record unencumbered expenditures. |         |         |

|      |   |           |           |
|------|---|-----------|-----------|
| (15) | Cash  | 250,000   |           |
|      | Due from State Government   |           | 250,000   |
|      | To record receipt of cash payment from State Government.  |           |           |
| (16) | Cash  | 1,020,000 |           |
|      | Certificate of Deposit  |           | 1,000,000 |
|      | Interest Receivable   |           | 12,500    |
|      | Interest Revenue  |           | 7,500     |
|      | To record realization of certificate of deposit.  |           |           |
| (17) | Fund Balance—Restricted   | 1,200,000 |           |
|      | Encumbrances  |           | 1,200,000 |
|      | Expenditures  | 1,200,000 |           |
|      | Contracts Payable   |           | 1,200,000 |
|      | To record approved final contract billings on completed construction and to remove remaining contract encumbrance.      |           |           |
| (18) | Contracts Payable   | 1,200,000 |           |
|      | Contracts Payable—Retained Percentage   |           | 125,000   |
|      | Cash  |           | 1,075,000 |
|      | To record payment of contract except for retention of 5% of the contract price pending inspection of completed project. |           |           |
| (19) | Vouchers Payable  | 275,000   |           |
|      | Cash  |           | 275,000   |
|      | To record payment of liabilities.   |           |           |

**December 31, 2015, Trial Balance** The preclosing trial balance of the capital projects fund on December 31, 2015, is presented below:

|                                       | <i>Debit</i>       | <i>Credit</i>      |
|---------------------------------------|--------------------|--------------------|
| Cash                                  | \$ 220,000         |                    |
| Expenditures                          | 1,425,000          |                    |
| Contracts Payable—Retained Percentage |                    | \$ 125,000         |
| Fund Balance—Restricted               |                    | 1,512,500          |
| Interest Revenue                      |                    | 7,500              |
|                                       | <u>\$1,645,000</u> | <u>\$1,645,000</u> |

*Closing Entry—December 31, 2015*

|      |  |           |           |
|------|--|-----------|-----------|
| (20) | Fund Balance—Restricted                    | 1,417,500 |           |
|      | Interest Revenue                           |           | 7,500     |
|      | Expenditures                               |           | 1,425,000 |
|      | To close nominal accounts to fund balance. |           |           |

**Financial Statements** A comparative balance sheet and a comparative statement of revenues, expenditures, and changes in fund balance for the years ended December 31, 2015, and December 31, 2014, are presented in Illustrations 18-2 and 18-3.

**Closing Out a Capital Projects Fund** Although the cost of a capital project should equal the resources provided for its acquisition, actual expenditures normally do not equal the project authorization. If an unexpended fund balance remains after the completion of the project, it should be distributed to the contributors of project resources in proportion to their contribution. For example, unless legal or policy decisions dictate otherwise, the capital projects fund of Model City illustrated above would be closed out as follows:

|      |                                       |         |         |
|------|---------------------------------------|---------|---------|
| (21) | Contracts Payable—Retained Percentage | 125,000 |         |
|      | Cash                                  |         | 125,000 |
|      | To record final payment on contract.  |         |         |

**ILLUSTRATION 18-2****Library and Civic Center Capital Projects Fund  
Balance Sheet at December 31, 2015, and December 31, 2014**

| <i>Assets</i>                         | <i>2015</i>      | <i>2014</i>        |
|---------------------------------------|------------------|--------------------|
| Cash                                  | \$220,000        | \$ 300,000         |
| Interest Receivable                   | —                | 12,500             |
| Certificates of Deposit               | —                | 1,000,000          |
| Due from State Government             | —                | 250,000            |
| Total Assets                          | <u>\$220,000</u> | <u>\$1,562,500</u> |
| <i>Liabilities and Fund Balance</i>   |                  |                    |
| Vouchers Payable                      | \$ —             | \$ 50,000          |
| Contracts Payable—Retained Percentage | 125,000          | —                  |
| Total Liabilities                     | <u>\$125,000</u> | <u>\$ 50,000</u>   |
| Fund Balance                          |                  |                    |
| Restricted for Capital Projects       | 95,000           | 1,512,500          |
| Total Fund Balance                    | <u>95,000</u>    | <u>1,512,500</u>   |
| Total                                 | <u>\$220,000</u> | <u>\$1,562,500</u> |

**ILLUSTRATION 18-3****Library and Civic Center Capital Projects Fund  
Statement of Revenues, Expenditures, and Other Changes  
in Fund Balance for Years Ended December 31, 2015, and December 31, 2014**

|   | <i>2015</i>        | <i>2014</i>        | <i>Cumulative</i>  |
|---|--------------------|--------------------|--------------------|
| <i>Revenues</i>                                   |                    |                    |                    |
| Grant Revenue                                     | \$ —               | 1,000,000          | 1,000,000          |
| Interest Revenue                                  | 7,500              | 12,500             | 20,000             |
| Total Revenue                                     | <u>7,500</u>       | <u>1,012,500</u>   | <u>1,020,000</u>   |
| <i>Expenditures</i>                               |                    |                    |                    |
| Capital Asset/Construction                        | 1,425,000          | 1,500,000          | 2,925,000          |
| Total Expenditures                                | <u>1,425,000</u>   | <u>1,500,000</u>   | <u>2,925,000</u>   |
| Excess (deficiency) of Revenues over Expenditures | <u>(1,417,500)</u> | <u>(487,500)</u>   | <u>(1,905,000)</u> |
| <i>Other Financing Sources (Uses)</i>             |                    |                    |                    |
| Proceeds of Long-Term Capital-related Debt        | —                  | 2,100,000          | 2,100,000          |
| Operating Transfer Out                            | —                  | (100,000)          | (100,000)          |
| Total Other Financing Sources (Uses)              | <u>—</u>           | <u>2,000,000</u>   | <u>2,000,000</u>   |
| Net Change in Fund Balance                        | <u>(1,417,500)</u> | <u>1,512,500</u>   | <u>95,000</u>      |
| Fund Balance—January 1                            | 1,512,500          | —                  | —                  |
| Fund Balance—December 31                          | <u>\$ 95,000</u>   | <u>\$1,512,500</u> | <u>\$ 95,000</u>   |

|  |          |        |
|--|----------|--------|
| (22) Transfer to Debt Service Fund—Other Financing Use | 63,333*  |        |
| Expenditures   | 31,667** |        |
| Cash   |          | 95,000 |
| To record distribution of Fund Balance.                |          |        |

\*  $(\$2,000,000/\$3,000,000) \times \$95,000 = \$63,333$  to another governmental fund.

\*\*  $(\$1,000,000/\$3,000,000) \times \$95,000 = \$31,667$  to the state government.

|   |        |        |
|---|--------|--------|
| (23) Fund Balance—Restricted                            | 95,000 |        |
| Fund Balance—Unassigned                                 |        | 95,000 |
| To reclassify the restricted fund balance to unassigned |        |        |



For financial reporting purposes, transfers to other funds within a governmental unit are distinguished from expenditures. The return of \$31,667 to the state government is treated as an expenditure because it reduces the financial resources of Model City.

When construction is completed, the assets acquired with capital projects fund resources are recorded at cost in the government activities column in the government-wide statement of net position. No assets are recorded in the capital projects fund.

## Debt Service Funds

### Lo 5 Describe a debt service fund.

Debt service funds are used to account for and report financial resources that are restricted, committed, or assigned to expenditure for principal and interest. Debt issued by the government is separated into two categories: general obligation long-term debt that supports the activities of the government as a whole, and debt that is issued by proprietary funds to support specific activities of the fund. Long-term liabilities directly related to, and expected to be paid from, fiduciary funds should be reported in the statement of fiduciary net position. General obligation long-term debt consists of bonds, notes, or warrants that are secured by the general credit and revenue-raising powers of the governmental unit as a whole, rather than by the resources of a specific fund. Two funds are involved in accounting for general obligation long-term debt. The debt is recorded on the statement of net position while *the funds* used to meet the principal and interest payments are accumulated in the **debt service fund**. Since the principal is not reported as a liability of the debt service fund, payments of bond principal and interest are *expenditures* of (rather than reduction of liabilities of) the debt service fund.<sup>7</sup> On the other hand, long-term debt that is the specific obligation of an enterprise fund (a proprietary fund) is a liability of that fund, and the accumulation of resources for its payment will be accounted for in that fund, rather than in a debt service fund.

General obligation bonds may be serial bonds or term bonds. The principal of a term bond is repaid in one lump sum at a specified maturity date. The total principal of serial bonds is repaid in a specified number of annual (and usually equal) installments.

Debt service funds are usually financed by one or more of the following sources of revenue:

- General property tax
- Sales tax or other specified tax revenues
- Transfers of other governmental fund revenues
- Special assessments
- Revenue from the investment of debt service fund resources

For purposes of illustrating the difference between the debt service for serial bonds and for term bonds, two debt service funds—Land Acquisition Serial Bonds Debt Service Fund and Library and Civic Center Term Bonds Debt Service Fund—are illustrated for Model City. In reality both these funds might be collapsed into a single debt service fund.

**Serial Bonds** Accounting for the accumulation of resources and payment of annual installments of principal and interest on serial bonds is relatively simple. To illustrate, assume that in 2011, Model City issued \$1,800,000 in 8% serial bonds at par, \$300,000 of which come due on July 1 of each year beginning July 1, 2012. On January 1, 2014, there is \$1,200,000 in principal on these bonds outstanding, and \$300,000 in principal and \$96,000 in interest will come due on July 1, 2014. The City Council committed property taxes for annual installments of principal and the Finance Director assigned funds from the General Fund for interest payments. At the beginning of 2014, the debt service fund had

<sup>7</sup> Matured long-term debt that has not yet been redeemed with the resources of the debt service fund may be recorded as a liability of the debt service fund.

cash and receivables of \$5,000 available to make debt payments. The trial balance of the Land Acquisition Serial Bonds Debt Service Fund on January 1, 2014, is as follows:

| <b>Trial Balance—January 1, 2014</b> |              |               |
|--------------------------------------|--------------|---------------|
|                                      | <i>Debit</i> | <i>Credit</i> |
| Cash                                 | \$3,000      |               |
| Property Tax Receivable              | 2,000        |               |
| Property                             |              |               |
| Fund Balance—Committed               |              | \$5,000       |
| Total                                | \$5,000      | \$5,000       |

In this example, we have assumed that the debt service for the serial bonds are paid from committed funds. However, the funds could be restricted, committed, or assigned. Transactions of the fund for 2014 are summarized in general journal form below.

**A. Budgeting Revenue and Appropriations**

|     |   |         |         |
|-----|---|---------|---------|
| (1) | Estimated Revenue   | 315,000 |         |
|     | Authorized Transfer from the General Fund                                   | 96,000  |         |
|     | Appropriations (300,000 + 96,000)   |         | 396,000 |
|     | Fund Balance—committed  |         | 15,000  |
|     | To record budgeted revenue, transfers, and appropriations for current year. |         |         |

**B. Revenue Generation and Fund Transfers**

|     |  |         |         |
|-----|--|---------|---------|
| (2) | Property Tax Receivable  | 320,000 |         |
|     | Allowance for Uncollectible Taxes  |         | 4,000   |
|     | Revenue (net)  |         | 316,000 |
|     | To record general property tax levy earmarked for debt service on serial bonds.                |         |         |
| (3) | Due from the General Fund  | 96,000  |         |
|     | Transfer from General Fund—Other Financing Source  |         | 96,000  |
|     | To record amount of resources authorized for transfer from General Fund during current period. |         |         |
| (4) | Cash   | 316,000 |         |
|     | Property Tax Receivable  |         | 316,000 |
|     | To record collection of property taxes.  |         |         |
| (5) | Cash   | 96,000  |         |
|     | Due from the General Fund  |         | 96,000  |
|     | To record receipt of cash transfer from General Fund.  |         |         |

**C. Debt Expenditure**

|     |  |         |         |
|-----|--|---------|---------|
| (6) | Expenditures—Principal                                 | 300,000 |         |
|     | Expenditures—Interest                                  | 96,000  |         |
|     | Cash   |         | 396,000 |
|     | To record payment of interest and principal on July 1. |         |         |

**D. Year-End Entries**

|     |   |         |         |
|-----|---|---------|---------|
| (7) | Revenue   | 316,000 |         |
|     | Estimated Revenue   |         | 315,000 |
|     | Fund Balance—Committed                                    |         | 1,000   |
|     | Transfer from General Fund—Other Financing Source         | 96,000  |         |
|     | Authorized Transfer from General Fund                     |         | 96,000  |
|     | Appropriations  | 396,000 |         |
|     | Expenditures—Principal                                    |         | 300,000 |
|     | Expenditures—Interest                                     |         | 96,000  |
|     | To close nominal and budget account balances at year-end. |         |         |
| (8) | Allowance for Uncollectible Taxes                         | 4,000   |         |
|     | Property Tax Receivable                                   |         | 4,000   |
|     | To record write-off of taxes authorized by City Council.  |         |         |

The postclosing trial balance for this fund on December 31, 2014, is as follows:

| <b>Trial Balance—December 31, 2014</b> |              |               |
|--|--------------|---------------|
|  | <i>Debit</i> | <i>Credit</i> |
| Cash                                   | \$19,000     |               |
| Property Tax Receivable                | 2,000        |               |
| Fund Balance—Committed                 |              | \$21,000      |
| Total                                  | \$21,000     | \$21,000      |

A statement of revenues, expenditures, and changes in fund balance is presented in Illustration 18-4 for the Land Acquisition Serial Bonds Debt Service Fund.

**Term Bonds** Accounting for the debt service of term bonds is more complicated than accounting for serial bonds. Debt service funds for term bonds require annual additions to fund resources that, with compound interest, will provide the total amount of bond principal by the maturity date of the bonds. In addition, the debt service fund for a term bond issue must provide for the payment of periodic interest on the bonds.

To illustrate, assume that the \$2,000,000 in bonds issued on October 1, 2014, to finance the construction of the Library and Civic Center of Model City were 8% bonds that mature five years after their issue date. (These bonds were issued in the capital projects fund earlier in this chapter. The bonds have a stated interest rate of 8% and an original market rate of 6.787%.) The calculation of the required annual additions to the debt service fund is presented in Illustration 18-5. It is assumed that funds can be invested at an average annual return of 10%. The required annual principal addition of \$327,595 is calculated by dividing the term bond principal of \$2,000,000 by the amount of an ordinary annuity of \$1.00 for five periods at 10% ( $\$2,000,000/6.1051 = \$327,595$ ). Alternatively, it can be calculated by first getting the present value \$2,000,000 discounted back for five periods at 10% ( $\$2,000,000 \times 0.62092 = \$1,241,840$ ). Then divide \$1,241,840 by the present value of an ordinary annuity for five periods at 10% ( $\$1,241,840/3.79079 = \$327,595$ ). See Appendix PV (at the back of the book) Tables A1 and A2 for present value table factors. In addition, \$160,000 is needed to cover the interest payments ( $\$2,000,000 \times .08$ ).

These calculations do not take into account the \$100,000 premium on the issue of the bonds that is transferred by the capital projects fund to the debt service fund in 2014. However, if the fund balance of a debt service fund exceeds actuarial requirements, the excess is ordinarily carried forward without adjustment until the final addition to the fund is made. It is assumed that annual additions to the Library and Civic Center Term Bonds Debt

#### ILLUSTRATION 18-4

##### **Land Acquisition Serial Bonds Debt Service Fund Statement of Revenues, Expenditure, and Changes in Fund Balance for Year Ended December 31, 2014**

|  |                 |
|--|-----------------|
| <b>Revenues</b>  |                 |
| General Property Taxes                                   | \$316,000       |
| <b>Expenditures</b>                                      |                 |
| Principal Payments on Serial Bonds                       | 300,000         |
| Interest on Bonds  | 96,000          |
| Total Expenditures                                       | 396,000         |
| <b>Excess (deficiency) of Revenues over Expenditures</b> | <b>(80,000)</b> |
| <b>Other Financing Sources (Uses)</b>                    |                 |
| Transfers in (from General Fund)                         | 96,000          |
| Net Change in Fund Balance                               | \$ 16,000       |
| Fund Balance—January 1                                   | 5,000           |
| Fund Balance—December 31                                 | \$ 21,000       |

## ILLUSTRATION 18-5

**Debt Service Fund—Term Bonds**  
**Required Annual Additions and Required Earnings for**  
**\$2,000,000 Library and Civic Center Bond Issue**

| <i>Year</i>                                     | <i>Required Principal Additions (1)</i> | <i>Required Earnings (2)</i> | <i>Required Increase in Fund Balance (3)</i> | <i>Required Fund Balance (4)</i> |
|---|---|------------------------------|--|----------------------------------|
| 2015  | \$ 327,595                              |                              | \$ 327,595                                   | \$ 327,595                       |
| 2016  | 327,595                                 | \$ 32,760                    | 360,355                                      | 687,950                          |
| 2017  | 327,595                                 | 68,795                       | 396,390                                      | 1,084,340                        |
| 2018  | 327,595                                 | 108,434                      | 436,029                                      | <u>1,520,369</u>                 |
| 2019  | <u>327,595</u>                          | <u>152,036</u>               | <u>479,631</u>                               | <u>2,000,000</u>                 |
|   | <u>\$1,637,975</u>                      | <u>\$ 362,025</u>            | <u>\$2,000,000</u>                           |                                  |
| Required Principal Addition (1)                 |   |                              |  | \$ 327,595                       |
| Required Interest Addition (0.08 × \$2,000,000) |   |                              |  | 160,000                          |
| Required Annual Addition                        |   |                              |  | <u>\$ 487,595</u>                |

(1) The required principal addition equals  $(\$2,000,000 \div 0.62092) \times .79079$  or \$327,595

(2) Required earnings equals 10% times the previous year's required fund balance (column (4))

(3) The required increase in fund balance equals the sum of column (1) and column (2)

(4) The required fund balance equals the cumulative sum of the required increase in fund balance, column (3)

Service Fund are derived from an earmarked portion of the general property tax assessment (assume restricted fund balance).

**Transactions—2014** Transactions of the fund in 2014 are summarized in general journal form as follows:

|  |         |         |
|--|---------|---------|
| (1) Cash   | 100,000 |         |
| Transfer from Capital Projects Fund—Other  |         | 100,000 |
| Financing Use  |         |         |
| To record transfer of cash from Capital Projects Fund for the premium received on bond issue proceeds. |         |         |

Note that for fund accounting purposes, the premium on the bond issued is not amortized to expense over the life of the bond, but is considered an operating transfer-in that increases the fund balance. However, on the government-wide financial statements (illustrated later in the chapter), the premium needs to be amortized to expense.

Without a transfer of cash to the debt service fund by the capital projects fund, no entries would have been required in the debt service fund until the 2015 fiscal year.

|   |         |         |
|---|---------|---------|
| (2) Investments   | 100,000 |         |
| Cash  |         | 100,000 |
| To record investment of cash in a certificate of deposit.                           |         |         |
| (3) Interest Receivable   | 4,000   |         |
| Interest Income   |         | 4,000   |
| To accrue interest receivable from the certificate of deposit on December 31, 2014. |         |         |
| (4) Interest Income   | 4,000   |         |
| Transfer from Capital Projects Fund   | 100,000 |         |
| Fund Balance—restricted   |         | 104,000 |
| To close nominal accounts to Fund Balance.  |         |         |

The postclosing trial balance on December 31, 2014, is as follows:

**Trial Balance—December 31, 2014**

|                         | <i>Debit</i>     | <i>Credit</i>    |
|-------------------------|------------------|------------------|
| Investments             | \$100,000        |                  |
| Interest Receivable     | 4,000            |                  |
| Fund Balance—Restricted |                  | \$104,000        |
| Total                   | <u>\$104,000</u> | <u>\$104,000</u> |

**Transactions—2015** Revenue and expenditure transactions for 2015 are summarized later in Illustration 18-9. At the end of 2015, the postclosing trial balance for the fund is as follows:

| <b>Trial Balance—December 31, 2015</b> |              |               |
|--|--------------|---------------|
|  | <i>Debit</i> | <i>Credit</i> |
| Cash                                   | \$ 33,000    |               |
| Interest Receivable                    | 4,000        |               |
| Property Tax Receivable                | 6,000        |               |
| Investments                            | 400,000      |               |
| Allowance for Uncollectible Taxes      |              | \$ 1,000      |
| Fund Balance—Restricted                |              | 442,000       |
| Total                                  | \$443,000    | \$443,000     |

**Transactions—2016** Transactions for 2016 (also shown later in Illustration 18-7) are summarized in general journal form as follows:

**A. Budget Additions, Appropriations, and Estimated Revenues**

|  |         |         |
|--|---------|---------|
| (1) Required Additions (\$327,595 + \$160,000)   | 487,595 |         |
| Required Earnings  | 32,760  |         |
| Fund Balance—Restricted  |         | 520,355 |
| To record budgeted additions and budgeted income on invested resources of fund for current year (see Illustration 18-5). |         |         |

The amounts reported in the required additions and the required earnings accounts are determined (actuarially) to meet the current and future years' interest and principal payments. For example, \$160,000 is needed to meet the current year's interest payment. An additional \$327,595 is needed for the fund to accumulate to meet future payments. In addition, existing funds must earn some minimum rate to accumulate to the desired amount. The required earnings amount is \$32,760 during the current year. If the actual amount of additions and earnings equals these budgeted amounts, the fund balance will equal the present value of the remaining interest and principal payments at the assumed interest rate.

|  |         |         |
|--|---------|---------|
| (2) Fund Balance—Restricted  | 160,000 |         |
| Appropriations   |         | 160,000 |
| To record budgeted expenditures for bond interest for current year.                            |         |         |
| (3) Property Tax Receivable  | 503,000 |         |
| Allowance for Uncollectible Taxes  |         | 15,000  |
| Revenue (net of uncollectible accounts)  |         | 488,000 |
| To record property tax levy earmarked for debt service on Library and Civic Center term bonds. |         |         |

**B. Collection of Receivables, Investment Income, and Purchase of Investments**

|   |         |         |
|---|---------|---------|
| (4) Cash                                | 485,000 |         |
| Property Tax Receivable                 |         | 485,000 |
| To record collection of property taxes. |         |         |
| (5) Investments                         | 360,000 |         |
| Premium on Investments                  | 15,000  |         |
| Cash                                    |         | 375,000 |
| To record investment of fund resources. |         |         |

Debt service fund investments are closely regulated by law and are usually restricted to quality government and municipal securities. When such investments are expected to be held to maturity, they are recorded at their par value and premium or discount is recorded in a *separate* account and amortized by reducing or increasing investment income over the remaining life of the investment.

|   |        |        |
|---|--------|--------|
| (6) Cash                                      | 26,000 |        |
| Interest Receivable                           |        | 4,000  |
| Interest Income                               |        | 22,000 |
| To record receipt of interest on investments. |        |        |

|   |        |        |
|---|--------|--------|
| (7) Allowance for Uncollectible Taxes                             | 13,000 |        |
| Property Tax Receivable   |        | 13,000 |
| To record write-off of property taxes authorized by City Council. |        |        |
| (8) Interest Receivable   | 21,000 |        |
| Interest Income   |        | 21,000 |
| To record interest accrued on investments to December 31, 2016.   |        |        |
| (9) Interest Income   | 1,200  |        |
| Premium on Investments  |        | 1,200  |
| To record current year's amortization of premium on investments.  |        |        |

**C. Expenditure for Interest**

|  |         |         |
|--|---------|---------|
| (10) Expenditures  | 160,000 |         |
| Interest Payable   |         | 160,000 |
| To record expenditures for current year's interest on bonds. |         |         |
| (11) Interest Payable  | 160,000 |         |
| Cash   |         | 160,000 |
| To record payment of interest.                               |         |         |

**D. Closing Entries**

|   |         |         |
|---|---------|---------|
| (12) Revenue  | 488,000 |         |
| Required Additions  |         | 487,595 |
| Fund Balance—Restricted                                     |         | 405     |
| Interest Income   | 41,800  |         |
| Required Earnings   |         | 32,760  |
| Fund Balance—Restricted                                     |         | 9,040   |
| Appropriations  | 160,000 |         |
| Expenditures  |         | 160,000 |
| To close budgeted and nominal account balances at year-end. |         |         |

In this example, the funds were restricted so the accounts are closed to fund balance-restricted. However, depending on the constraints on the funds, the accounts could be closed to either restricted, committed, or assigned fund balance. Comparative financial statements for the Library and Civic Center Term Bonds Debt Service Fund are presented in Illustrations 18-6 and 18-7. Two things should be noted about these statements, as follows:

*(1) There is no interest payable accrual on general obligation long-term debt.* For fund accounting, there are no entries to record the accrual of interest payable on the

**ILLUSTRATION 18-6**

**Model City**  
**Library and Civic Center Term Bonds Debt Service Fund**  
**Balance Sheet at December 31, 2016, December 31, 2015, and December 31, 2014**

| <i>Assets</i>   | <i>2016</i>      | <i>2015</i>      | <i>2014</i>      |
|---|------------------|------------------|------------------|
| Cash  | \$ 9,000         | \$ 33,000        | \$ —             |
| Interest Receivable   | 21,000           | 4,000            | 4,000            |
| Taxes Receivable (less allowance for uncollectible taxes, 2016—\$3,000; 2015—\$1,000) | 8,000            | 5,000            |                  |
| Investment (at maturity value)  | 760,000          | 400,000          | 100,000          |
| Unamortized Premium on Investments  | 13,800           | —                | —                |
| Total Assets  | <u>\$811,800</u> | <u>\$442,000</u> | <u>\$104,000</u> |
| <b><i>Liabilities and Fund Balance</i></b>  |                  |                  |                  |
| Fund Balance:   |                  |                  |                  |
| Restricted for Debt Service   | <u>\$811,800</u> | <u>\$442,000</u> | <u>\$104,000</u> |

***Disclosure***

The actuarial requirements in the fund balance are \$687,950 in 2016 and \$327,595 in 2015. See Illustration 18-5.

**ILLUSTRATION 18-7**

**Library and Civic Center Term Bonds Debt Service Fund**  
**Statement of Revenues, Expenditures, and Changes**  
**In Fund Balance for Years Ended December 31, 2016, 2015, and 2014**

|  | 2016             | 2015             | 2014             |
|--|------------------|------------------|------------------|
| <b>Revenues</b>                                      |                  |                  |                  |
| General Property Tax                                 | \$488,000        | \$488,000        | \$ —             |
| Interest on Investments<br>(net of amortization)     | <u>41,800</u>    | <u>10,000</u>    | <u>4,000</u>     |
| Total Revenues                                       | 529,800          | 498,000          | 4,000            |
| <b>Expenditures</b>                                  |                  |                  |                  |
| Redemption of Term Bonds                             | —                | —                | —                |
| Interest on Bonds                                    | <u>160,000</u>   | <u>160,000</u>   | <u>—</u>         |
| Total Expenditures                                   | <u>160,000</u>   | <u>160,000</u>   | <u>—</u>         |
| Excess (Deficiency) of Revenues over<br>Expenditures | 369,800          | 338,000          | 4,000            |
| <b>Other Financing Sources (Uses)</b>                |                  |                  |                  |
| Transfers In   | —                | —                | <u>100,000</u>   |
| Net Change in Fund Balance                           | 369,800          | 338,000          | 104,000          |
| Fund Balance—January 1                               | \$442,000        | \$104,000        | —                |
| Fund Balance—December 31                             | <u>\$811,800</u> | <u>\$442,000</u> | <u>\$104,000</u> |

Note: The actuarial requirements in the fund balance are \$687,950 in 2016, \$327,595 in 2015, and \$— in 2014. See Illustration 18-5.

bonds from the last interest payment date (July 1 for the serial bonds and October 1 for the term bonds) to the end of the fiscal year. This action is justified because financial resources that are appropriated by the debt service fund are usually appropriated in the period the interest on the debt must be paid. To accrue the debt service fund expenditure and liability in one year, but record the transfer or collection of the financial resources appropriated for this purpose in a later year, would be confusing and would result in an overstatement of fund liabilities and expenditures and an understatement of the fund balance. Thus, for fund purposes it is considered appropriate and more informative to treat interest payable on general obligation long-term debt at the end of the year as an expenditure in the year of payment. *However, on the accrual-based government-wide statements, this interest must be accrued regardless of the period that the interest will be paid.* On the government-wide statement of net position, accrued interest of \$76,000 (\$36,000 from the serial bond and \$40,000 from the term bond) is included in liabilities, while no accrued interest is included on the governmental fund statements.

(2) **Actuarial requirements must be disclosed.** An essential disclosure in the financial statements of debt service funds for term bonds is the amount, actuarially determined, of resources that is necessary on the financial statement date for the accumulation of sufficient resources to redeem the debt on its maturity date. The actuarial requirements shown in Illustrations 18-6 and 18-7 are those determined in the “Required Fund Balance” column of Illustration 18-5.

**Closing Out the Debt Service Fund** Assume the following trial balance for the Library and Civic Center Term Bonds Debt Service Fund on September 15, 2019:

|                         | Debit              | Credit             |
|-------------------------|--------------------|--------------------|
| Cash                    | \$2,220,000        |                    |
| Fund Balance—Restricted |                    | \$2,220,000        |
| Total                   | <u>\$2,220,000</u> | <u>\$2,220,000</u> |

Entries to close the fund are as follows:

|     |   |           |           |
|-----|---|-----------|-----------|
| (1) | Expenditures—Principal  | 2,000,000 |           |
|     | Expenditures—Interest   | 160,000   |           |
|     | Cash  |           | 2,160,000 |
|     | To record redemption of matured bonds and payment of interest.                |           |           |
| (2) | Transfer to X Fund—Other Financing Use  | 60,000    |           |
|     | Cash  |           | 60,000    |
|     | To record transfer of unexpended fund resources to another governmental fund. |           |           |

The unexpended balance of the fund after the final payment of interest and principal on the matured bonds should be disposed of in accordance with legal or bond indenture requirements. Usually the unexpended balance is transferred to another debt service fund, but legal requirements may specify an alternative disposition. The accounts of the fund being terminated should be closed in such a way as to reflect compliance with applicable legal requirements.

|     |  |           |           |
|-----|--|-----------|-----------|
| (3) | Fund Balance—Restricted                | 2,220,000 |           |
|     | Expenditures—Principal                 |           | 2,000,000 |
|     | Expenditures—Interest                  |           | 160,000   |
|     | Transfer to X Fund—Other Financing Use |           | 60,000    |
|     | To close out Debt Service Fund.        |           |           |

After these entries are posted, the balance of all accounts would be zero and the Debt Service Fund would effectively cease to exist.



IN  
THE  
NEWS

The Montana Senate supported a bill to prohibit benefits for people who retire early in an effort to offset the declining value of the state's pension funds. Previously, full benefits were awarded to anyone retiring after 30 years of service.<sup>8</sup>

Credit Suisse estimated that state and local governments owed more than \$1.5 trillion in unfunded health-care and non-pension benefits. Boston's College's Center for Retirement Research has estimated that the recent market meltdown has eliminated \$1 trillion from municipal pension funds. The fear is that many municipalities might have to follow the city of Vallejo, California and declare bankruptcy. The city was spending 74 percent of its general fund budget on public sector salaries and benefits. New York City added \$63 billion in liabilities in order to comply with GASB 45.<sup>9</sup>

## Permanent Funds

**LO 6** Explain the use of a permanent fund.

**Nonexpendable Trust Funds** Nonexpendable trust funds are generally reported as permanent funds. There are two types of nonexpendable trust funds: those in which the principal must be retained intact but earnings may be expended, and those in which both the principal and the earnings of the fund must be retained intact. An example of the latter type of nonexpendable trust funds is the *revolving loan fund*, in which interest collected on loans outstanding increases the funds available for subsequent loans.

Nonexpendable trust funds may be established as a result of a gift, a bequest, or some other action that requires the governmental unit to act in a fiduciary capacity and to maintain and conserve cash or other assets that it does not own. Trust funds must be accounted for in accordance with the terms of the trust agreement or the applicable provisions of statutory and common law. Accounting procedures must result in a clear distinction between nonexpendable fund resources and expendable resources resulting from the earnings of the fund. Appropriate procedures are also necessary to ensure that the expenditure of expendable resources is made in accordance with the trust agreement or other applicable legal provisions.

Where the earnings of a trust fund may be expended, they are generally transferred to a special revenue fund (expenditures restricted to specified use). To illustrate, assume that

<sup>8</sup> "Senate Nixes Early Retirement to Plug Pension Gap," Associated Press, February 25, 2009.

<sup>9</sup> "The Great GASB," City Journal, February 24, 2009.



a private donor granted Model City \$300,000 for the purpose of financing the purchase of rare editions of the classics for the public library. As a result of this grant, two funds were created:

1. The Classics Endowment Fund to account for the nonexpendable fund principal and the investment (this fund is classified as a permanent fund).
2. The Classics Acquisition Fund to account for the expenditure of the earnings of the endowment fund (this fund is classified as a special revenue fund).

The general ledger trial balances for each fund on January 1, 2014, are presented below.

**Classics Endowment Fund**

| <i>(Permanent Fund)</i>          | <i>Debit</i>     | <i>Credit</i>    |
|----------------------------------|------------------|------------------|
| Cash                             | \$ 2,000         |                  |
| Certificates of Deposit          | 300,000          |                  |
| Interest Receivable (accrued)    | 7,500            |                  |
| Due to Classics Acquisition Fund |                  | \$ 9,500         |
| Fund Balance—Nonspendable        |                  | <u>300,000</u>   |
| Total                            | <u>\$309,500</u> | <u>\$309,500</u> |

**Classics Acquisition Fund**

| <i>(Special Revenue Fund)</i>    |                  |                  |
|----------------------------------|------------------|------------------|
| Cash                             | \$ 8,000         |                  |
| Due from Classics Endowment Fund | 9,500            |                  |
| Fund Balance—Restricted          |                  | \$ 17,500        |
| Total                            | <u>\$ 17,500</u> | <u>\$ 17,500</u> |

Transactions for 2014 for each fund are summarized below in general journal form.

**Classics Endowment Fund**

|  |        |        |
|--|--------|--------|
| (1) Cash   | 30,000 |        |
| Interest Receivable  |        | 7,500  |
| Interest Income  |        | 22,500 |
| To record interest collected on certificate of deposit.                    |        |        |
| (2) Interest Receivable  | 7,500  |        |
| Interest Income  |        | 7,500  |
| To accrue interest on certificate of deposit.                              |        |        |
| (3) Transfer to Classics Acquisition Fund                                  | 30,000 |        |
| Due to Classics Acquisition Fund   |        | 30,000 |
| To record amount of 2014 income transferable to Classics Acquisition Fund. |        |        |
| (4) Due to Classics Acquisition Fund                                       | 32,000 |        |
| Cash   |        | 32,000 |
| To record cash payment to Classics Acquisition Fund.                       |        |        |

For purposes of simplification, it is assumed that the trust agreement requires that the entire endowment principal be invested in a savings account earning 10% interest. Usually, the principal of an endowment fund is invested in various securities. If the securities are purchased at a premium or discount, such amounts should ordinarily be amortized to interest income, and only the net amount of investment income would accrue to the recipient Classics Acquisition Fund. Accounting procedures for an endowment fund are complicated further if the endowment includes depreciable income-producing assets such as rental properties. In that case, earnings accruing to the recipient expendable fund must also be reduced by depreciation if the trust principal is to be maintained “intact.”

**Classics Acquisition Fund**

|  |        |        |
|--|--------|--------|
| (1) Due from Classics Endowment Fund                   | 30,000 |        |
| Fund Balance—Restricted                                |        | 30,000 |
| To record expendable earnings due from endowment fund. |        |        |
| (2) Cash   | 32,000 |        |
| Due from Classics Endowment Fund                       |        | 32,000 |
| To record receipt of cash from endowment fund.         |        |        |
| (3) Fund Balance—Restricted                            | 18,000 |        |
| Cash   |        | 18,000 |
| To record acquisition of rare books.                   |        |        |

Financial statements for these funds are presented in Illustrations 18-8 and 18-9.



According to government accounting standards, the U.S. government’s responsibilities to make future payments for social insurance and certain other programs are not reported as liabilities on the U.S. government’s balance sheet, even though they will have a significant claim on budgetary resources in the future. The U.S. government’s 2005 balance sheet shows liabilities of \$9,915 billion. What it does not show is the net present value of all responsibilities (for current participants over a 75-year period), including Medicare and Social Security payments and pensions and benefits for federal employees and veterans, amounting to \$49,403 billion.<sup>10</sup>

**ILLUSTRATION 18-8**

**Classics Endowment Fund  
Balance Sheet  
December 31, 2014 and December 31, 2013**

| <i>Assets</i>                           | <i>2014</i>      | <i>2013</i>      |
|---|------------------|------------------|
| Cash                                    | \$ —             | \$ 2,000         |
| Interest Receivable                     | 7,500            | 7,500            |
| Investments                             | <u>300,000</u>   | <u>300,000</u>   |
| Total Assets                            | <u>\$307,500</u> | <u>\$309,500</u> |
| <br><i>Liabilities and Fund Balance</i> |                  |                  |
| Due to Classics Acquisition Fund        | \$ 7,500         | \$ 9,500         |
| Fund Balance—Nonspendable               | <u>300,000</u>   | <u>300,000</u>   |
| Total                                   | <u>\$307,500</u> | <u>\$309,500</u> |

**Statement of Revenues, Expenditures, and Changes  
In Fund Balances for Years Ended  
December 31, 2014, and December 31, 2013**

|   | <i>2014</i>      | <i>2013</i>      |
|---|------------------|------------------|
| <i>Revenues</i>                                   |                  |                  |
| Interest Income                                   | \$ 30,000        | \$ 30,000        |
| <i>Expenditures</i>                               |                  |                  |
| Excess (Deficiency) of Revenues over Expenditures | <u>30,000</u>    | <u>30,000</u>    |
| <i>Other Financing Sources (Uses)</i>             |                  |                  |
| Transfers to Classics Acquisitions Fund           | <u>(30,000)</u>  | <u>(30,000)</u>  |
| Net Change in Fund Balance:                       | —                | —                |
| Fund Balance—January 1                            | <u>300,000</u>   | <u>300,000</u>   |
| Fund Balance—December 31                          | <u>\$300,000</u> | <u>\$300,000</u> |

<sup>10</sup> *Financial Report of the United States* (with a foreword by Representative Jim Cooper), Nelson Current, 2006.

**ILLUSTRATION 18-9**
**Classics Acquisition Fund  
Balance Sheet  
December 31, 2014, and December 31, 2013**

| <i>Assets</i>                       | <i>2014</i>     | <i>2013</i>     |
|-------------------------------------|-----------------|-----------------|
| Cash                                | \$22,000        | \$ 8,000        |
| Due from Classics Endowment Fund    | 7,500           | 9,500           |
| Total Assets                        | <u>\$29,500</u> | <u>\$17,500</u> |
| <i>Liabilities and Fund Balance</i> |                 |                 |
| Fund Balance—Restricted             | <u>\$29,500</u> | <u>\$17,500</u> |

**Statement of Revenues, Expenditures, and Changes  
In Fund Balances for Years Ended  
December 31, 2014, and December 31, 2013**

|   | <i>2014</i>   | <i>2013</i>     |
|---|---------------|-----------------|
| <i>Revenues</i>                                   | \$ —          | \$ —            |
| <i>Expenditures</i>                               | <u>18,000</u> | <u>20,000</u>   |
| Excess (Deficiency) of Revenues over Expenditures | (18,000)      | (20,000)        |
| <i>Other Financing Sources (Uses)</i>             |               |                 |
| Transfers from Endowment Trust Fund               | <u>30,000</u> | <u>30,000</u>   |
| Excess (Deficiency) to Fund Balance               | 12,000        | 10,000          |
| Fund Balance—January 1                            | <u>17,500</u> | <u>7,500</u>    |
| Fund Balance—December 31                          | <u>29,500</u> | <u>\$17,500</u> |

## 18.4 PROPRIETARY FUNDS

**Lo 7** Distinguish proprietary funds from government funds.

In *GASB Statement No. 34*, the proprietary fund operating statement requirements were changed from a capital maintenance approach to a change in net position approach. Under a capital maintenance approach, certain resource flows such as contributions of capital assets and permanently restricted contributions of financial assets were excluded from the operating or income statement “bottom line” and were reported as direct charges to equity or net assets. In other words, they were not considered revenues or expenses, but “balance-sheet only” transactions. The board concluded that the change in net position approach, which is already required in the government-wide statement of activities, is also appropriate for proprietary funds. Under the change in net position approach, *all* changes in net position are included somewhere in the “statement of activities” and are included in the “bottom-line” total in the change in net position for the year. There are no “direct to equity” transactions and no mandatory reporting distinction between capital transactions and operating transactions. No additional change in net position is reported between the beginning and ending net position, as would be needed under the capital maintenance approach.

Proprietary fund reporting focuses on the determination of operating income, changes in net position (or cost recovery), financial position, and cash flows. The cash flow statement is to be prepared using the direct basis. Proprietary funds include Enterprise and Internal Service Funds, as illustrated in the following sections.

### Enterprise Funds

Enterprise Funds may be used to report any activity for which a fee is charged to external users for goods and services. The most common examples of governmental enterprises are public utilities that provide such services as water or electricity. Other activities of governmental units that are accounted for in Enterprise Funds include airports, transportation

systems, parking lots and garages, and recreational facilities such as swimming pools. Activities are required to be reported as Enterprise Funds if any one of the following is met:

- The activity is financed with debt that is secured solely by a pledge of the net revenues from fees and charges of the activity.
- Laws or regulations require that the activity's costs of providing services including capital costs (such as depreciation or debt service) be recovered with fees and charges, rather than with taxes or similar revenues.
- The pricing policies of the activity establish fees and charges designed to recover its costs, including capital costs (such as depreciation and debt service).

The resources to establish an enterprise fund may come from contributions or from the proceeds of long-term debt issues or both. Contributions may be obtained from other governmental units, resources of the General Fund of the same governmental unit, property owners, subdivision developers, or customers.

A balance sheet of the proprietary funds (both the Enterprise and the Internal Service Funds) is presented in Illustration 18-10, and several features of the enterprise fund are pointed out. Some assets are restricted in use by bond provisions or other arrangements and are classified on the balance sheet as *restricted assets*. Restricted assets are generally reported between current assets and capital assets. In Illustration 18-10, the Restricted

#### ILLUSTRATION 18-10

##### Model City Proprietary Funds Balance Sheet at December 31, 2014\*

|  | <i>Business-Type<br/>Activities—<br/>Enterprise Fund</i> | <i>Governmental<br/>Activities</i> |
|--|--|------------------------------------|
|  | <i>Sewer Fund</i>  | <i>Internal Service Fund</i>       |
| <b>Assets</b>  |  |                                    |
| <i>Current Assets</i>                                |  |                                    |
| Cash   | \$ 100,000   | \$ 22,500                          |
| Receivables  | 451,000  | 100,000                            |
| Total Current Assets                                 | \$ 551,000   | \$122,500                          |
| <i>Noncurrent Assets:</i>                            |  |                                    |
| Restricted Assets                                    | 509,000  | —                                  |
| Capital Assets (net of accumulated depreciation)     | 10,000,000   | 420,000                            |
| Construction in Progress                             | 40,000   | —                                  |
| Total Noncurrent Assets                              | 10,549,000   | 420,000                            |
| Total Assets   | <u>\$11,100,000</u>                                      | <u>\$542,500</u>                   |
| <b>Liabilities</b>                                   |  |                                    |
| <i>Current Liabilities:</i>                          |  |                                    |
| Current Liabilities (payable from current assets)    | \$ 361,000   | \$ 27,500                          |
| Current Liabilities (payable from restricted assets) | 282,000  | —                                  |
| Total Current Liabilities                            | 643,000  | 27,500                             |
| Revenue Bonds Payable                                | 4,200,000  | —                                  |
| Total Liabilities                                    | <u>\$ 4,843,000</u>                                      | <u>\$ 27,500</u>                   |
| <b>Net Position</b>                                  |  |                                    |
| Invested in capital assets, net of related debt      | 5,558,000  | 420,000                            |
| Restricted   | 500,000  | —                                  |
| Unrestricted   | 199,000  | 95,000                             |
| Total Net Position                                   | <u>\$ 6,257,000</u>                                      | <u>\$515,000</u>                   |
| Total Liabilities and Net Position                   | <u>\$11,100,000</u>                                      | <u>\$542,500</u>                   |

\* An alternative to the balance sheet format shown here is a statement of net position format, which presents the same information but is organized slightly differently.

Assets consist of assets segregated in compliance with the sinking fund requirements of the revenue bonds,<sup>11</sup> and the Current Liabilities (Payable from Restricted Assets) consist of the current interest and principal installments due on the revenue bonds.

Net position is reported as either (1) net investment in capital assets, (2) restricted for some specific purpose such as debt service, or (3) unrestricted.

## Internal Service Funds

Internal Service Funds are used to account for any activity that provides goods or services to *other funds, departments, or agencies of the primary governmental unit and its component units, or to other governments*, on a cost reimbursement basis. Internal service funds should be used only if the reporting government is the predominant participant in the activity. Otherwise, the activity should be reported as an Enterprise Fund.

Typical examples of activities accounted for in Internal Service Funds include the operations of central computer facilities, central garages and motor pools, central purchasing and stores departments, and central printing departments.

Internal Service Funds are established with resources obtained from contributions from other funds, proceeds from the sale of general obligation bonds, or long-term advances from other funds. If an Internal Service Fund obtains resources from the proceeds of the issuance of general obligation bonds, the bond liability is *not* accounted for in the records of the Internal Service Fund. Rather a Debt Service Fund is established, and the bond liability is accounted for on the statement of net position. Upon the receipt of the bond issue proceeds, the entry in the records of the Internal Service Fund is a

### ILLUSTRATION 18-11

**Model City  
Proprietary Funds  
Statement of Revenues, Expenses, and Changes in Fund Net Position  
for the Year Ended December 31, 2014**

|   | <i>Business-Type<br/>Activities—<br/>Enterprise Fund</i> | <i>Governmental<br/>Activities</i> |
|---|--|------------------------------------|
|   | <i>Sewer Fund</i>  | <i>Internal Service Fund</i>       |
| <b><i>Operating Revenues</i></b>              |  |                                    |
| Charges for Services                          | \$1,500,000  | \$200,000                          |
| Total Operating Revenues                      | <u>1,500,000</u>   | <u>200,000</u>                     |
| <b><i>Operating Expenses</i></b>              |  |                                    |
| Personal Services                             | 675,000  | 185,000                            |
| Utilities                                     | 105,000  | 20,000                             |
| Depreciation Expense                          | 500,000  | 15,000                             |
| Total Operating Expenses                      | <u>1,280,000</u>   | <u>220,000</u>                     |
| Operating Income (loss)                       | <u>220,000</u>   | <u>(20,000)</u>                    |
| <b><i>Nonoperating Revenue (Expenses)</i></b> |  |                                    |
| Interest Expense (10%)                        | (420,000)  | —                                  |
| Total Nonoperating Revenue (expenses)         | <u>(420,000)</u>   | <u>—</u>                           |
| Income Before Contributions and Transfers     | (200,000)  | (20,000)                           |
| Transfers Out—General Fund                    | <u>(150,000)</u>   | <u>—</u>                           |
| Change in Net Position                        | (350,000)  | (20,000)                           |
| Total Net Position—beginning of year          | <u>6,607,000</u>   | <u>535,000</u>                     |
| Total Net Position—end of year                | <u><u>6,257,000</u></u>                                  | <u><u>515,000</u></u>              |

<sup>11</sup> Revenue bonds are long-term obligations, where the principal and interest are paid from the earnings of self-supporting enterprises on which the bond proceeds were spent.

debit to Cash and a credit to Capital Contributions—General Obligation Bonds. A balance sheet and the statement of revenues, expenses, and changes in fund balance for an Internal Service Fund are included as part of the proprietary fund statements as shown in Illustrations 18-10 and 18-11. As indicated, fixed assets acquired with the resources of the Internal Service Fund and depreciation thereon are recorded in the accounting records of that fund.

## 18.5 FIDUCIARY FUNDS

### Trust and Agency Funds

As stated earlier, trust and agency funds focus on reporting net position and changes in net position. Fiduciary funds are used to report assets held in a trustee or agency capacity for others and therefore cannot be used to support the government's own programs. Fiduciary funds include pension trust funds, investment trust funds, private-purpose trust funds, and agency funds. The three types of *trust* funds should be used to report resources held and administered by the reporting government when it is acting in a fiduciary role. These funds are distinguished from *agency* funds generally by the existence of a trust agreement that affects the degree of management involvement and the length of time that the resources are held. Accounting procedures for agency funds and most trust funds are quite similar and are relatively simple. The disclosures under *GASB Statement No. 34* require a separate statement of fiduciary responsibilities with a statement of net position and a statement of changes in net position. The statement of net position and the statement of changes in net position may be presented in a "layered" approach or presented as separate statements.

**Agency Funds** For example, assume that Model City collects property taxes on behalf of a legally separate governmental unit such as a water improvement district. The following entries are made to record the amount of taxes to be collected and their remittance to the water improvement district.

|   |         |         |
|---|---------|---------|
| (1) Property Tax Receivable   | 250,000 |         |
| Due to Water Improvement District   |         | 250,000 |
| To record levy of taxes earmarked for Valley Water Improvement District.                    |         |         |
| (2) Cash  | 250,000 |         |
| Property Tax Receivable   |         | 250,000 |
| To record collection of taxes earmarked for Valley Water Improvement District.              |         |         |
| (3) Due to Water Improvement District   | 250,000 |         |
| Cash  |         | 250,000 |
| To record remittance to Valley Water Improvement District of taxes collected on its behalf. |         |         |

Agency funds are purely custodial, and assets always equal liabilities (no fund balance exists or if a fund balance is recorded, it is reported as a liability). These funds do not involve revenues or expenditures, nor do they require the preparation of a statement of revenues, expenditures, and changes in fund balance.

## 18.6 CAPITAL ASSETS AND LONG-TERM DEBT

Under *GASB Statement No. 34*, governments report all capital assets, including infrastructure assets, and unmatured general long-term debt on a government-wide basis and report depreciation expense as a charge to operations in each period. General fixed assets of a governmental unit are the fixed assets that are not accounted for in proprietary (enterprise, internal service, and nonexpendable trust) funds.

General long-term debt of a governmental unit is the unmatured principal of general obligation indebtedness that is not accounted for in a proprietary fund or trust fund. Such debt is reported on the government-wide statement of net position. *Governments must maintain amortization schedules for all debt issued since the effective interest expense is reported on the government-wide statement of activities and the amortized debt is reported on the statement of net position.*

## Capital Assets

General fixed assets may be acquired through gift or foreclosure, or they may be acquired through the expenditure of resources of the general fund, special revenue funds, or capital project funds.

### INFRASTRUCTURE ASSETS

How should a government account for streets, sidewalks, bridges and other immovable assets? Prior to the issuance of *GASB Statement No. 34* on reporting for state and local governments, most governments ignored accounting for these assets. Using the former rules, if the majority of a city's bridges needed repairs, there was no information provided in statements. Under the new rules, governments will be required to show the historical cost of these assets on the government-wide statement of net position and include depreciation expense on the government-wide statement of activities. Although this topic is a controversial issue, the GASB felt that capitalization and depreciation of infrastructure assets is important to assist users in:

1. Determining whether current-year revenues are sufficient to pay for current-year services.
2. Assessing the service efforts and costs of programs.
3. Determining whether the government's financial position improved or deteriorated as a result of the year's operations.
4. Assessing the government's financial position and condition.

Governments are required to capitalize and report major general infrastructure assets that were acquired (purchased, constructed, or donated) in fiscal years ending after June 30, 1980. The initial capitalization amount should be based on historical cost. If determination of historical cost is not practical because of inadequate records, estimated historical cost may be used.

**LO 8** Describe where capital assets are reported.

The valuation of constructed or purchased general fixed assets is determined using the cost basis. Donated assets, intended for use by the city, would not be recorded in the government funds as assets or revenue. However, donated assets would be recorded as an asset and as revenue on the government-wide financial statements. Donated assets are recorded at their estimated fair value at the time they are received. Consider the following classifications of general fixed assets and the sources of the funds:

| <i>Classification of Assets</i>   | <i>Classification of Sources of Assets</i>         |
|-----------------------------------|--|
| Land                              | Investments in general fixed assets from:          |
| Buildings                         | Capital projects funds                             |
| Improvements other than buildings | General obligation bonds                           |
| Machinery and equipment           | Special assessment debt with government commitment |
| Construction in progress          | Federal grants                                     |
| Infrastructure assets             | State grants                                       |
|                                   | Local grants                                       |
|                                   | General fund revenues                              |
|                                   | Special revenue fund revenues                      |
|                                   | Contributions from property owners                 |
|                                   | Private gifts                                      |

Prior to *GASB Statement No. 34*, governments maintained a set of self-balancing account groups called the General Fixed Asset Account Group and the General Long-Term Obligation Account Group. In place of these account groups, information on capital assets

and long-term debt is reported in the statement of net position, in addition to detailed schedules for both in the footnotes (illustrated later in the chapter). The following journal entries reflect how the capital asset transactions would be reported on the statement of net position.

Accounting events in 2014 that affect the capital assets of Model City are summarized below in general journal form:

**Purchase of a Fixed Asset**

|  |         |         |
|--|---------|---------|
| (1) Machinery and Equipment  | 250,000 |         |
| Cash   |         | 250,000 |
| To record expenditure for office equipment made by<br>General Fund in 2014 (see Chapter 17). |         |         |

**Sale of a Fixed Asset**

|  |         |         |
|--|---------|---------|
| (2) Cash                                 | 87,250  |         |
| Accumulated Depreciation                 | 140,000 |         |
| Machinery and Equipment                  |         | 225,000 |
| Gain on sale                             |         | 2,250   |
| To record sale of used office equipment. |         |         |

Equipment, which was purchased five years ago for \$225,000, was sold for \$87,250. Accumulated depreciation on the asset was \$140,000. The proceeds of the sale were accounted for as revenue of the General Fund (see Chapter 17). When a general fixed asset is sold, both its original cost and accumulated depreciation are removed from the records. Under *GASB Statement No. 34*, the difference between the book value of the asset (\$85,000) and the cash received (\$87,500) is reported as a gain (loss) on sale and reported on the government-wide statement of activities. In this case, the gain is \$2,250.

During 2014, \$1,500,000 was spent on construction of Model City's Library and Civic Center. (Of the amount incurred, recall that \$50,000 was still owed.) Thus the impact on the government-wide statement of net position is:

|  |             |           |
|--|-------------|-----------|
| Construction in Progress                         | 1,500,000   |           |
| Cash   |             | 1,450,000 |
| Vouchers payable                                 |             | 50,000    |
| <br>Depreciation Expense (321,000 – 15,000)      | <br>306,000 |           |
| Accumulated Depreciation—Buildings               |             | 120,000   |
| Accumulated Depreciation—Machinery and equipment |             | 55,000    |
| Accumulated Depreciation—Improvements            |             | 131,000   |

Total depreciation expense of \$321,000 includes \$15,000 of depreciation expense already recorded in the Internal Service Fund.

As previously explained, depreciation of general fixed assets is not measured or reported in the accounts of governmental funds. Since depreciation is now required on government-wide statements, accumulated depreciation is deducted from the related assets in the statement of net position. Notice that the recognition of accumulated depreciation does *not* result in the recording or reporting of depreciation expense in any governmental fund type. ***It is reported only on the government-wide statements.***

The required disclosures about capital assets are presented in Illustration 18-12. The primary difference between past disclosures (pre-*GASB 34*) and the new disclosures is that the capital assets of the Internal Service Fund and infrastructure assets are included in the new disclosures for *governmental activities*.

## Long-Term Debt

**LO 8** Describe where long-term obligations are reported.

General long-term obligations of a governmental unit include the unmatured principal on bonds, warrants, notes, and other long-term general obligations, including special assessment debt for which the government is obligated in some manner. It is not limited to liabilities arising from debt issues, but may include noncurrent liabilities arising from lease agreements and similar commitments. It does not include long-term debt that is the specific liability of proprietary funds. However, where the full faith and credit of the governmental unit is pledged as additional assurance that specific proprietary fund liabilities will be paid, the contingent liability should be disclosed in the notes to the financial statements.



**ILLUSTRATION 18-12****Disclosure of Information About Capital Assets  
for the Year Ending December 31, 2014**

| <i>Governmental Activities</i>   | <i>Primary Government</i> |                    |                    |                       |
|--|---------------------------|--------------------|--------------------|-----------------------|
|  | <i>Beginning Balance</i>  | <i>Additions</i>   | <i>Retirements</i> | <i>Ending Balance</i> |
| Land   | \$ 500,000                |                    |                    | \$ 500,000            |
| Building*  | 4,760,000                 |                    |                    | 4,760,000             |
| Improvements   | 2,795,000                 |                    |                    | 2,795,000             |
| Machinery and Equipment*   | 950,000                   | 250,000            | (225,000)          | 975,000               |
| Construction in Progress   |                           | 1,500,000          |                    | 1,500,000             |
| Infrastructure   | 5,000,000                 |                    |                    | 5,000,000             |
| Total at historical cost   | <u>\$14,005,000</u>       | <u>1,750,000</u>   | <u>225,000</u>     | <u>\$15,530,000</u>   |
| <i>Less accumulated depreciation</i>   |                           |                    |                    |                       |
| Building*  | (1,490,000)               | (130,000)          |                    | (1,620,000)           |
| Improvements   | (600,000)                 | (31,000)           |                    | (631,000)             |
| Machinery and Equipment*   | (235,000)                 | (60,000)           | 140,000            | (155,000)             |
| Infrastructure   | (1,000,000)               | (100,000)          |                    | \$(1,100,000)         |
| Total accumulated depreciation   | <u>\$(3,325,000)</u>      | <u>(321,000)</u>   | <u>140,000</u>     | <u>\$(3,506,000)</u>  |
| Governmental activities capital assets, net  | <u>\$10,680,000</u>       | <u>1,429,000</u>   | <u>(85,000)</u>    | <u>\$12,024,000</u>   |
| <b><i>Business-Type Activities:</i></b>  |                           |                    |                    |                       |
| Utility Plant  | 12,000,000                |                    |                    | 12,000,000            |
| Construction in Progress   | —                         | 40,000             |                    | 40,000                |
| Totals at historical cost  | <u>12,000,000</u>         | <u>40,000</u>      |                    | <u>12,040,000</u>     |
| <i>Less accumulated depreciation</i>   |                           |                    |                    |                       |
| Utility Plant  | (1,800,000)               | (200,000)          |                    | (2,000,000)           |
| Business-type Activities Capital Assets, Net   | <u>\$10,200,000</u>       | <u>\$(160,000)</u> |                    | <u>\$10,040,000</u>   |
| <b><i>Depreciation Expense Charged to Governmental Activities as Follows:</i></b>  |                           |                    |                    |                       |
| Public Safety  |                           | \$ 36,612          |                    |                       |
| General Government   |                           | 18,210             |                    |                       |
| Highways and Streets   |                           | 12,332             |                    |                       |
| Sanitation   |                           | 6,745              |                    |                       |
| Health   |                           | 13,585             |                    |                       |
| Cultural—recreation  |                           | 153,963            |                    |                       |
| Education  |                           | 64,553             |                    |                       |
| In addition, depreciation on capital assets held by the Internal Service Fund is charged to the various functions based on usage |                           |                    | 15,000             |                       |
|  |                           |                    | <u>\$ 321,000</u>  |                       |

\* Includes, in ending balances, the capital assets of the Internal Service Fund (\$360,000 and \$200,000 in buildings and equipment, respectively, with \$100,000 and \$40,000 in accumulated depreciation).

The following journal entries reflect how the following events affect the statement of net position of Model City:

|                         |           |           |
|-------------------------|-----------|-----------|
| Cash                    | 2,100,000 |           |
| Term Bond Payable       |           | 2,000,000 |
| Premium on Bond Payable |           | 100,000   |
| Interest Expense        | 96,000    |           |
| Serial Bond Payable     | 300,000   |           |
| Cash                    |           | 396,000   |

To meet the reporting requirements, amortization schedules are needed. The following amortization schedules are prepared for the serial and the term bonds.

**Term Bond Amortization Schedule\***  
Effective interest rate = 6.7875%. Coupon rate = 8%

| Date    | Interest Expense | Interest Paid | Premium Amortization | Unamortized Premium | Term Bond Balance |
|---------|------------------|---------------|----------------------|---------------------|-------------------|
|         |                  |               |                      | 100,000             | \$2,100,000       |
| 10/1/15 | 142,537          | 160,000       | 17,463               | 82,537              | 2,082,537         |
| 10/1/16 | 141,352          | 160,000       | 18,648               | 63,889              | 2,063,889         |
| 10/1/17 | 140,086          | 160,000       | 19,914               | 43,975              | 2,043,975         |
| 10/1/18 | 138,734          | 160,000       | 21,266               | 22,709              | 2,022,709         |
| 10/1/19 | 137,291          | 160,000       | 22,709               | 0                   | 2,000,000         |

\* Note: Minor differences in calculations may result from rounding.

**Serial Bond Amortization Schedule**  
Effective interest rate = 8%. Coupon rate = 8%

| Date   | Interest Expense | Interest Paid | Principal Payment | Serial Bond Balance |
|--------|------------------|---------------|-------------------|---------------------|
|        |                  |               |                   | 1,200,000           |
| 7/1/14 | 96,000           | 396,000       | 300,000           | 900,000             |
| 7/1/15 | 72,000           | 372,000       | 300,000           | 600,000             |
| 7/1/16 | 48,000           | 348,000       | 300,000           | 300,000             |
| 7/1/17 | 24,000           | 324,000       | 300,000           | —                   |

If the serial bonds were issued at a premium or discount, the amortization schedule would adjust interest expense to the historical market rate (effective interest rate), similar to the term bond illustrated above.

The total effective interest expense is \$119,634 (or 50% of \$96,000 plus 50% of \$72,000 plus 25% of \$142,537). Accrued interest payable is \$76,000 (or 25% of \$160,000 plus 50% of \$72,000). An example of the disclosure requirements concerning long-term liabilities is presented in Illustration 18-13.

**ILLUSTRATION 18-13**

**Model City**

**Schedule of General Long-Term Obligations  
December 31, 2014, and December 31, 2013**

|  | Beginning Balance  | Additions          | Reductions       | Ending Balance     | Amounts Due within One Year |
|--|--------------------|--------------------|------------------|--------------------|-----------------------------|
| <b>Governmental Activities</b>                 |                    |                    |                  |                    |                             |
| Term Bonds                                     | \$ —               | \$2,100,000        | \$ 4,366         | \$2,095,634        | \$ —                        |
| Serial Bonds                                   | 1,200,000          | —                  | 300,000          | 900,000            | 300,000                     |
| Governmental Activities Long-Term Liabilities  | <u>\$1,200,000</u> | <u>\$2,100,000</u> | <u>\$304,366</u> | <u>\$2,995,634</u> | <u>\$300,000</u>            |
| <b>Business-Type Activities</b>                |                    |                    |                  |                    |                             |
| Revenue Bonds Payable                          | \$4,200,000        | \$ —               | \$ —             | \$4,200,000        | \$ —                        |
| Business-Type Activities Long-Term Liabilities | <u>\$4,200,000</u> | <u>\$ —</u>        | <u>\$ —</u>      | <u>\$4,200,000</u> | <u>\$ —</u>                 |

**TEST YOUR KNOWLEDGE 18.1**

NOTE: Solutions to *Test Your Knowledge* questions are found at the end of each chapter before the end-of-chapter questions.

True or False

1. Are the following statements concerning fixed assets true or false?
  - a. \_\_\_\_\_ Infrastructure assets need to be disclosed on the government-wide statement of net position.
  - b. \_\_\_\_\_ Accrued interest is reported as a liability on the statement of net position.
  - c. \_\_\_\_\_ Depreciation expense does not have to be recorded for either government-wide or governmental fund balance reports.

## 18.7 EXTERNAL REPORTING REQUIREMENTS (GASB STATEMENT NO. 34)

**Lo 9** Describe reporting requirements under GASB Statement No. 34.

The following statements and disclosures are required:<sup>12</sup>

### *Reporting Governmental Fund Financial Statements*

1. Balance sheet (Illustration 18-14)
2. Statement of revenues, expenditures, and changes in fund balances (Illustration 18-15)
3. Reconciliation to the government-wide statements (Illustrations 18-16 and 18-17)

### *Reporting Proprietary Fund Financial Statements*

1. Balance sheet (Illustration 18-10) or a statement of net position (not shown); either format is acceptable
2. Statement of revenues, expenses, and changes in fund net position (Illustration 18-11)
3. Statement of cash flows (not shown)—direct format

### *Reporting Fiduciary Funds (and Similar Component Units) Financial Statements*

1. Statement of fiduciary net position (not shown)
2. Statement of changes in fiduciary net position (not shown)

### *Reporting Government-wide Statements*

1. Statement of net position (Illustration 18-17)
2. Statement of activities (Illustration 18-18)

### *Combining Statements for Major Component Units*

1. Statement of net position (not shown)
2. Statement of activities (not shown)

### *Notes to the Financial Statements*

1. Schedule of changes in capital assets (Illustration 18-12)
2. Schedule of changes in long-term liabilities (Illustration 18-13)

### *Required Supplementary Information (RSI)*

1. Management's discussion and analysis (MD&A)
2. Budgetary comparison schedules (see Chapter 17, Illustration 17-9), accompanied by information reconciling the budget-to-GAAP (see Chapter 17, Illustration 17-10)

## 18.8 GOVERNMENT FUND-BASED REPORTING

Earlier in the chapter, several individual fund financial statements were illustrated. In this section, we discuss the reporting requirements for the governmental funds aggregated. See Illustrations 18-14 and 18-15 for the fund balance sheets and the statement of revenues, expenditures, and changes in fund balances for the governmental funds. Fund information is important because funds are created to account for financial resources and the activities that they support and to aid management in decision making. Because much of the government's activities is managed and accounted for in a limited number of funds, the governmental fund reporting is designed to report the government's **major funds**. For example, in Illustration 18-14, each of the funds is reported in separate columns. Governments are required only to report the **major funds** in separate columns, but have flexibility to report more funds separately if desired. **Individual governmental funds and proprietary funds are major funds if the total assets, liabilities, revenues, or**

<sup>12</sup> The focus of the governmental and proprietary fund statements is on major funds. Nonmajor funds are aggregated and displayed in a single column. Combining statements, showing the details of the nonmajor funds, are not required but may be presented as supplementary information.

*expenditure/ expenses of that individual fund are at least 10% of the corresponding total for the relevant fund category (governmental or enterprise funds) and at least 5% of the corresponding total for all governmental and enterprise funds combined.* In addition, any fund that may be important to financial statement users should be reported as a major fund. Internal Service Funds are exempt from major fund reporting. Therefore to avoid double counting (revenue to the internal service fund is an expenditure of the government funds), the net effects of internal service transactions are eliminated.

## Reconciliation between Government Fund Balances and Government-wide Net Position

The primary difference between the disclosure requirement for capital assets (Illustration 18-12) and prior disclosures relates to the assets of the Internal Service Funds and infrastructure assets. On the statement of net position, the Internal Service Fund's assets and liabilities are reported in governmental activities along with infrastructure assets. To assist the users of the financial statements, governments must reconcile the change in fund

### ILLUSTRATION 18-14

#### Model City Governmental Funds\* Balance Sheets at December 31, 2014

| Assets                              | General Fund     | Capital Projects Fund    | Debt Service Funds                 |                  | Special Revenue Fund | Permanent Fund   | Total Governmental Funds |
|-------------------------------------|------------------|--------------------------|------------------------------------|------------------|----------------------|------------------|--------------------------|
|                                     |                  | Library and Civic Center | Library and Civic Center Term Bond | Land Acquisition |                      | Classics         | Classics Endowment       |
|                                     |                  |                          |                                    | Serial Bond      | Serial Bond          |                  |                          |
| Cash                                | \$ 63,250        | \$ 300,000               | \$ —                               | \$19,000         | \$22,000             | \$ —             | \$ 404,250               |
| Interest Receivable                 |                  | 12,500                   | 4,000                              |                  |                      | 7,500            | 24,000                   |
| Investments                         | 106,000          | 1,000,000                | 100,000                            |                  |                      | 300,000          | 1,506,000                |
| Property Tax Receivable             | 127,750          |                          |                                    | 2,000            |                      |                  | 129,750                  |
| Due from Other Funds                | 50,000           |                          |                                    |                  | 7,500                |                  | 57,500                   |
| Due from State Government           |                  | 250,000                  |                                    |                  |                      |                  | 250,000                  |
| Total Assets                        | <u>\$347,000</u> | <u>\$1,562,500</u>       | <u>\$104,000</u>                   | <u>\$21,000</u>  | <u>\$29,500</u>      | <u>\$307,500</u> | <u>\$2,371,500</u>       |
| <b>Liabilities and Fund Balance</b> |                  |                          |                                    |                  |                      |                  |                          |
| Vouchers Payable                    | \$ 73,000        | \$ 50,000                |                                    |                  |                      |                  | \$ 123,000               |
| Due to Other Funds                  |                  |                          |                                    |                  |                      | 7,500            | 7,500                    |
| Total Liabilities                   | <u>\$ 73,000</u> | <u>\$ 50,000</u>         | <u>\$ —</u>                        | <u>\$ —</u>      | <u>\$ —</u>          | <u>\$ 7,500</u>  | <u>\$ 130,500</u>        |
| Fund Balance:                       |                  |                          |                                    |                  |                      |                  |                          |
| Nonspendable                        |                  |                          |                                    |                  |                      | 300,000          | 300,000                  |
| Restricted for:                     |                  |                          |                                    |                  |                      |                  |                          |
| Capital projects                    |                  | 1,512,500                |                                    |                  |                      |                  | 1,512,500                |
| Debt Service                        |                  |                          | 104,000                            |                  |                      |                  | 104,000                  |
| Other                               |                  |                          |                                    |                  | 29,500               |                  | 29,500                   |
| Committed for:                      |                  |                          |                                    |                  |                      |                  |                          |
| Debt Service                        |                  |                          |                                    | 21,000           |                      |                  | 21,000                   |
| Assigned for:                       |                  |                          |                                    |                  |                      |                  |                          |
| Encumbrances                        | 191,000          |                          |                                    |                  |                      |                  |                          |
| Unassigned                          | 83,000           |                          |                                    |                  |                      |                  |                          |
| Total Fund Balance                  | <u>274,000</u>   | <u>1,512,500</u>         | <u>104,000</u>                     | <u>21,000</u>    | <u>29,500</u>        | <u>300,000</u>   | <u>2,241,000</u>         |
| Total Liabilities and Fund Balances | <u>\$347,000</u> | <u>\$1,562,500</u>       | <u>\$104,000</u>                   | <u>\$21,000</u>  | <u>\$29,500</u>      | <u>\$307,500</u> | <u>\$2,371,500</u>       |

\* Because Model City does not have many funds, all of which were considered important to readers, the city reported on all funds rather than focusing on only the major funds, as defined by percentage cutoffs.

## ILLUSTRATION 18-15

**Model City  
Governmental Funds\***  
**Statement of Revenues, Expenditures, and Changes in Fund Balances  
for the Year Ended December 31, 2014**

|   | <i>Capital<br/>Projects<br/>Fund</i> |                                     | <i>Debt Service Funds</i>                         |                             | <i>Special<br/>Revenue<br/>Fund</i> | <i>Permanent<br/>Fund</i>        | <i>Total<br/>Governmental<br/>Funds</i> |
|---|--------------------------------------|-------------------------------------|---|-----------------------------|-------------------------------------|----------------------------------|---|
|   | <i>General<br/>Fund</i>              | <i>Library and<br/>Civic Center</i> | <i>Library and<br/>Civic Center<br/>Term Bond</i> | <i>Land<br/>Acquisition</i> |                                     | <i>Classics<br/>Acquisitions</i> | <i>Classics<br/>Endowment</i>           |
|   |                                      |                                     |   | <i>Serial<br/>Bond</i>      |                                     |                                  |   |
| <b>Revenues</b>   |                                      |                                     |   |                             |                                     |                                  |   |
| Property Taxes  | \$1,158,750                          |                                     |   | \$316,000                   |                                     |                                  | \$1,474,750                             |
| Licenses and Permits                                    | 170,500                              |                                     |   |                             |                                     |                                  | 170,500                                 |
| State Grant—education                                   | 275,000                              |                                     |   |                             |                                     |                                  | 275,000                                 |
| Intergovernmental                                       |                                      | \$1,000,000                         |   |                             |                                     |                                  | 1,000,000                               |
| Charges for Services                                    | 130,500                              |                                     |   |                             |                                     |                                  | 130,500                                 |
| Interest  | 6,000                                | 12,500                              | \$ 4,000  |                             |                                     | \$ 30,000                        | 52,000                                  |
| Total Revenue   | <u>\$1,740,750</u>                   | <u>\$1,012,500</u>                  | <u>\$ 4,000</u>                                   | <u>\$316,000</u>            |                                     | <u>\$ 30,000</u>                 | <u>\$3,103,250</u>                      |
| <b>Expenditures</b>                                     |                                      |                                     |   |                             |                                     |                                  |   |
| Public Safety   | \$ 480,000                           |                                     |   |                             |                                     |                                  | \$ 480,000                              |
| General Government                                      | 289,000                              |                                     |   |                             |                                     |                                  | 289,000                                 |
| Highways and Streets                                    | 128,000                              |                                     |   |                             |                                     |                                  | 128,000                                 |
| Sanitation  | 70,000                               |                                     |   |                             |                                     |                                  | 70,000                                  |
| Health  | 141,000                              |                                     |   |                             |                                     |                                  | 141,000                                 |
| Cultural—recreation                                     | 80,000                               |                                     |   |                             | \$ 18,000                           |                                  | 98,000                                  |
| Education   | 670,000                              |                                     |   |                             |                                     |                                  | 670,000                                 |
| Debt Service  |                                      |                                     |   |                             |                                     |                                  |   |
| Principal   |                                      |                                     |   | \$300,000                   |                                     |                                  | 300,000                                 |
| Interest  |                                      |                                     |   | 96,000                      |                                     |                                  | 96,000                                  |
| Capital Outlay  |                                      | \$1,500,000                         |   |                             |                                     |                                  | 1,500,000                               |
| Total Expenditures                                      | <u>\$1,858,000</u>                   | <u>\$1,500,000</u>                  | <u>—</u>  | <u>\$396,000</u>            | <u>\$ 18,000</u>                    | <u>—</u>                         | <u>\$3,772,000</u>                      |
| Excess (deficiency) of<br>revenues over<br>expenditures | <u>\$ (117,250)</u>                  | <u>\$ (487,500)</u>                 | <u>\$ (4,000)</u>                                 | <u>\$80,000</u>             | <u>\$(18,000)</u>                   | <u>\$ 30,000</u>                 | <u>(668,750)</u>                        |
| <b>Other Financing Sources (Uses)</b>                   |                                      |                                     |   |                             |                                     |                                  |   |
| Proceeds from long-term<br>capital debt                 |                                      | \$2,100,000                         |   |                             |                                     |                                  | \$2,100,000                             |
| Transfers in  | \$ 150,000                           |                                     | \$100,000   | \$ 96,000                   | \$ 30,000                           |                                  | 376,000                                 |
| Transfers out   | (96,000)                             | (100,000)                           |   |                             |                                     | \$(30,000)                       | (226,000)                               |
| Total other   | <u>\$ 54,000</u>                     | <u>\$2,000,000</u>                  | <u>\$100,000</u>                                  | <u>\$ 96,000</u>            | <u>\$ 30,000</u>                    | <u>\$(30,000)</u>                | <u>\$2,250,000</u>                      |
| <b>Special Items</b>                                    |                                      |                                     |   |                             |                                     |                                  |   |
| Proceeds from sale of<br>equipment                      | \$ 87,250                            |                                     |   |                             |                                     |                                  | \$ 87,250                               |
| Net change in fund balance                              | 24,000                               | \$1,512,500                         | \$104,000   | \$ 16,000                   | \$ 12,000                           | \$ —                             | \$1,668,500                             |
| Fund balance—beginning                                  | 250,000                              | —                                   | —   | 5,000                       | 17,500                              | 300,000                          | 572,500                                 |
| Fund balance—ending                                     | <u>\$ 274,000</u>                    | <u>\$1,512,500</u>                  | <u>\$ 21,000</u>                                  | <u>\$104,000</u>            | <u>\$ 29,500</u>                    | <u>\$300,000</u>                 | <u>\$2,241,000</u>                      |

\* Because Model City does not have many funds, all of which were considered important to readers, the city reported on all funds rather than focusing on only the major funds, as defined by percentage cutoffs. In addition, \$250,000 of capital expenditures made by the general fund are included in the following governmental activities: Public Safety, \$100,000, Cultural—recreation, \$50,000, and Education, \$100,000.

**ILLUSTRATION 18-16**

**Model City  
Reconciliation of the Statement of Revenues,  
Expenditures, and Changes in Fund Balances of Governmental  
Funds to the Statement of Activities  
for the Year Ended December 31, 2014**

|   |                           |
|---|---------------------------|
| Net change in fund balances—total governmental funds (Illustration 18-15)   | <b>\$1,668,500</b>        |
| Governmental funds report capital outlays as expenditures while governmental activities report depreciation expense to allocate those expenditures over the life of the asset. This is the amount by which capital outlays exceeded depreciation in the current period. (a)                 | 1,444,000                 |
| In the statement of activities, only the gain on the sale of equipment is reported, while in the governmental funds, the proceeds from the sale increase financial resources. Thus, the change in net position differs from the change in fund balance by the book value of the asset sold. | (85,000)                  |
| Bond proceeds provide current financial resources to governmental funds, but issuing debt increases long-term liabilities in the statement of net position.   | (2,100,000)               |
| Repayment of bond principal is an expenditure in the government funds, but reduces long-term liabilities in the statement of net position.  | 300,000                   |
| Some expenses reported on the statement of activities do not require the use of current financial resources and therefore are not reported as expenditures in government funds (in this case, accrued interest). (b)  | (23,634)                  |
| Internal service funds are used by management to charge the cost of certain activities to individual funds. The net revenue (expense) of the internal service fund is reported with governmental activities. (c)  | (20,000)                  |
| Change in Net Position of Governmental Activities (see Illustration 18-18)  | <b><u>\$1,183,866</u></b> |

(a) Total capital expenditures from the capital projects fund (\$1,500,000) plus purchases by the General Fund (\$250,000) less depreciation expense, excluding depreciation from the Internal Service Fund (\$321,000 – \$15,000).

(b) Total interest expense using the accrual basis is \$119,634 but only \$96,000 is recognized as an expenditure. (The \$119,634 includes \$84,000 from the serial bond and \$35,634 from the term bond.)

(c) The \$20,000 is charged equally to public safety and to the general government.

balances in the governmental funds (see Illustration 18-15) with the changes in fund balance reported on the government-wide statements (see Illustration 18-18 later in the chapter). This reconciliation is reported in Illustration 18-16. In addition, governments must reconcile the fund balance in the governmental funds (see Illustration 18-14) with the fund balance reported in the statement of net position prepared on a government-wide basis (from Illustration 18-17). This reconciliation is reported at the bottom of Illustration 18-17. These reconciliations highlight the major differences between fund accounting and accrual accounting. For instance, in the governmental funds, amounts spent to acquire capital assets are expenditures; while under accrual accounting, these assets are capitalized on the balance sheet and depreciated on the statement of activities. Similarly, when bonds are issued, the total proceeds increase financial resources on the statement of revenues, expenditures, and changes in fund balance, whereas under accrual accounting, bond issues increase liabilities on the balance sheet. Total proceeds from the sale of an asset are also included on the statement of revenues, expenditures, and changes in fund balance, whereas under accrual accounting only the difference between the carrying value of the asset and the cash received is reported on the statement of activities. Similarly, in the governmental funds, only the amount of cash interest paid is treated as an expenditure; in the government-wide statements, the effective interest expense is recorded on the statement of activities with accrued interest payable reported on the balance sheet.

## 18.9 GOVERNMENT-WIDE REPORTING

**LO10** Benefits of government-wide reporting.

As stated previously, the primary financial statements under *GASB Statement No. 34* are prepared on a government-wide basis. These statements are prepared on the accrual basis using the flow of economic resources concept. These primary statements include:

1. The statement of net position.
2. The statement of activities.

Note that a governmental-wide statement of cash flows is *not* required. Cash flow statements are required for proprietary funds.

## Statement of Net Position

The statement of net position reports both financial and capital resources. The statement of net position is prepared using the accrual basis and a government-wide format (formerly called entity-wide basis). Under the prior rules, the balance sheet listed each fund's assets and liabilities with no overall government totals. While permitted, no distinction between current and long-term is required under the proposal for government-wide assets and liabilities. However, if no distinction is made, the items should be listed in the order of liquidity. In Illustration 18-17, we show the "net asset format" with items listed in the order of liquidity rather than the classified version of the statement of net position. If the classified format is used and there are liabilities with maturities longer than one year, the current portion should be listed separately from the amount due later than one year.

The statement of net position is divided into two categories: the primary government and its discretely presented component units. The *primary government* columns include the governmental funds, the business-activities (proprietary) funds, and a total column.<sup>13</sup> *Component units* are governmental units that are legally independent of the reporting government, but within the reporting unit's control. Control means either appointing a majority of the unit's governing body members or being fiscally dependent (e.g., the budget is approved by the primary government). An example of a component unit is a school district that receives funding from the county. Because the school district is financially accountable to the county, it is considered a component unit. No component units are shown in Illustration 18-17.

At a minimum, assets, liabilities, and net position should be disclosed for each of the following four categories:

- A. Primary Government<sup>14</sup>
  1. Government activities
  2. Business-type activities
  3. Total primary government activities (total of 1 and 2)
- B. Discretely Presented Component Units
  4. "Discretely presented" component units (discretely presented, as opposed to blended, means reporting the data in a separate column as if it were a separate fund).

Under previous guidelines, long-term debt was reported as one amount. Under the new rules, the current portion of long-term debt must be listed separately from the noncurrent portion. In addition, a footnote is required for the governmental, business-type, and component units activities showing the additions and reductions to the long-term liability account for the year, including the current portion.

Similar to the requirements for long-term debt, a footnote is required showing the additions and reductions to the capital asset account. The amount of depreciation charged to governmental activities is required. This information is disclosed for the government, business-type, and component units activities.

**Net Position** Net position are displayed in three components as follows:

1. *Net Investment in capital assets.* This component consists of capital assets including restricted capital assets, net of accumulated depreciation and reduced by the outstanding balances of any bonds, mortgages, notes, or other borrowings attributable to the acquisition, construction, or improvement of those assets.

<sup>13</sup> Fiduciary activities whose resources are not available to finance the government's programs should be excluded from the government-wide statements and should be reported only in the fund financial statements.

<sup>14</sup> Component units that meet the criteria for blending should be reported in the primary government columns (GASB Codification 2600.115).

## ILLUSTRATION 18-17

**Model City**  
**Statement of Net Position—Government-wide Basis At December 31, 2014**

| <i>Assets</i>                    | <i>Primary Government</i>          |                                 |                     |
|----------------------------------|------------------------------------|---------------------------------|---------------------|
|                                  | <i>Total Government Activities</i> | <i>Business-Type Activities</i> | <i>Total</i>        |
| Cash                             | \$ 428,750                         | \$ 100,000                      | \$ 528,750          |
| Interest Receivable              | 24,000                             |                                 | 24,000              |
| Investments                      | 1,506,000                          |                                 | 1,506,000           |
| Receivables                      | 227,750                            | 451,000                         | 678,750             |
| Internal Balances                | 50,000                             | (50,000)                        | —                   |
| Due from State Government        | 250,000                            |                                 | 250,000             |
| Restricted Assets                |                                    | 509,000                         | 509,000             |
| Capital Assets (net)             | 12,024,000                         | 10,040,000                      | 22,064,000          |
| <b>Total Assets</b>              | <b>\$14,510,500</b>                | <b>\$11,050,000</b>             | <b>\$25,560,500</b> |
| <b><i>Liabilities</i></b>        |                                    |                                 |                     |
| Payables                         | \$ 226,500                         | \$ 593,000                      | \$ 819,500          |
| Long-term Liabilities            |                                    |                                 |                     |
| Due within One Year              | 300,000                            |                                 | 300,000             |
| Due in More Than One Year        | 2,695,634                          | 4,200,000                       | 6,895,634           |
| <b>Total Liabilities</b>         | <b>3,222,134</b>                   | <b>4,793,000</b>                | <b>\$ 8,015,134</b> |
| <b><i>Net Position</i></b>       |                                    |                                 |                     |
| Net Investment in Capital Assets | 9,028,366                          | 5,558,000                       | 14,586,366          |
| Restricted for Debt Service      | 125,000                            | 500,000                         | 625,000             |
| Restricted for Permanent Funds:  |                                    |                                 |                     |
| Nonexpendable                    | 300,000                            |                                 | 300,000             |
| Restricted for other             | 29,500                             |                                 | 29,500              |
| Unassigned                       | 1,805,500                          | 199,000                         | 2,004,500           |
| <b>Total Net Position</b>        | <b>\$11,288,366</b>                | <b>\$6,257,000</b>              | <b>\$17,545,366</b> |

***Reconciling the Statement of Net Position with Governmental Fund Reporting***

|  |                     |
|--|---------------------|
| Fund balance for governmental activities (see Illustration 18-14)  | <b>\$ 2,241,000</b> |
| Capital assets used in governmental activities are not financial resources and are not reported in the funds (\$12,024,000 less internal service fund assets of \$420,000)   | 11,604,000          |
| Internal service funds are used by management to charge the costs of certain activities to individual funds. The assets and liabilities of the internal service fund are included in the governmental activities in the statement of net position. (Note: this line item includes capital assets.) | 515,000             |
| Some liabilities are not due in the current period and are not recognized in the funds (\$40,000 and \$36,000 accrued interest on the serial and term bonds)   | (76,000)            |
| Long-term liabilities (plus unamortized premium) are not due and payable in the current period and therefore are not reported in the funds.  | (2,995,634)         |
| <b>Net position in governmental activities (see Illustration 18-18)</b>  | <b>\$11,288,366</b> |

- 2. Restricted** (listed by major categories of restrictions such as capital projects, debt service, etc.). Net position is reported as restricted when constraints placed on net position use are either: (a) externally imposed by creditors (such as through debt covenants), grantors, contributors, or laws and regulations of other governments, or (b) imposed by law. When permanent endowments or permanent fund principal amounts are included, “restricted net position” should be displayed in two components—expendable and nonexpendable. Nonexpendable net position are those that are required to be retained in perpetuity.
- 3. Unrestricted.** Unrestricted net position consists of total balances that do not meet the definition of *restricted* or *net investment in capital assets*.



Restricted fund balance on the governmental fund financial statements will generally be different from restricted net position for governmental activities reported on the government-wide statement of net position. There are three reasons for this difference. First, the principal amount of a permanent fund is classified as nonspendable fund balance in the governmental fund financial statements, but is included in restricted net position in the government-wide statement of position assets.

Second, the fund financial statements are prepared on the modified accrual basis of accounting and the government-wide statement of net position is prepared on the accrual basis of accounting. The differences between the two bases of accounting will generate differences in the two amounts. And finally, the internal service fund is not included on the governmental fund financial statements; however, on the government-wide statement of net position, the internal service fund is generally included with governmental activities.

**Infrastructure Asset Reporting Issues** One of the more controversial rules of *GASB Statement No. 34* is that infrastructure assets such as roads, bridges, storm sewers, water systems, and so on are reported as assets in the governmental-wide statements at historical cost (or estimated historical cost at transition). In addition, governments are required to report depreciation on these assets.<sup>15</sup>

## TEST YOUR KNOWLEDGE 18.2

**NOTE:** Solutions to *Test Your Knowledge* questions are found at the end of each chapter before the end-of-chapter questions.

### Multiple Choice

- In reconciling the fund balance for government activities to net position in government activities (government-wide basis), which of the following items is not a reconciling item?
  - Capital assets used in government activities
  - Accrued interest on debt
  - Long-term liabilities
  - Property Taxes Revenue
  - Net position of Internal Service Fund.

## Statement of Activities

The statement of activities presented in Illustration 18-18 is prepared on a government-wide basis and is presented using a *net cost* format. This format separates revenues into program revenues and general revenues. Then expenses are reduced by program revenues resulting in “net (expense) revenue.” General revenues, extraordinary items and special items, and transfers are reported separately. **Program revenues** include three categories: charges for services; program-operating grants and contributions; and capital grants and contributions. (In the illustration only two of the three categories are used.) Charges for services include revenues attributable to a specific program because they result from exchange transactions, such as charges to customers. Licenses and permits would generally be reported as charges for services under program revenues since the users benefit directly from the services provided. In Illustration 18-18 the \$170,500 of revenue from licenses and permits from Illustration 18-15 is included as charges for services: highways and streets (\$94,000), cultural and recreation (\$15,000), and general government (\$61,500, along with an additional \$130,500 from Illustration 18-15. “All” taxes are considered **general revenue**. In Illustration 18-18, columns are used to distinguish between governmental and business-type activities of the primary government. A total column for the primary government should be presented.<sup>16</sup>

<sup>15</sup> Governments may elect not to report depreciation expense for infrastructure assets if two conditions are met. First, a government must use an asset management system that contains up-to-date inventories of the assets, be able to assess the condition of the assets, and be able to estimate the amounts needed to preserve the network at a level established by the government. Second, the government must be able to document that the network of infrastructure assets is being preserved at a level established and disclosed by the government.

<sup>16</sup> Discretely presented component units are shown in a separate column and not included in the totals for the primary government.

## ILLUSTRATION 18-18

**Model City  
Statement of Activities—Government-wide  
for the Year Ended December 31, 2014**

| Functions/Programs                                      | Expenses           | Program Revenues        |                             | Net (Expense) Revenue and<br>Changes in Net Position |                             |                     |
|---|--------------------|-------------------------|-----------------------------|--|-----------------------------|---------------------|
|   |                    | Charges for<br>Services | Grants and<br>Contributions | Primary Government                                   |                             | Total               |
|   |                    |                         |                             | Governmental<br>Activities                           | Business-type<br>Activities |                     |
| <b>Primary Government</b>                               |                    |                         |                             |  |                             |                     |
| <i>Government Activities</i>                            |                    |                         |                             |  |                             |                     |
| Public Safety   | \$ 426,612         |                         |                             | \$ (426,612)   |                             | \$ (426,612)        |
| General Government                                      | 317,210            | \$ 192,000              | \$1,000,000                 | 874,790  |                             | 874,790             |
| Highways and Streets                                    | 140,332            | 94,000                  |                             | (46,332)   |                             | (46,332)            |
| Sanitation  | 76,745             |                         |                             | (76,745)   |                             | (76,745)            |
| Health  | 154,585            |                         |                             | (154,585)  |                             | (154,585)           |
| Cultural—recreation                                     | 201,963            | 15,000                  |                             | (186,963)  |                             | (186,963)           |
| Education   | 634,553            |                         | 275,000                     | (359,553)  |                             | (359,553)           |
| Interest on Long-term Debt                              | 119,634            |                         |                             | (119,634)  |                             | (119,634)           |
| Total Governmental Activities                           | <u>2,071,634</u>   | <u>301,000</u>          | <u>1,275,000</u>            | <u>(495,634)</u>                                     |                             | <u>(495,634)</u>    |
| <i>Business-type Activities</i>                         |                    |                         |                             |  |                             |                     |
| Sewer   | 1,322,000          | 1,500,000               |                             |  | \$ 178,000                  | 178,000             |
| Total Business-type Activities                          | <u>1,322,000</u>   | <u>1,500,000</u>        |                             |  | <u>178,000</u>              | <u>178,000</u>      |
| <b>Total Primary Government</b>                         | <u>\$3,393,634</u> | <u>\$1,801,000</u>      | <u>\$1,275,000</u>          | <u>\$ (495,634)</u>                                  | <u>\$ 178,000</u>           | <u>\$ (317,634)</u> |
| <b>General Revenues</b>                                 |                    |                         |                             |  |                             |                     |
| Taxes:  |                    |                         |                             |  |                             |                     |
| Property taxes, levied for general purposes             |                    |                         |                             | \$ 1,158,750   |                             | \$ 1,158,750        |
| Property taxes, levied for debt service                 |                    |                         |                             | 316,000  |                             | 316,000             |
| Interest and investment earnings                        |                    |                         |                             | 52,500   |                             | 52,500              |
| Special item—gain on sale of equipment                  |                    |                         |                             | 2,250  |                             | 2,250               |
| Transfers   |                    |                         |                             | 150,000  | (150,000)                   | —                   |
| Total general revenues, special items,<br>and transfers |                    |                         |                             | <u>1,679,500</u>                                     | <u>(150,000)</u>            | <u>1,529,500</u>    |
| <b>Change in Net Position</b>                           |                    |                         |                             | <b>1,183,866</b>                                     | <b>28,000</b>               | <b>1,211,866</b>    |
| Net position—beginning (assumed)                        |                    |                         |                             | 10,104,500   | 6,229,000                   | 16,333,500          |
| Net position—ending                                     |                    |                         |                             | <u>\$11,288,366</u>                                  | <u>\$6,257,000</u>          | <u>\$17,545,366</u> |



The statement of activities might actually change how governments do business, according to one expert, who claims that these net cost statements by departments and functions might give governments a lot of heartburn as the numbers for certain funds may look bad. Other funds, however, could look better. He gives the example of a police department being funded from an ad valorem tax collected for general purposes. Since the government specifically dedicates the revenue from the ad valorem tax for the police department, the net cost would no longer be as big a negative on the Statement of Activities since there would now be revenue directly associated with the function.<sup>17</sup>

## 18.10 MANAGEMENT'S DISCUSSION AND ANALYSIS (MD&A)

Management's Discussion and Analysis (MD&A) is an integral part of the annual reporting of a government entity, as required by *GASB Statement No. 34*. This discussion should provide an objective and easily readable analysis of the government's financial activities based on currently known facts, decisions, or conditions. It provides financial managers with the

<sup>17</sup> *Practical Accountant*, Vol. 32, "New Look for Government Statements," by Howard Wolosky, August 1999, pp. 47–50.

opportunity to present both a short-term and a long-term analysis of the government's activities. MD&A should discuss the current-year results in comparison with the prior year. This comparison should include a discussion of both the positive and the negative aspects of the current year changes. The focus of the MD&A is on the primary government (i.e., it should distinguish between the primary government and its component units). The MD&A requirements are general, rather than specific, to encourage financial managers to report effectively only the most relevant information. At a minimum, MD&A should include:

- a. A brief discussion of the basic financial statements including interrelationships among the statements and significant differences in the information provided.
- b. Condensed financial information derived from government-wide financial statements comparing the current year to the prior year.
- c. An analysis of the government's overall financial position and results of operations to assist users in assessing whether financial position has improved or deteriorated as a result of the year's operations. The analysis should address both governmental and business-type activities as reported in the government-wide financial statements and the *reasons* for significant changes from the prior year.
- d. An analysis of balances and transactions of individual funds. This analysis should address the reasons for significant changes in fund balances or fund net position and whether restrictions, commitments, or other limitations significantly affect the availability of fund resources for future use.
- e. An analysis of significant variations between original and final budget amounts and between final budget amounts and actual results for the general fund (or its equivalent).
- f. A description of significant capital asset and long-term debt activity during the year, including a discussion of commitments made for capital expenditures, changes in credit ratings, and debt limitations that may affect the financing of planned facilities or services.
- g. A discussion by governments that use the modified approach to report some or all of their infrastructure assets including significant changes in the assessed condition of eligible infrastructure assets from previous condition assessments, how the current assessed condition compares with the condition level the government has established, and any significant differences from the estimated annual amount to maintain/preserve eligible infrastructure assets compared with the actual amounts spent during the current year.
- h. A description of currently known facts, decisions, or conditions that are expected to have a significant effect on financial position (net position) or results of operations (revenues, expenditures, and other changes in net position).

## 18.11 INTERFUND ACTIVITY

**LO11** Type of inter fund activity.

Interfund activity within and among the three fund categories (governmental, proprietary, and fiduciary) should be classified and reported as follows:

### *Interfund Activity*

- a. *Reciprocal interfund activity*—internal counterpart to exchange and exchange-like transactions. It includes:
  1. *Interfund loans*—Interfund loans should be reported as interfund receivables in the lender fund and as an interfund payable in the borrower fund.
  2. *Interfund services provided and used*—sales and purchases of goods and services between funds for a price approximating their external exchange value. Interfund services provided and used should be reported as revenues in seller funds and expenses or expenditures in the purchaser funds. Unpaid amounts should be reported as interfund receivables and payables in the fund balance sheet or the statement of net position.
- b. *Nonreciprocal interfund activity*—the internal counterpart to nonexchange transaction.
  1. *Interfund transfers*—flows of assets without an equivalent flow of assets in return and without a requirement for repayment. In government funds, transfers should be reported as “other financing uses” in the funds making the transfer and as “other financing sources” in the funds receiving the transfer. In proprietary funds, transfers should be reported after nonoperating revenues and expenses.

2. *Interfund reimbursements*—repayments from the funds responsible for the particular expenditure or expense to the funds that initially paid for them. Reimbursements should not be displayed in the financial statements.

### Illustration of Reciprocal Interfund Activity—Interfund Loans

Assume that the general fund advances \$4,000 as a temporary loan to a special revenue fund. Corresponding entries to record the advance are

| <i>General Fund</i>           |       |       |
|-------------------------------|-------|-------|
| Due from Special Revenue Fund | 4,000 |       |
| Cash                          |       | 4,000 |
| <i>Special Revenue Fund</i>   |       |       |
| Cash                          | 4,000 |       |
| Due to General Fund           |       | 4,000 |

### Interfund Services Provided and Used

Interfund services provided and used are interfund transactions that would be treated as revenue, expense, or expenditures if they were entered into with organizations outside the governmental unit. Contributions in lieu of taxes from an enterprise fund to the general fund and internal service fund billings to government departments for services rendered are examples of interfund services provided and used. Interfund services provided and used are accounted for as revenue, expense, or expenditures of the funds involved. Accounting for interfund services provided and used in this manner is necessary for the determination of the operating results (net income) of proprietary funds.

To illustrate, assume that the internal service fund bills the Police Department for \$3,000 for services rendered. The corresponding entries to record this billing are

| <i>Internal Service Fund</i> |       |       |
|------------------------------|-------|-------|
| Due from General Fund        | 3,000 |       |
| Revenue                      |       | 3,000 |
| <i>General Fund</i>          |       |       |
| Expenditures                 | 3,000 |       |
| Due to Internal Service Fund |       | 3,000 |

### Illustration of Nonreciprocal Interfund Activity—Interfund Transfers

Some nonreciprocal interfund transfers represent nonrecurring transfers between funds. Examples include nonrecurring contributions from the general fund to proprietary funds, the return of part or all of such contributions to the general fund, and transfers of the residual balances of discontinued funds to the general fund or to debt service funds.

To illustrate, assume that an enterprise fund transfers \$150,000 of excess resources to the general fund. Corresponding entries to record the transfer are

| <i>Enterprise Fund</i>        |         |         |
|-------------------------------|---------|---------|
| Transfer to General Fund      | 150,000 |         |
| Cash                          |         | 150,000 |
| <i>General Fund</i>           |         |         |
| Cash                          | 150,000 |         |
| Transfer from Enterprise Fund |         | 150,000 |

Nonreciprocal transfers should be reported as other financing sources or uses in the governmental funds. Nonreciprocal transfers to or from proprietary funds should be reported after nonoperating revenues and expenses.

In other cases, nonreciprocal transfers consist of recurring transfers between funds for the purpose of shifting resources from the fund legally required to record the revenue to the fund legally required to expend the revenue. An example of this type of transfer is the

annual transfer of revenue from an endowment trust fund to an expendable trust fund. To illustrate, the net effect of the entries to record the transfer of revenue from the Classics Acquisition Endowment Trust Fund of Model City to the Classics Acquisition Expendable Trust Fund may be summarized as follows.

| <i>Endowment Trust Fund</i>        |        |        |
|------------------------------------|--------|--------|
| Transfer to Expendable Trust Fund  | 30,000 |        |
| Cash                               |        | 30,000 |
| <i>Expendable Trust Fund</i>       |        |        |
| Cash                               | 30,000 |        |
| Transfer from Endowment Trust Fund |        | 30,000 |

As stated earlier, nonreciprocal transfers should be reported as other financing sources or uses in the governmental funds. Nonreciprocal transfers to or from proprietary funds should be reported after nonoperating revenues and expenses.

## Interfund Reimbursements

Interfund reimbursements are transactions that involve the transfer of resources from one fund to another in order to reimburse the recipient fund for expenditures made by it that are properly expenditures of the reimbursing fund. The recipient fund should record the transaction as a credit to expenditures, and the reimbursing fund should record the transaction as a debit to expenditures.

For example, assume that the general fund performs services in the amount of \$10,000 for a special revenue fund. The corresponding entries to record the reimbursement are

| <i>Special Revenue Fund</i>             |        |        |
|---|--------|--------|
| Expenditures                            | 10,000 |        |
| Due to General Fund (or cash)           |        | 10,000 |
| <i>General Fund</i>                     |        |        |
| Due from Special Revenue Fund (or cash) | 10,000 |        |
| Expenditures                            |        | 10,000 |

## SUMMARY

- 1 *Identify the issues involved in developing standards for non-profit organizations.* Currently both the GASB and the FASB are responsible for setting standards for nonprofit organizations. The GASB is involved in establishing standards for governments, while the FASB has been responsible since 1979 for setting standards for all other nonbusiness organizations. Because of the dual nature of standard setting, public universities and hospitals follow different rules from private universities and hospitals. Therefore, it is important to the users of financial statements to understand the differences between the standards of public and private organizations.
- 2 *Describe the broad categories of government fund entities.* Government entities are composed of a set of separate self-balancing funds. The eleven categories of funds fall under three primary groups. **Government funds** include the general fund, special revenue funds, capital projects funds, debt service funds, and permanent funds. Government funds report on current period resources and focus on inflows, outflows, and unexpended resources. In addition, they are designed to determine

compliance with legal provisions specifying how revenues are raised and resources spent. The funds in this group are organized by the types of activities each fund is designed to carry out. The second primary group includes the **proprietary funds**, which in turn include the enterprise funds and the internal service funds. These funds are used to account for the business-type activities of the government. Since these funds operate similarly to for-profit organizations, the accounting also parallels for-profit organizations. The statements issued by proprietary funds include cash flow statements, balance sheets, and accrual-based income statements. The last group includes **fiduciary funds**. These funds, which include trust and agency funds, account for assets held by the government for others, and these funds cannot be used to support the government's own programs.

- 3 *Distinguish between a general fund and a special revenue fund.* Special revenue funds are used to account for resources that are legally restricted for some specific expenditure (other than capital projects or debt service). If resources are unrestricted, then they will be accounted for in a general fund.

- 4** *Explain the use of a capital projects fund.* Capital projects funds are used to account for resources used to acquire permanent assets with long lives, such as buildings, streets and highways, and sewer systems. The purpose of this type of fund is to show that funds designated for capital projects are used for authorized purposes only and that any unexpended amounts are treated properly. Long-term assets acquired by proprietary funds are accounted for in the proprietary fund accounts.
- 5** *Describe the purpose of a debt service fund.* Governments issue two kinds of debt: general long-term debt that supports the activities of the government as a whole, and debt that is issued by a proprietary fund to support that fund's activities. The debt service fund accounts for the funds used to meet principal and interest payments for general long-term debt. The principal amounts of the general long-term debt are recorded in the government-wide statement of net position. Therefore, payments of interest and principal are expenditures of the debt service fund. It should be noted that accrued interest is not recorded in the debt service fund (even though it is required on the government-wide statements).
- 6** *Explain the use of a permanent fund.* Permanent funds include nonexpendable trust funds. These are funds in which the principal must remain intact and the earnings either spent or retained also, as specified. The resources in these funds must be accounted for according to law or trust provisions.
- 7** *Distinguish proprietary funds from government funds.* Proprietary funds account for the activities of governments that are similar to for-profit enterprises. For example, cities often provide water to the public and recover all or most of the cost through charges to the public. These funds are accounted for using the accrual basis of accounting, and all assets (including fixed assets) and liabilities (including long-term debt) are accounted for. The cash flow statement is prepared using the direct format, and accrual-based revenues and expenses are reported on the income statement. Government funds operate using a flow of financial resources concept where each year is treated as a distinct event, and the important measurements are the current period's sources and uses of funds.
- 8** *Describe where capital assets and long-term obligations are reported in government financial statements.* Fixed assets and long-term obligations are not reported for governmental activities. Instead, these items are reported on the government-wide Statement of Net Position and for proprietary funds. In addition, schedules of capital assets showing both cost and accumulated depreciation are required to be disclosed. Similarly, a schedule of long-term obligations highlighting the additions and reductions in debt is required. In addition, accrued interest is reported on the Statement of Net Position.
- 9** *Describe the changes in reporting requirements under GASB Statement No. 34.* Two additional statements are the statement of net position and the statement of activities, both prepared on a government-wide basis using accrual accounting. Fund-based statements are still required, but only major funds are required to be shown separately (minor funds can be combined). Additional statements reconciling the differences between the government-wide statement and the fund statements are required. In addition, disclosures relating to capital assets and long-term liabilities are added. Proprietary fund reports must include a direct-based statement of cash flows. Also, net position is displayed by three categories: net investment in capital assets; restricted; and unrestricted.
- 10** *Explain the benefits of government-wide statements.* The new government-wide statements help users assess the extent to which the government has invested in capital assets. Also, users can assess whether the public paid for services they received during the year or if the costs are shifted to other periods. The government-wide statement of activities focuses on the net cost of each of the government's functions. The expenses of the individual functions are compared to the revenues generated directly by that function. This helps users assess whether each program provides a benefit or a burden to the public.
- 11** *Describe the types of interfund activities.* Reciprocal interfund activity is similar to exchanges or exchange-like transactions. It includes interfund loans and interfund services provided and used. Interfund loans should be reported as interfund receivables in the lender fund and as an interfund payable in the borrower fund. Interfund services provided and used are sales or purchases of goods and services between funds for a price approximating their external exchange value. Interfund services provided and used should be reported as revenues in the seller funds and expenses or expenditures in the purchaser funds. Unpaid amounts should be reported as interfund receivables and payables in the fund balance sheet or the statement of net position.
- Nonreciprocal interfund activity is similar to nonexchange transactions. This includes interfund transfers (e.g., outflows of assets without an equivalent inflow of assets in return and without a requirement for repayment) and interfund reimbursements (repayments from the funds responsible for a particular expenditure or expense to the funds that initially paid for them). In government funds, interfund transfers should be reported as "other financing uses" in the funds initiating the transfer and as "other financing sources" in the funds receiving the transfer. In proprietary funds, interfund transfers should be reported after no operating revenues and expenses. Reimbursements should not be displayed in the financial statements.

### TEST YOUR KNOWLEDGE SOLUTIONS

**18.1** 1. a. T. b. T c. F Depreciation expense is reported on the government-wide statement of net activities.

**18.2** 1. d.

Appendix 18A, "Government-wide Financial Statements—City of Atlanta" is available online at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter).

## QUESTIONS

(The letter A indicated here for a question, exercise, or problem refers to the appendix.)

- LO 2** 1. Eleven funds are recommended to account for the various activities and resources of a governmental unit. Identify these funds by title and type and briefly state (in two sentences or less) the basic purpose of each fund.
- LO 10** 2. Why are governments required to prepare financial statements on a government-wide basis using full accrual accounting?
- LO 7** 3. What is the difference between a governmental fund and a proprietary fund?
- LO 2** 4. Are fiduciary funds governmental funds or proprietary funds? Explain.
- LO 11** 5. A disbursement by the general fund to another fund may be recorded as a receivable, an expenditure, or a fund transfer. Explain the circumstances that would result in each of these different treatments.
- LO 2 LO 8** 6. In what funds would you expect bonds payable to be included?
- LO 2 LO 8** 7. In what funds might property and other nonfinancial resources be recorded?
- LO 3 LO 4** 8. Why are budgeted revenues and expenditures formally recorded in the records of the general fund but not in the records of a capital projects fund?
- LO 4** 9. Are all major capital facilities acquisitions accounted for in a capital projects fund? Explain.
- LO 5** 10. What exception to the normal expenditure recognition criteria is associated with debt service funds and what is the justification for this exception?
- LO 11** 11. Identify and describe four types of interfund activities.
- LO 2** 12. The following funds and account groups are recommended for use in accounting for state and municipal governmental financial operations:
- A. General Fund.
  - B. Special Revenue Fund.
  - C. Debt Service Fund.
  - D. Capital Projects Fund.
  - E. Agency Fund.
  - F. Enterprise Fund.
  - G. Internal Service Fund.
  - H. Trust Fund.
  - I. Government-wide Statement of Activities.
  - J. Government-wide Statement of Net Position.
- Identify, by the letters given above, the funds and account groups in which each of the account titles below might properly appear.
- (1) Bonds Payable.
  - (2) Equipment.
  - (3) Appropriations.
  - (4) Estimated Revenue.
  - (5) Property Taxes Receivable.
  - (6) Construction Work in Progress.
  - (7) Accumulated Depreciation.
  - (8) Depreciation Expense.
  - (9) Required Earnings.
13. Describe some of the major reconciling items between a **LO 9** government fund and the government-wide financial statements.

### Business Ethics

*GASB 45* requires that the expected future costs of retiree health costs be recognized in the current period. Prior to this, governments used a pay-as-you-go plan in which only the current year's actual payments affected the financial statements.

Suppose you are working for a government prior to the issuance of *GASB 45*. As part of the collective bargaining agreement, the government offers employees increased health benefits.

1. Prior to the issuance of *GASB 45*, what would be the impact on the government's financial statements?
2. Under *GASB 45*, what are the financial statement implications?
3. Why might the current governmental leaders agree to offer such a benefit?
4. What are the ethical issues involved in this decision?

## ANALYZING FINANCIAL STATEMENTS

### AFS 18-1

#### Type of Government Fund **LO 5**

**Part A:** The following departments of activities are recorded in the City of Atlanta's Comprehensive Annual Financial Report in the appendix to this chapter. Indicate the type of fund that most likely would be used for each department by placing a G for governmental, P for proprietary, or F for fiduciary by each department.

1. \_\_\_\_\_ Department of Aviation (Airport Authority)
2. \_\_\_\_\_ Police and Fire Departments
3. \_\_\_\_\_ Water and Wastewater System
4. \_\_\_\_\_ Agency Funds
5. \_\_\_\_\_ Sanitation
6. \_\_\_\_\_ Public Works
7. \_\_\_\_\_ Pension and Retirement Trust Funds
8. \_\_\_\_\_ Internal Service (e.g., Information Technology)
9. \_\_\_\_\_ Payment of General Obligation Debt

**Part B:** What is the main factor that causes some of the above departments to be classified in the proprietary fund?

**AFS 18-2 Statement of Net Position**

Examine the financial statements for the City of Atlanta in the appendix to this chapter.

1. The balance in unrestricted net position can be positive or negative. A negative balance would indicate that the government owes more than it owns. What is the balance in unrestricted net position for the governmental activities?
2. Does the balance in the unrestricted net position indicate that the city has cash available to spend? Examine the amount of cash and cash equivalents on the statement of net position. Does the city have enough cash to spend? If not, what would the city need to do to have cash available?
3. Net position is considered restricted if their use is constrained for a specific purpose. What is the largest purpose listed for restricted net position?

**AFS 18-3 Reconciling the Governmental Fund Balance with the Government-Wide Statement of Net Position.**

Examine the appendixes in both Chapter 17 and this chapter (specifically the reconciliation between the Governmental Fund Balance Sheet and the Government-wide Statement of Net Position.

1. What are the top two categories of reconciling differences between the two statements? Is this to be expected? Why or why not?
2. Discuss one of the other reconciling items. Why did the item appear in one, but not the other?

**AFS 18-4 Statement of Activities**

Examine the Statement of Activities in the appendix to this chapter.

1. For each of the six governmental activities listed (from general government to Parks, Recreation, and Cultural Activities), did the program revenue exceed program expenses? List the excess or deficit for each activity.
2. For each of the seven business-type activities listed (from Watershed Management to Civic Center), did the program revenue exceed program expenses? List the excess or deficit for each activity.
3. For the total primary government, did the City of Atlanta have an excess or a deficit before considering general revenues? After considering general revenues, did net position increase or decrease? List the amount of the change.

## EXERCISES

**EXERCISE 18-1 Identify the Fund LO 2**

The following transactions take place:

1. A cement mixer was purchased with resources of the general fund.
2. A contract was signed for the construction of a new civic center.
3. Bonds were issued to finance the construction of the new civic center.
4. Construction of the civic center was completed.

**Required:**

Indicate the name of the fund(s) in which each of the transactions or events should be recorded.

**EXERCISE 18-2 Identify the Fund LO 2**

The following transactions take place:

1. A commitment was made to transfer general revenues to the entity in charge of providing transportation for all government agencies.
2. Construction bonds were issued at a premium. The premium is to be included in funds accumulated to retire the debt.
3. Police salaries were paid.
4. Interest and principal were paid on general obligation serial bonds.



**Required:**

Indicate the name of the fund(s) in which each of the transactions or events should be recorded.

**EXERCISE 18-3 Identify the Interfund Activity LO11**

The following events take place:

1. The Special Revenue Fund transfers \$8,000 to the Internal Service Fund as a temporary loan.
2. The Internal Service Fund bills the Special Revenue Fund \$20,000 for services performed.
3. Interest payments in the amount of \$14,000 that are the responsibility of the Debt Service Fund are paid by the General Fund.
4. The unexpended balance of the Capital Projects Fund, which is \$65,000, is transferred to the General Fund.
5. Current expendable revenues of the Trust Fund in the amount of \$35,000 are transferred to the Special Revenue Fund.
6. The General Fund transfers \$100,000 to start an Internal Service Fund.

**Required:**

- A. Identify the interfund activity as a loan, services provided and used, interfund transfer, or interfund reimbursement and prepare entries in general journal form to record the transactions on the records of the funds involved.
- B. Why is it important to distinguish residual equity transfers from operating transfers?

**EXERCISE 18-4 Journal Entries LO2 LO8**

The following events take place:

1. Hector Madras died and left 100 acres of undeveloped land to the city for a future park. He acquired the land at \$100 an acre, but at the date of his death the land was appraised at \$8,000 an acre.
2. The city authorized the transfer of \$100,000 of general revenues and the issuance of \$1,000,000 in general obligation bonds to construct improvements on the donated land. The bonds were sold at par.
3. The improvements were completed at a cost of \$1,100,000, and the operation of the park was turned over to the City Parks Department.

**Required:**

Prepare entries in general journal form to record these transactions in the proper fund(s). Designate the fund in which each transaction is recorded. If the transaction did not result in a journal entry to a government fund, record the journal entry needed to reflect the information in the government-wide Statement of Net Position.

**EXERCISE 18-5 Journal Entries LO2 LO8**

The following transactions take place:

1. The General Fund repaid the Special Revenue Fund a loan of \$10,000 plus \$900 in interest on the loan.
2. On January 1, the city issued 9% general obligation bonds with a face value of \$2,000,000 payable in 10 years to finance the construction of city offices. Total proceeds were \$2,300,000.
3. On December 20, construction was completed and occupancy taken of the city offices. The full cost of \$1,960,000 was paid to the contractor, and appropriate closing entries were made with regard to the project.

**Required:**

Prepare entries in general journal form to record these transactions in the proper fund(s). Designate the fund in which each entry is recorded.

**EXERCISE 18-6 Journal Entries LO5**

On January 1, 2015, Allentown issued \$800,000 of 9% serial bonds at par. Semiannual interest is payable on January 1 and July 1 and principal of \$80,000 matures each January 1 starting in 2016. The debt will be serviced through a special tax levy designed especially for this purpose. Therefore, transfers will be provided as needed from the Special Revenue Fund.

The following transactions occurred relating to the Debt Service Fund.

2015

---

|         |  |
|---------|--|
| June 29 | A transfer of \$36,000 was received from the Special Revenue Fund. |
| July 1  | The semiannual interest payment was made.                          |
| Dec. 18 | A Special Revenue Fund transfer of \$20,000 was received.          |

2016

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|        |   |
|--------|---|
| Jan. 1 | A payment on bond principal and semiannual interest was made. |
|--------|---|

2026

- |        |   |
|--------|---|
| Jan. 2 | Accumulations in the Debt Service Fund amounted to \$55,000 in investments and \$40,000 in cash. The investments were liquidated at face value and the final interest and principal payment was made. |
| Jan. 4 | Having served its purpose, the Debt Service Fund's remaining assets were transferred to the Special Revenue Fund.   |

**Required:**

Prepare the journal entries necessary to record the foregoing transactions.

**EXERCISE 18-7 Multiple Choice LO2 LO8**

Select the best answer for each of the following:

1. The City of Apache should use a Capital Projects Fund to account for
  - (a) Structures and improvements constructed with the proceeds of a special assessment.
  - (b) Special Revenue funds set aside to acquire land for city parks.
  - (c) Construction in progress on the city-owned electric utility plant, financed by an issue of revenue bonds.
  - (d) Assets to be used to retire bonds issued to finance an addition to the City Hall.
2. Activities of a central print shop offering printing services at cost to various city departments should be accounted for in
  - (a) The General Fund.
  - (b) An Internal Service Fund.
  - (c) A Special Revenue Fund.
  - (d) An Agency Fund.
3. Adams County collects property taxes for the benefit of the state government and the local school districts and periodically remits collections to these units. These activities should be accounted for in
  - (a) An Agency Fund.
  - (b) The General Fund.
  - (c) An Internal Service Fund.
  - (d) A Special Revenue Fund.
4. In order to provide for the retirement of general obligation bonds, the City of Globe invests a portion of its receipts from general property taxes in marketable securities. This investment activity should be accounted for in
  - (a) A Capital Projects Fund.
  - (b) A Debt Service Fund.
  - (c) A Trust Fund.
  - (d) The General Fund.
5. The transactions of a municipal police retirement system should be recorded in
  - (a) The General Fund.
  - (b) A Special Revenue Fund.
  - (c) A Trust Fund.
  - (d) An Internal Service Fund.

*(AICPA adapted)*

**EXERCISE 18-8 Multiple Choice LO2 LO8**

Select the best answer for each of the following:

1. The activities of a municipal golf course that receives three-fourths of its total revenue from a special tax levy should be accounted for in
  - (a) An Enterprise Fund.
  - (b) The General Fund.
  - (c) A Trust Fund.
  - (d) A Special Revenue Fund.
2. Equipment in general governmental service that had been constructed 10 years before with resources of a Capital Projects Fund was sold. The receipts were accounted for as unrestricted revenue. Entries are necessary in the
  - (a) General Fund and Capital Projects Fund.
  - (b) General Fund.

- (c) General Fund, Capital Projects Fund, and Enterprise Fund.
  - (d) General Fund, Capital Projects Fund, and Debt Service Fund.
3. An account for expenditures does not appear in which fund?
    - (a) Capital Projects.
    - (b) Enterprise.
    - (c) General.
    - (d) Special Revenue.
  4. Part of the general obligation bond proceeds from a new issuance was used to pay for the cost of a new City Hall as soon as construction was completed. The remainder of the proceeds was transferred to repay the debt. Entries are needed to record these transactions in the
    - (a) General Fund and Proprietary Fund.
    - (b) General Fund, Agency Fund, and Debt Service Fund.
    - (c) Trust Fund and Debt Service Fund.
    - (d) Debt Service Fund, Capital Projects Fund.
  5. Cash secured from property tax revenue was transferred for the eventual payment of principal and interest on general obligation bonds. The bonds had been issued when land was acquired several years ago for a city park. Upon the transfer, an entry would be made in which of the following?
    - (a) Debt Service Fund.
    - (b) Enterprise Fund.
    - (c) Agency Fund.
    - (d) General Fund.

(AICPA adapted)

### EXERCISE 18-9 Multiple Choice **LO 2** **LO 8**

Select the best answer for each of the following:

1. Premiums received on general obligation bonds are generally transferred to what fund or group of accounts?
  - (a) Debt Service.
  - (b) General.
  - (c) Special Revenue.
2. Of the items listed below, those most likely to have parallel accounting procedures, account titles, and financial statements are
  - (a) Special Revenue Funds and Internal Service Funds.
  - (b) Internal Service Funds and Debt Service Funds.
  - (c) The General Fund and Special Revenue Funds.
3. Recreational facilities run by a governmental unit and financed on a user-charge basis would be accounted for in which fund?
  - (a) General.
  - (b) Trust.
  - (c) Enterprise.
  - (d) Capital Projects.
4. Taylor City should record depreciation as an expense in its
  - (a) Enterprise Fund and Internal Service Fund.
  - (b) Internal Service Fund and the General Fund.
  - (c) General Fund and Enterprise Fund.
  - (d) Enterprise Fund and Capital Projects Fund.
5. A performance budget relates a governmental unit's expenditures to
  - (a) Objects of Expenditure.
  - (b) Expenditures of the preceding fiscal year.
  - (c) Individual months within the fiscal year.
  - (d) Activities and programs.

(AICPA adapted)

**EXERCISE 18-10 Identify the Fund LO2 LO8**

Write the name of the fund(s) in which each of the following transactions or events would be recorded.

1. Bonds, the proceeds of which were to be used for the construction of a new City Hall, were issued.
2. A sum of money was appropriated, to be advanced from monies on hand, to finance the establishment of a City Garage for servicing city-owned transportation equipment.
3. A contribution was received from a private source. The use of the income earned on the investment of this sum of money was specifically designated by the donor.
4. Proceeds received from a bond issue were used for the purchase of the privately owned water utility in the city.
5. Property taxes designated to be set aside for the eventual retirement of the City Hall building bonds were collected.
6. Real estate and personal property taxes, which had not been assessed or levied for any specific purpose, were collected.
7. Payment was made to the contractor for progress made in the construction of the new City Hall.
8. Interest was paid on the bonds issued for the purchase of the water utility.
9. Bonds, the proceeds of which are to be used to pay for the improvement of streets in the residential district, were issued. The debt is to be serviced by assessments on the property benefited. The government is obligated to the bondholders to assure the timely payment of principal and interest on the debt.
10. Salaries of personnel in the office of the mayor were paid.
11. Interest was paid on the City Hall building bonds.
12. Installment payments were received from the property owners assessed for the street improvement project.
13. Interest was paid on bonds issued for the payment of the improvement of streets in the residential district.
14. Interest was received on the investment of moneys set aside for the retirement of the City Hall building bonds.
15. Sums of money were received from employees by payroll deductions to be used for the purchase of United States government bonds for those employees individually.
16. City motor vehicle license fees, to be used for general street expenditures, were collected.
17. Materials to be used for the general repair of the streets were purchased.
18. The City Garage was reimbursed for services on the equipment of the fire and police departments.
19. Excess funds were transferred from the water utility to the General Fund.

*(AICPA adapted)*

**EXERCISE 18-11 Capital Projects Fund—Journal Entries LO4**

On June 1, 2015, the City of Cape May authorized the construction of a police station at an expected cost of \$250,000. Financing will be provided through transfers from a Special Revenue Fund.

The following transactions occurred during the fiscal year beginning June 1, 2015, relating to the Capital Project Fund.

1. The \$250,000 receivable from the Special Revenue Fund was recorded.
2. The Special Revenue Fund transferred \$125,000 to the Capital Project Fund to begin construction on the police station.
3. The Capital Project Fund invested the transfer of monies in a six-month certificate, at 5%.
4. A contract in the amount of \$250,000 was let to the lowest bidder.
5. Architect and legal fees in the amount of \$3,125 were approved for payment. There was no encumbrance for these expenditures.
6. Contract billings in the amount of \$250,000 were approved for payment on the completion of the police station and the encumbrance was removed.
7. The six-month certificate was redeemed at maturity with interest revenue.
8. The Special Revenue Fund transferred the final amount of \$125,000 to the Capital Projects Fund.
9. All liabilities except for the retention of 5% of the contract price were paid.
10. All requirements and obligations were completed; the final payment of the contract price was made and all nominal accounts were closed.

**Required:**

Prepare the journal entries necessary in the Capital Projects Fund to record the transactions and events described above.

**EXERCISE 18-12 Capital Projects Fund—Journal Entries LO 4**

The town of Aberdeen authorized a fire station to be built at an estimated cost of \$150,000. On January 1, 2015, 6% bonds with a par value of \$150,000 were authorized and issued. Any difference between the par value of the bonds and the proceeds from their sale is transferred to the Debt Service Fund.

The following transactions relating to the Capital Project Fund occurred during 2015.

1. Encumbrances were recorded on signing contracts in the amount of \$150,000.
2. Proceeds from the bond issue were received in the amount of \$155,000.
3. The premium on the bond issue was transferred to the Debt Service Fund.
4. Contract billings in the amount of \$150,000 were approved for payment on the completion of the fire station.
5. The contractor was paid except for retention of 5% of the contract price.
6. The final contract price was paid on the completion of the requirements and obligations of the contract. The nominal accounts were closed.

**Required:**

Prepare the journal entries necessary in the Capital Projects Fund to record the transactions and events described above.

**EXERCISE 18-13 Determining a Government's Major Funds LO 2****Required:**

Using Illustrations 18-10, 18-11, 18-14, and 18-15, determine which of Model City's funds qualify as major funds using the percentage cutoffs. Calculate aggregate amounts for all other nonmajor funds, and indicate how they would be presented.

**EXERCISE 18-14 Determining Amounts to Report for Long-Term Liabilities LO 5**

On January 1, 2015, Metropolis City issued a 7%, 5-year, \$100,000 general obligation bond for \$96,007. The bond pays interest annually (on December 31) and was issued to yield 8%. The bond was issued in the capital projects fund, and the proceeds are to be used to build a giant ball that will drop twenty stories on New Year's Eve. No construction has occurred. A debt service fund was created to meet the interest and principal payments. The city prepares financial statements on December 31 of each year.

**Required:**

Determine how the above information will be reflected on each of the following statements for the year 2015.

1. The governmental funds' statement of revenue, expenditures, and changes in fund balances. List the governmental fund and then list the dollar amount within the appropriate heading on the statement (such as Revenues, Expenditures, or Other Financing Sources (Uses)).
2. The government-wide statement of net position.
3. The government-wide statement of activities.

**EXERCISE 18-15 Determining Amounts to Report for Capital Assets LO 4**

The following schedule of capital assets was prepared for Capital City.

| <i>Government Activities</i>   | <i>Beginning Balance</i> | <i>Additions</i> | <i>Retirements</i> | <i>Ending Balance</i> |
|--------------------------------|--------------------------|------------------|--------------------|-----------------------|
| Total Capital Assets (gross)   | \$500,000                | 100,000          | (75,000)           | \$525,000             |
| Less: Accumulated Depreciation | (200,000)                | (30,000)         | 25,000             | (205,000)             |
| Net Capital Assets             | \$300,000                | 70,000           | (50,000)           | \$320,000             |

All capital acquisitions were made in a capital projects fund (and paid for with cash). An asset was sold by the general fund for \$65,000 cash.

**Required:**

Determine how the above information will be reflected on each of the following statements for the year 2015.

1. The governmental funds' statement of revenue, expenditures, and changes in fund balances. List the governmental fund and then list the dollar amount within the appropriate heading on the statement (such as Revenues, Expenditures, or Other Financing Sources (Uses)).
2. The government-wide statement of net position.
3. The government-wide statement of activities.

**EXERCISE 18-16 Reconciliation Schedule—Statement of Activities LO 9**

The following information is available about items that differ between the governmental funds and the government-wide statements. Assume that there are no internal service funds. The schedule of capital assets prepared for the year ended December 31, 2015, includes the following items:

| <i>Government Activities</i>    | <i>Beginning Balance</i> | <i>Additions</i> | <i>Retirements</i> | <i>Ending Balance</i> |
|---------------------------------|--------------------------|------------------|--------------------|-----------------------|
| Total Capital Assets (at gross) | \$700,000                | \$50,000         | \$(25,000)         | \$725,000             |
| Less: Accumulated Depreciation  | (170,000)                | (30,000)         | 17,500             | (182,500)             |
| Net Capital Assets              | \$530,000                | \$20,000         | \$ (7,500)         | \$542,500             |

The bond was issued at the beginning of the year, and the following amortization schedule is available.

| <i>Date</i> | <i>Interest Expense</i> | <i>Cash Paid</i> | <i>Premium Amortization</i> | <i>Bond Balance</i> |
|-------------|-------------------------|------------------|-----------------------------|---------------------|
| 1/1/2015    |                         |                  |                             | \$104,213           |
| 12/31/2015  | 6,253                   | 7,000            | 747                         | \$103,466           |

The net change in fund balances—total governmental funds was \$1,100,000.

**Required:**

Prepare the reconciliation of the statement of revenues, expenditures, and changes in fund balances to the statement of activities on a government-wide basis for the year ended December 31, 2015.

**EXERCISE 18-17 Reconciliation Schedule—Statement of Net Position LO 9**

The following information was available about items that differed between the governmental funds and the government-wide statements. Assume that there are no internal service funds. The schedule of capital assets prepared for the year ended December 31, 2015, included the following items:

| <i>Government Activities</i>    | <i>Beginning Balance</i> | <i>Additions</i> | <i>Retirements</i> | <i>Ending Balance</i> |
|---------------------------------|--------------------------|------------------|--------------------|-----------------------|
| Total Capital Assets (at gross) | \$800,000                | \$60,000         | \$(30,000)         | \$830,000             |
| Less: Accumulated Depreciation  | (200,000)                | (40,000)         | 22,500             | (217,500)             |
| Net Capital Assets              | \$600,000                | \$20,000         | \$ (7,500)         | \$612,500             |

The bond was issued at the beginning of the year and the following amortization schedule is available:

| <i>Date</i> | <i>Interest Expense</i> | <i>Cash Paid</i> | <i>Premium Amortization</i> | <i>Balance</i> |
|-------------|-------------------------|------------------|-----------------------------|----------------|
| 1/1/2015    |                         |                  |                             | \$104,213      |
| 12/31/2015  | \$6,253                 | \$7,000          | \$747                       | \$103,466      |

The total fund balances for governmental activities was \$3,125,000 at the end of the year.

**Required:**

Prepare the reconciliation of the governmental fund balances to the net position reported for governmental activities on the Statement of Net Position as of December 31, 2015.

**ASC Exercises:** For all ASC exercises indicate as part of your answer: the Codification topic, subtopic, section, and/or paragraph upon which your answer is based (unless otherwise specified). All ASC questions require access to the FASB Codification.

**ASC18-1 Disclosure** Which topic and subtopic require entities to disclose all significant accounting policies? Is this information required to be disclosed on an interim basis?

**ASC18-2 Industry** Franchise fee revenue is recognized (with an appropriate provision for estimated uncollectible amounts) when all material services relating to the sale have been substantially performed by the franchisor. Describe the conditions that must be met to satisfy substantial performance.

**ASC18-3** **Recognition** Define *subsequent events*. When should an entity recognize subsequent events in the financial statements?

**ASC18-4** **Recognition** Provide examples of non-recognized subsequent events.

## PROBLEMS

### PROBLEM 18-1 Debt Service Fund LO 5

On January 1, 2015, the City of Cape May authorized and issued \$200,000 of 5%, three-year term bonds. Interest is payable annually on December 31. A debt service fund is established to accumulate the necessary resources to pay the annual interest on the bonds and to redeem the bonds when they mature. The required annual addition for principal and interest will be transferred annually to the debt service fund from the general fund. It is assumed that amounts received by the debt service fund for the payment of principal can be invested at an annual return of 8%.

#### Required:

- A. Prepare a schedule to calculate the annual required additions and annual required earnings to repay the principal on the bonds assuming that the first installment for principal and interest is transferred to the debt service fund from the general fund on December 30, 2015.
- B. Prepare the entries to be recorded by the debt service fund as follows:
  - (1) The 2016 budget entry.
  - (2) The entry to record the annual transfer from the general fund.
  - (3) The entry to record the annual payment of interest.
  - (4) The entry to record \$4,929 in interest income for 2016.
  - (5) The entry(s) to close the accounts at the end of 2016.

### PROBLEM 18-2 Capital Projects Fund and Related Funds LO 4 LO 8

The Town of Green River authorized a municipal building to be constructed at a cost of \$175,000. The construction will be financed from the proceeds from the issue of \$175,000 of 6% bonds. Any difference between the par value of the bonds and the proceeds from their sale is transferred to the Debt Service Fund.

Transactions and events relating to this project include the following:

1. The proceeds from the sale of the bonds were received and included a premium on the bond issue in the amount of \$15,000. The premium was transferred to Debt Service Fund.
2. Encumbrances were recorded on signing of the construction contract in the amount of \$175,000.
3. Contract billings in the amount of \$85,000 were approved for payment.
4. Contract billings were paid in the amount of \$85,000.
5. All nominal accounts were closed and construction in progress was recorded in the appropriate account group in anticipation of the preparation of financial statements.
6. Encumbrances that were closed in anticipation of the preparation of financial statements are reestablished in the Capital Projects Fund.
7. Contract billings in the amount of \$90,000 were approved on the completion of the municipal building.
8. Contract billings of \$90,000 less a retention of 5% were paid.
9. The building was accepted, all construction liabilities were paid, and the building was recorded as an asset in the appropriate account group.

#### Required:

Prepare the journal entries relating to the Capital Projects Fund and the Debt Service Fund for the transactions and events described above. Clearly identify the fund in which each entry is recorded.

### PROBLEM 18-3 Special Assessment Debt LO 5 LO 8

The City of Dayville has undertaken a sidewalk construction project. The project is being financed by the proceeds from the issue on July 1, 2015, of \$500,000 of 7% special assessment debt. One quarter of the principal plus interest is payable on June 30 of each year beginning June 30, 2016. Property owners are assessed to provide the funds to pay the principal and interest on the debt.

The following transactions occurred during the period July 1, 2015, through June 30, 2016.

1. The bonds for the construction of the sidewalks were issued at par value.
2. The sidewalks were completed at a cost of \$500,000.

3. Property owners were assessed and billed for the first installment of principal and interest on the special assessment debt.
4. Assessments for the first installment of principal and interest on the special assessment debt were collected and the June 30, 2016, payment of principal and interest on the special assessment debt was made.

**Required:**

Prepare all journal entries for the above transactions that are necessary in the funds of the City of Dayville assuming that.

- A. The City of Dayville has made a commitment to the holders of the special assessment debt to assure the timely and full payment of principal and interest on the appropriate due dates.
- B. The City of Dayville has not obligated itself in any manner on the special assessment debt that was issued for the construction of the sidewalks.

**PROBLEM 18-4 Internal Service Fund LO 2**

The administrators of the City of Lyons have obtained approval from the City Council to centralize the computer facility as of January 1, 2015. An internal service fund is created to account for the activities of the computer facility. The City Council has approved a contribution of \$25,000 from the General Fund for use as working capital and an advance from the Electric Utility Fund of \$355,000 for the purchase of equipment and facilities. The \$355,000 advance will be repaid by the internal service fund in 20 equal annual installments.

The following transactions relate to the establishment and operation of the Internal Service Fund.

|             |  |
|-------------|--|
| January 1   | The computer facility received the contribution from the General Fund and the advance from the Electric Utility Fund.  |
| January 4   | Land and a building were purchased for \$175,000 of which \$25,000 was assigned to land. Hardware was purchased for \$125,000 and equipment to protect the hardware was purchased for \$55,000.  |
| April 10    | The computer facility billed the Electric Utility Fund for service provided. The service cost \$200,000 and was billed at a mark-up of 25% on cost. (Direct costs of providing computer services are accumulated in the "Computer Service" account. When services are billed to departments, this account is credited and the "Cost of Service" account is debited for the cost of services billed.) |
| April 29    | Administrative expenses totaling \$10,000 were approved for payment.   |
| May 1       | Payment of \$37,750 was received from the Electric Utility in partial payment of the April 10 billing.   |
| May 1       | The administrative expense was paid.   |
| December 2  | The first of 20 equal annual installments to the Electric Utility Fund was paid.   |
| December 30 | Depreciation expense was recorded for the year as administration expense. The building was estimated to have a remaining useful life of 25 years; the hardware was estimated to have a useful life of 5 years; the equipment to protect the hardware was estimated to have a useful life of 10 years.  |
| December 31 | The nominal accounts of the internal service fund were closed through a closing account, "Excess of Billings to Departments over Costs," which in turn was closed to unrestricted net position.  |

**Required:**

Prepare the journal entries necessary in the Internal Service Fund to record the transactions and events described above. The chart of accounts presented below may be used as an aid.

The closing account, "Excess of Billings to Departments over Costs," is similar to the "Income Summary" account of a corporation.

**PROBLEM 18-5 Tax Agency Fund LO 2**

An administrative section of the County Assessor's Office of Mecklenburg County serves as the billing and collection agency for all property taxes assessed in Mecklenburg County. A charge of 1% of taxes and penalties collected is apportioned among recipients of the taxes for this service. All property tax records—current and delinquent—are maintained in this administrative unit. The 1% charge is included as revenue in the General Fund budget of the county government.



|                                |                                |
|--------------------------------|--------------------------------|
| <i>Current Assets:</i>         | <i>Liabilities:</i>            |
| Cash                           | Vouchers payable               |
| Due from general fund          | Advance from electric utility  |
| Due from electric utility fund |                                |
| Computer service               | <i>Net Position:</i>           |
|                                | Unrestricted net position      |
| <i>Fixed Assets:</i>           | <i>Revenue:</i>                |
| Land                           | Billing to departments         |
| Building                       | Contribution from general fund |
| Equipment—hardware             |                                |
| Equipment—protection           | <i>Costs and Expense:</i>      |
| Accumulated depreciation       | Cost of computer service       |
|                                | Administrative expense         |

Information relative to the collection of property taxes for fiscal year 2015 is as follows:

|                               |             |
|-------------------------------|-------------|
| Assessed valuation            | \$5,826,300 |
| Tax rates per \$100 assessed: |             |
| County government             | \$1.20      |
| State government              | .80         |
| City of Midvale               | 2.80        |
| Unified school district       | 3.20        |

Tax bills are issued on January 1; taxes are payable without penalty by April 30; taxes paid after April 30 are subject to a 5% penalty for late payment. Taxes not paid by June 30 are considered delinquent.

No delinquent taxes remain uncollected for years prior to 2015.

An estimated 3% of billed taxes for 2015 will be uncollectible.

A summary of the activities of the Tax Agency Fund for the period January 1, 2015, to June 30, 2015, includes the following:

|           |   |
|-----------|---|
| January 1 | Tax bills are mailed to property owners. Accounts are opened by the tax collection unit.  |
| April 30  | Taxes collected and deposited during first four months total \$372,883. Distribution of taxes collected is made to the applicable governmental units.                                     |
| June 30   | Taxes collected and deposited during May and June including the 5% penalty total \$73,412.<br>Distribution of taxes and penalties collected is made to the applicable governmental units. |

**Required:**

- A. Prepare in general journal form entries to record the activities of the Tax Agency Fund from January 1 to June 30. Establish a Delinquent Account for taxes not collected.
- B. Prepare a balance sheet for the Tax Agency Fund after adjusting the accounts on June 30.

**PROBLEM 18-6 Journal Entries—Identify the Fund LO 2 LO 3**

The following activities and transactions are typical of those that may affect the various funds used by a typical municipal government.

**Required:**

Prepare journal entries to record each transaction and identify the fund in which each entry is recorded.

- A. The Greenville City Council passed a resolution approving a general operating budget of \$5,000,000 for the fiscal year 2015. Total revenues are estimated at \$4,900,000.
- B. The Greenville City Council Passed an ordinance providing a property tax levy of \$6.25 per \$100 of assessed valuation for the fiscal year 2015. Total property valuation in Greenville City is \$204,800,000. Property is assessed at 25% of current property valuation. Property tax bills are mailed to property owners. An estimated 3% will be uncollectible.
- C. Reed City sold a general obligation term bond issue for \$1,000,000 at 105 to a major brokerage firm. The stated interest rate is 5%. Proceeds are to be used for construction of a new Central Law Enforcement Building. (*Note:* Entries are required in the Capital Project Fund).

- D. The premium on bond sale in (C) above is transferred to the Debt Service Fund.
- E. At the end of fiscal year 2015, the Greenville City Council approves the write-off of \$52,550 of uncollected 2014 taxes because of inability to locate the property owners. The tax bills have been referred to the legal department for further action.
- F. The Reed City Central Law Enforcement Building [(C) above] is completed. Contracts and expenses total \$989,000, and all have been paid and recorded in the Capital Project Fund. Prepare entries to close this project and record the completion of the project in all other funds or account groups affected. Any balance in the Capital Project Fund is to be applied to payment of interest and principal of the bond issue.
- G. On May 1, 2015, Hopi City supervised the issue of 6% serial bonds at par to finance street curbing in an area recently incorporated in the city limits. The face amount of the bonds is \$600,000; interest is payable annually, and bonds are to be retired in equal amounts over five years from collections from assessments against property owners. The City acts as a collection agent and has given assurances to the debt holders that it will guarantee payment of principal and interest even though it is not obligated to do so.
  - (1) Record the issuance of the bonds on May 1, 2015.
  - (2) Record the payment to bondholders on May 1, 2016.
- H. The curbing project in (G) above was completed on November 30 at a total of \$590,000. Record summary entries for expenditure transactions May 1–November 30, 2015, and on completion of the project.

**PROBLEM 18-7 Journal Entries—Identify the Fund LO 2 LO 8**

The following transactions take place.

1. Bond proceeds of \$1,000,000 were received to be used in constructing a firehouse. An equal amount is contributed from general revenues.
2. \$800,000 of serial bonds matured. Interest of \$120,000 was paid on these and other serial bonds outstanding.
3. \$8,000 was received as insurance proceeds from the accidental destruction of a four-year-old police car costing \$24,000.
4. \$120,000 in expendable funds was transferred from the City Parks Endowment Fund to the City Parks Special Revenue Fund.
5. Equipment purchased from general revenues at a cost of \$200,000 was sold for \$40,000.
6. The City Water Company (an enterprise fund) issued a bill for \$800 for water provided to the street department's street cleaner.
7. The City Water Company transferred \$400,000 in excess funds to the General Fund.
8. A central motor pool was established by a contribution of \$120,000 from the General Fund, a long-term loan of \$80,000 from the City Parks Special Revenue Fund, and general obligation bond issue proceeds of \$200,000.
9. The Motor Pool Fund billed the General Fund \$10,000 and the City Parks Fund \$4,000 for the use of motor vehicles.
10. Special Assessment Bonds in the amount of \$400,000 were retired. The city has indicated a willingness to guarantee the payment of principal even though it was not obligated to do so.
11. Customers' deposits of \$8,000 for water meters were received by the City Water Company during the year. The monies are to be held in trust until the customers request that their services be disconnected and the final bills are collected.
12. It is determined that the Service Fund will require an annual contribution of \$60,000 and earnings of \$6,000 in the current year to accumulate the amounts necessary to retire general obligation term bonds.

**Required:**

Prepare entries in general journal form to record these transactions in the proper fund(s). Designate the fund in which each entry is recorded.

**PROBLEM 18-8 General Fund Journal Entries and Related Fund Adjustments LO 2 LO 8**

You have been engaged to examine the financial statements of the Town of Bridgeport for the year ended June 30, 2015. Your examination disclosed that, because of the inexperience of the town's bookkeeper, all transactions were recorded in the General Fund. The following General Fund trial balance as of June 30, 2015, was furnished to you.

**General Fund Trial Balance**  
**Town of Bridgeport**  
**June 30, 2015**

|                                | <i>Debit</i> | <i>Credit</i> |
|--------------------------------|--------------|---------------|
| Cash                           | \$ 16,800    |               |
| Short-term Investments         | 40,000       |               |
| Accounts Receivable            | 11,500       |               |
| Taxes Receivable—current year  | 30,000       |               |
| Tax Anticipation Notes Payable |              | \$ 50,000     |
| Appropriations                 |              | 400,000       |
| Expenditures                   | 382,000      |               |
| Estimated Revenue              | 320,000      |               |
| Revenues                       |              | 360,000       |
| General Property               | 85,400       |               |
| Bonds Payable                  | 52,000       |               |
| Fund Balance                   |              | 127,700       |
|                                | \$937,700    | \$937,700     |

Your audit disclosed the following additional information:

1. The accounts receivable of \$11,500 includes \$1,500 due from the town's water utility for the sale of scrap sold on its behalf. Accounts for the municipal water utility are maintained in a separate fund.
2. The balance in Taxes Receivable—Current Year is now considered delinquent, and the town estimates that \$24,000 will be uncollectible.
3. On June 30, 2015, the town retired, at par value, 6% general obligation serial bonds totaling \$40,000. The bonds were issued on July 1, 2010, at a face value of \$200,000. Interest paid during the year ended June 30, 2015, was charged to Bonds Payable.
4. Expenditures for the year ended June 30, 2015, included \$11,200 applicable to purchase orders issued to the prior year. Outstanding purchase orders at June 30, 2015, not recorded in the accounts amounted to \$17,500.
5. On June 28, 2015, the State Revenue Department informed the town that its share of a state-collected, locally shared tax would be \$34,000.
6. During the year, equipment with a book value of \$7,900 was removed from service and sold for \$4,600. In addition, new equipment costing \$90,000 was purchased. The transactions were recorded in General Property.
7. During the year, 100 acres of land were donated to the town for use as an industrial park. The land had a value of \$400,000. This donation has not been recorded.

**Required:**

- A. Prepare the formal reclassification, adjusting, and closing journal entries for the General Fund as of June 30, 2015.
- B. Prepare the formal adjusting journal entries for any other fund as of June 30, 2015.

*(AICPA adapted)*

**PROBLEM 18-9 Journal Entries—Various Funds LO 2 LO 8**

The Village of Oakridge, which was incorporated recently, began financial operations on July 1, 2015, the beginning of its fiscal year. The following transactions occurred during this first fiscal year, July 1, 2015, to June 30, 2016.

1. The Village Council adopted a budget for general operations during the fiscal year ended June 30, 2015. Revenues were estimated at \$400,000. Legal authorizations for budgeted expenditures were \$394,000.
2. Property taxes were levied in the amount of \$390,000; it was estimated that 2% of this amount would prove to be uncollectible. These taxes are available as of the date of levy to finance current expenditures.
3. During the year, a resident of the village donated marketable securities valued at \$50,000 to the village under the terms of a trust agreement. The terms of the trust agreement stipulated that the principal amount is to be kept intact; use of revenue generated by the securities is restricted to financing college scholarships for needy students. Revenue earned and received on these marketable securities amounted to \$5,500 through June 30, 2016.
4. A General Fund transfer of \$5,000 was made to establish an Internal Service Fund to provide for a permanent investment in inventory.
5. During the year the Internal Service Fund purchased various supplies at a cost of \$1,900.

6. Cash collections recorded by the General Fund during the year were as follows:

|                      |           |
|----------------------|-----------|
| Property taxes       | \$386,000 |
| Licenses and permits | 7,000     |

7. The Village Council decided to build a village hall at an estimated cost of \$500,000 to replace space occupied in rented facilities. The village does not record project authorizations. It was decided that general obligation bonds bearing interest at 6.5% would be issued. On June 30, 2016, the bonds were issued at their face value of \$500,000, payable June 30, 2033. No contracts have been signed for this project, and no expenditures have been made.
8. A fire truck was purchased for \$150,000 and the voucher approved and paid by the General Fund. This expenditure was previously encumbered for \$150,000.

**Required:**

**Part A:** Prepare journal entries to record each of the transaction above in the appropriate fund(s) of Oakridge Village for the fiscal year ended June 30, 2016. Use the following funds:

- General Fund
- Capital Projects Fund
- Internal Service Fund
- Permanent Fund
- Special Revenue Fund

Each journal entry should be numbered to correspond with the transactions described above. Do *not* prepare closing entries for any fund. Present your answer in the following format:

| Transaction Number | Fund | Account Title<br>and Explanation | Amounts |        |
|--------------------|------|----------------------------------|---------|--------|
|                    |      |                                  | Debit   | Credit |
| 1                  |      |                                  |         |        |
| 2                  |      |                                  |         |        |
| .                  |      |                                  |         |        |
| .                  |      |                                  |         |        |

**Part B:** For transactions 7 and 8, describe how the information would be reflected on the government-wide financial statements (if at all).

*(AICPA adapted)*

**PROBLEM 18-10 Journal Entries—Various Funds LO 2 LO 8**

The following transactions represent practical situations frequently encountered in accounting for municipal governments. Each transaction is independent of the others.

1. The City Council of Bernardville adopted a budget for the general operations of the government during the new fiscal year. Revenues were estimated at \$695,000. Legal authorizations for budgeted expenditures were \$650,000.
2. Taxes of \$160,000 were levied for the special revenue fund of Millstown. One percent was estimated to be uncollectible.
3. (a) On July 25, 2016, office supplies estimated to cost \$2,390 were ordered for the city manager’s office of Bullersville. Bullersville, which operates on the calendar year, does not maintain an inventory of such supplies.  
(b) The supplies ordered July 25 were received on August 9, 2016, accompanied by an invoice for \$2,500.
4. On October 10, 2016, the general fund of Washingtonville repaid to the utility fund a loan of \$1,000 plus \$40 interest. The loan had been made earlier in the fiscal year.
5. A prominent citizen died and left 10 acres of undeveloped land to Harper City for a future school site. The donor’s cost of the land was \$55,000. The fair value of the land was \$85,000.
6. (a) On March 6, 2016, Dahlstrom City supervised the issue of 6% special assessment bonds payable March 6, 2021, at face value of \$90,000. Interest is payable annually. Dahlstrom City, which operates on the calendar year, will supervise the use of the proceeds to finance a curbing project. The City has made no commitments and has not obligated itself in any manner with respect to the payment of principal and interest on the debt.  
(b) On October 26, 2016, the full \$84,000 cost of the completed curbing project was recorded. Also, appropriate closing entries were made with regard to the project.

7. (a) Conrad Thamm, a citizen of Basking Knoll, donated common stock valued at \$22,000 to the City under a trust agreement. Under the terms of the agreement, the principal amount is to be kept intact; use of revenue from the stock is restricted to financing college scholarships for needy students.  
(b) On December 14, 2016, dividends of \$1,100 were received on the stock donated by Mr. Thamm.
8. (a) On February 23, 2016, the Town of Lincoln, which operates on the calendar year, issued 5% general obligation bonds with a face value of \$300,000 payable February 23, 2026, to finance the construction of an addition to the City Hall. Total proceeds were \$308,000.  
(b) On December 31, 2016, the addition to the City Hall was officially approved, the full cost of \$297,000 was paid to the contractor, and appropriate closing entries were made with regard to the project. (Assume that no entries have been made with regard to the project since February 23, 2016.)

**Required:**

For each transaction, prepare the necessary journal entries for all the funds involved. No explanation of the journal entries is required. Use the following headings for your workpaper.

| <i>Transaction<br/>Number</i> | <i>Journal<br/>Entries</i> | <i>Dr.</i> | <i>Cr.</i> | <i>Fund</i> |
|-------------------------------|----------------------------|------------|------------|-------------|
|-------------------------------|----------------------------|------------|------------|-------------|

In the far right column, indicate in which fund each entry is to be made, using the coding below:

| Funds            |    |
|------------------|----|
| General          | G  |
| Special revenue  | SR |
| Capital projects | CP |
| Debt service     | DS |
| Enterprise       | E  |
| Internal service | IS |
| Permanent fund   | P  |
| Trust or agency  | TA |

*(AICPA adapted)*

**PROBLEM 18-11 Capital Projects Fund LO 4**

The City of Minden entered into the following transactions during the year 2016.

1. A bond issue was authorized by vote to provide funds for the construction of a new municipal building, which it was estimated would cost \$1,000,000. The bonds are to be paid in 10 equal installments from a Debt Service Fund, and payments are due March 1 of each year. Any premium on the bond issue, as well as any balance of the Capital Projects Fund, is to be transferred directly to the Debt Service Fund.
2. An advance of \$80,000 was received from the General Fund to underwrite a deposit on the land contract of \$120,000. The deposit was made.
3. Bonds of \$900,000 were sold for cash at 102. It was decided not to sell all the bonds because the cost of the land was less than expected.
4. Contracts amounting to \$780,000 were let to Standstone and Company, the low bidder, for construction of the municipal building.
5. The temporary advance from the General Fund was repaid and the balance on the land contract was paid.
6. On the basis of the architect's certificate, contract billings were approved for \$640,000 for the work completed to date.
7. Contract billings paid in cash by the treasurer amounted to \$620,000.
8. Because of changes in the plans, the contract with Sandstone and Company was revised to \$880,000; the remainder of the bonds were sold at 101.
9. Before the end of the year, the building had been completed, and additional contract billings amounting to \$230,000 approved. All contract billings were paid by the treasurer to the contractor in final payment for the work.

**Required:**

- A. Prepare entries to record the foregoing transactions (excluding the entries necessary to close out the fund) of the Capital Projects Fund.

- B. Prepare a preclosing trial balance for the Capital Projects Fund.
- C. Prepare entries necessary to close out the Capital Projects Fund on the completion of construction.
- D. Prepare a statement of revenues, expenditures, and changes in fund balance for the Capital Projects Fund.
- E. Prepare preclosing trial balances at December 31, 2016, for the Debt Service Fund, considering only the proceeds, expenditures, and transfers resulting from transactions of the Capital Projects Fund.

(AICPA adapted)

**PROBLEM 18-12 Determining a Government's Major Funds LO2 LO8**

The following information is available about Gotham's City government funds.

| <i>Governmental Funds</i>  | <i>Assets</i>   | <i>Liabilities</i> | <i>Revenues</i>  | <i>Expenditures</i> |
|----------------------------|-----------------|--------------------|------------------|---------------------|
| 1 General Fund             | \$ 9,408        | \$ 7,753           | \$ 86,022        | \$ 88,717           |
| 2 HUD Programs             | 7,504           | 6,428              | 2,731            | 2,954               |
| 3 Community Development    | 13,616          | 440                | 549              | 2,664               |
| 4 Route 7 Construction     | 10,478          | 1,115              | 273              | 11,298              |
| 5 Impact Fees              | 371             | 61                 | 35               | 755                 |
| 6 Local Gas Tax            | 2,139           | 170                | 1,436            | 2,971               |
| 7 Historic District        | 194             | 4                  | 60               | 47                  |
| 8 Central City Development | 1,618           | 151                | 4,783            | 6,804               |
| 9 Community Redevelopment  | 2,365           | —                  | 42               | 1,872               |
| 10 Culvert Project         |                 |                    | 1,471            | 1,974               |
| 11 Bridge                  | 2,602           | 686                | 3                | 1,270               |
| 12 Cemetery Fund           | 1,405           | —                  | 72               | —                   |
|                            | <u>\$51,700</u> | <u>\$16,808</u>    | <u>\$ 97,477</u> | <u>\$121,326</u>    |
| <i>Proprietary Funds</i>   |                 |                    |                  |                     |
| 13 Water and Sewer         | \$12,149        | \$ 4,679           | \$11,329         | \$ 6,907            |
| 14 Parking Facilities      | 372             | 672                | 1,344            | 1,582               |
|                            | <u>12,521</u>   | <u>5,351</u>       | <u>12,673</u>    | <u>8,489</u>        |
| Totals, All Funds          | <u>\$64,221</u> | <u>\$22,159</u>    | <u>\$110,150</u> | <u>\$129,815</u>    |

**Required:**

Using the information about the government's funds, determine which funds qualify as "major" funds using percentage cutoffs and would be required to be included in the governmental fund financial statements.

**PROBLEM 18-13 Preparing Government-wide Financial Statements LO9**

Circus City issued an 8%, 10-year \$2,000,000 bond to build a monorail mass transit system. The city received \$1,754,217 cash from the bond issuance on January 1, 2015. The bond yield is 10%. Interest is paid annually on December 31 of each year. Disclosure information about capital assets is reported below.

**Disclosure of Information about Capital Assets  
for the Year Ending December 31, 2015**

| <i>Primary Government</i>                   |                              |                    |                    |                           |
|---|------------------------------|--------------------|--------------------|---------------------------|
| <i>Governmental Activities</i>              | <i>Beginning<br/>Balance</i> | <i>Additions</i>   | <i>Retirements</i> | <i>Ending<br/>Balance</i> |
| Land  | \$ 500,000                   |                    |                    | \$ 500,000                |
| Building                                    | 760,000                      |                    |                    | 760,000                   |
| Machinery and Equipment                     | 950,000                      |                    | \$(225,000)        | 725,000                   |
| Construction in Progress                    |                              | \$1,500,000        |                    | 1,500,000                 |
| Infrastructure                              | <u>450,000</u>               |                    |                    | <u>450,000</u>            |
| Totals at historical cost                   | <u>\$2,660,000</u>           | <u>\$1,500,000</u> | <u>\$(225,000)</u> | <u>\$3,935,000</u>        |
| Less accumulated depreciation               |                              |                    |                    |                           |
| Building                                    | (190,000)                    | (59,150)           |                    | (249,150)                 |
| Machinery and Equipment                     | (235,000)                    | (76,050)           | 140,000            | (171,050)                 |
| Infrastructure                              | <u>(50,000)</u>              | <u>(33,800)</u>    |                    | <u>(83,800)</u>           |
| Total accumulated depreciation              | <u>\$(475,000)</u>           | <u>\$(169,000)</u> | <u>\$140,000</u>   | <u>\$(504,000)</u>        |
| Governmental activities capital assets, net | <u>\$2,185,000</u>           | <u>\$1,331,000</u> | <u>\$ (85,000)</u> | <u>\$3,431,000</u>        |

**Depreciation expense** charged to governmental activities as follows:

|                      |                  |
|----------------------|------------------|
| Public Safety        | \$ 55,000        |
| General Government   | 72,000           |
| Highways and Streets | 25,000           |
| Sanitation           | <u>17,000</u>    |
|                      | <u>\$169,000</u> |

Circus City's governmental funds financial statements are as follows:

**Circus City  
Governmental Funds  
Fund Balance Sheets at December 31, 2015**

|                                     | <i>General<br/>Fund</i> | <i>Capital<br/>Projects<br/>Fund</i> | <i>Debt<br/>Service<br/>Fund</i> | <i>Total<br/>Governmental<br/>Funds</i> |
|-------------------------------------|-------------------------|--------------------------------------|----------------------------------|---|
| <i>Assets</i>                       |                         |                                      |                                  |   |
| Cash                                | \$ 64,000               | \$ 300,000                           | \$ —                             | \$ 364,000                              |
| Interest Receivable                 |                         | 12,000                               | 4,000                            | 16,000                                  |
| Investments                         | 100,000                 | 1,250,500                            | 100,000                          | 1,450,500                               |
| Property Tax Receivable             | <u>183,000</u>          |                                      |                                  | <u>183,000</u>                          |
| Total Assets                        | <u>\$347,000</u>        | <u>\$1,562,500</u>                   | <u>\$104,000</u>                 | <u>\$2,013,500</u>                      |
| <i>Liabilities and Fund Balance</i> |                         |                                      |                                  |   |
| Vouchers Payable                    | \$ 73,000               | \$ 50,000                            |                                  | \$ 123,000                              |
| Total Liabilities                   | <u>\$ 73,000</u>        | <u>\$ 50,000</u>                     | <u>\$ —</u>                      | <u>\$ 123,000</u>                       |
| Fund Balances:                      |                         |                                      |                                  |   |
| Restricted for:                     |                         |                                      |                                  |   |
| Capital projects                    |                         | 1,512,500                            |                                  | 1,512,500                               |
| Debt Service                        |                         |                                      | 104,000                          | 104,000                                 |
| Assigned for encumbrance            | 191,000                 |                                      |                                  | 191,000                                 |
| Unassigned                          | <u>83,000</u>           |                                      |                                  | <u>83,000</u>                           |
| Total Fund Balance                  | <u>274,000</u>          | <u>1,512,500</u>                     | <u>104,000</u>                   | <u>1,890,500</u>                        |
| Total Liabilities and Fund Balances | <u>\$347,000</u>        | <u>\$1,562,500</u>                   | <u>\$104,000</u>                 | <u>\$2,013,500</u>                      |

**Circus City**  
**Governmental Funds**  
**Statement of Revenues, Expenditures, and Changes in Fund**  
**Balances for the Year Ended December 31, 2015**

|   | <i>General<br/>Fund</i> | <i>Capital<br/>Projects<br/>Fund</i> | <i>Debt<br/>Service<br/>Fund</i> | <i>Total<br/>Governmental<br/>Funds</i> |
|---|-------------------------|--------------------------------------|----------------------------------|---|
|   | <i>General<br/>Fund</i> | <i>Monorail<br/>Fund</i>             | <i>Term Bond</i>                 |   |
| <b>Revenues</b>                                   |                         |                                      |                                  |   |
| Property Taxes                                    | \$ 525,000              |                                      | \$ 50,000                        | \$ 575,000                              |
| Licenses and Permits*                             | 150,000                 |                                      |                                  | 150,000                                 |
| State Grant—highways and streets                  | 250,000                 |                                      |                                  | 250,000                                 |
| Intergovernmental—state grant                     |                         | \$1,000,000                          |                                  | 1,000,000                               |
| Charges for Services (general government)         | 130,000                 |                                      |                                  | 130,000                                 |
| Investment Earnings                               | 75,000                  |                                      |                                  | 75,000                                  |
| Total Revenue                                     | <u>\$1,130,000</u>      | <u>\$1,000,000</u>                   | <u>\$ 50,000</u>                 | <u>\$2,180,000</u>                      |
| <b>Expenditures</b>                               |                         |                                      |                                  |   |
| Public Safety                                     | \$ 500,000              |                                      |                                  | \$ 500,000                              |
| General Government                                | 300,000                 |                                      |                                  | 300,000                                 |
| Highways and Streets                              | 130,000                 |                                      |                                  | 130,000                                 |
| Sanitation  | 70,000                  |                                      |                                  | 70,000                                  |
| Debt Service Interest                             |                         |                                      | \$160,000                        | 160,000                                 |
| Capital Outlay                                    |                         | \$1,500,000                          |                                  | 1,500,000                               |
| Total Expenditures                                | <u>\$1,000,000</u>      | <u>\$1,500,000</u>                   | <u>\$160,000</u>                 | <u>\$2,660,000</u>                      |
| Excess (deficiency) of revenues over expenditures | <u>\$ 130,000</u>       | <u>\$ (500,000)</u>                  | <u>\$(110,000)</u>               | <u>\$ (480,000)</u>                     |
| <b>Other Financing Sources (Uses)</b>             |                         |                                      |                                  |   |
| Proceeds from long-term capital debt              |                         | \$1,754,217                          |                                  | \$1,754,217                             |
| Transfers in                                      |                         |                                      | \$160,000                        | 160,000                                 |
| Transfers out                                     | \$ (160,000)            |                                      |                                  | (160,000)                               |
| Total other                                       | <u>\$ (160,000)</u>     | <u>\$1,754,217</u>                   | <u>\$160,000</u>                 | <u>\$1,754,217</u>                      |
| <b>Special Items</b>                              |                         |                                      |                                  |   |
| Proceeds from sales of equipment                  | \$ 115,000              |                                      |                                  | \$ 115,000                              |
| Net change in fund balance                        | 85,000                  | 1,254,217                            | 50,000                           | 1,389,217                               |
| Fund balance—beginning                            | 189,000                 | 258,283                              | 54,000                           | 501,283                                 |
| Fund balance—ending                               | <u>\$ 274,000</u>       | <u>\$1,512,500</u>                   | <u>\$104,000</u>                 | <u>\$1,890,500</u>                      |

\* Revenues from licenses and permits are assigned to highways and streets (\$100,000) and to the general government (\$50,000).

**Required:**

Using the information above, prepare the statement of activities and the statement of net position on a government-wide basis (using full accrual accounting). The beginning fund balance in the government-wide Statement of Net Position is \$2,686,283.

**PROBLEM 18-14 Reporting Information about Long-term Liabilities LO 5 LO 8**

On January 1, 2007, the city of Nashvegas issued an 8% annual, 10-year, \$10,000 bond for \$11,472 (an effective yield of 6%). The bonds become due on December 31, 2016. On June 30, 2015, the city of Nashvegas issued an 8% annual, 10-year, \$10,000 bond to yield 10% (the proceeds are \$8,771).

**Required:**

- A. Assuming that both bonds are general obligation bonds, prepare the schedule of long-term liabilities at December 31, 2015 (see Illustration 18-13 for an example).
- B. Determine the amount of interest reported on the government-wide statement of activities for the year ending December 31, 2015.
- C. Determine the amount of long-term liabilities reported on the government-wide statement of net position at December 31, 2015.
- D. Determine the total amount of interest expenditures included in the governmental statement of revenues, expenditures, and changes in net position for the year ending December 31, 2015.
- E. Determine the amount of debt (if any) reported on the governmental funds balance sheet.



# Chapter 18

## APPENDIX 18A – GOVERNMENT-WIDE FINANCIAL STATEMENTS CITY OF ATLANTA (ONLINE)

### CITY OF ATLANTA, GEORGIA

#### Statement of Net Position June 30, 2013 (Dollars in Thousands)

|  | <i>Governmental<br/>Activities</i> | <i>Business-type<br/>Activities</i> | <i>Total</i>      | <i>Component<br/>Units</i> |
|--|------------------------------------|-------------------------------------|-------------------|----------------------------|
| <b>ASSETS</b>  |                                    |                                     |                   |                            |
| <b>Current assets:</b>                                       |                                    |                                     |                   |                            |
| Cash and cash equivalents                                    | \$ 1,892                           | \$ 24,254                           | \$ 26,14          | \$ 18,014                  |
| Restricted cash  | \$ 388,830                         | 173,537                             | 562,367           | 30,961                     |
| Equity in cash management pool                               | 191,845                            | 1,309,052                           | 1,500,897         | —                          |
| Investments  | 286                                | —                                   | 286               | 673                        |
| Receivables (net of allowances for uncollectables)           | 62,193                             | 112,677                             | 174,870           | 3,247                      |
| Due from other governments                                   | 16,699                             | 27,678                              | 44,377            | —                          |
| Due from primary government                                  | —                                  | —                                   | —                 | 264                        |
| Due from component unit                                      | —                                  | —                                   | —                 | 1,415                      |
| Capital lease receivable, current portion                    | —                                  | —                                   | —                 | 875                        |
| Internal balances  | (57,646)                           | 57,646                              | —                 | —                          |
| Inventories  | —                                  | 19,675                              | 19,675            | —                          |
| Other restricted assets                                      | —                                  | 39,325                              | 39,325            | —                          |
| Prepaid expenses and other assets                            | —                                  | 1,766                               | 1,766             | 648                        |
| <b>Total current assets</b>                                  | <b>604,099</b>                     | <b>1,765,610</b>                    | <b>2,369,709</b>  | <b>56,097</b>              |
| <b>Noncurrent assets:</b>                                    |                                    |                                     |                   |                            |
| Restricted cash  | —                                  | 1,020,117                           | 1,020,117         | 48,383                     |
| Restricted investments                                       | —                                  | 489,642                             | 489,642           | 8,315                      |
| Investments  | —                                  | —                                   | —                 | 3,597                      |
| Due from primary government                                  | —                                  | —                                   | —                 | 16,025                     |
| <b>Capital assets:</b>                                       |                                    |                                     |                   |                            |
| Capital assets not being depreciated                         | 342,226                            | 1,664,096                           | 2,006,322         | 139,706                    |
| Capital assets being depreciated                             | 1,772,912                          | 13,286,750                          | 15,059,662        | 305,409                    |
| Less accumulated depreciation                                | (1,026,787)                        | (4,250,750)                         | (5,277,537)       | (143,550)                  |
| Investments in joint venture                                 | —                                  | 82,164                              | 82,164            | —                          |
| Restricted investments in escrow                             | 17,188                             | —                                   | 17,188            | —                          |
| Due from other parties                                       | —                                  | 10,320                              | 10,320            | —                          |
| Due from component unit                                      | —                                  | 24,000                              | 24,000            | 27,075                     |
| Other assets   | 7,089                              | 5,049                               | 12,138            | 10,679                     |
| Long-term receivable   | —                                  | —                                   | —                 | 50,228                     |
| <b>Total noncurrent assets</b>                               | <b>1,112,628</b>                   | <b>12,331,388</b>                   | <b>13,444,016</b> | <b>465,867</b>             |
| <b>Total Assets</b>  | <b>1,716,727</b>                   | <b>14,096,998</b>                   | <b>15,813,725</b> | <b>521,964</b>             |
| <b>Deferred outflows of resources</b>                        |                                    |                                     |                   |                            |
| Accumulated decrease in fair value of derivative instruments | —                                  | 15,323                              | 15,323            | —                          |
| Accumulated deferred losses on refunding                     | —                                  | 96,468                              | 96,468            | —                          |
| <b>Total assets and deferred outflows of resources</b>       | <b>1,716,727</b>                   | <b>14,208,789</b>                   | <b>15,925,516</b> | <b>521,964</b>             |

(continued)

## CITY OF ATLANTA, GEORGIA (CONTINUED)

|  | <i>Governmental<br/>Activities</i> | <i>Business-type<br/>Activities</i> | <i>Total</i>        | <i>Component<br/>Units</i> |
|--|------------------------------------|-------------------------------------|---------------------|----------------------------|
| <b>LIABILITIES</b>   |                                    |                                     |                     |                            |
| <b>Current liabilities</b>                                   |                                    |                                     |                     |                            |
| Accounts payable   | 61,210                             | 82,878                              | 144,088             | 3,957                      |
| Accrued expenses and vacations                               | 9,062                              | 19,629                              | 28,691              | —                          |
| Accrued interest payable                                     | —                                  | 106,448                             | 106,448             | 4,676                      |
| Claims payable   | 8,328                              | 8,568                               | 16,896              | —                          |
| Contract retentions  | 1,592                              | 14,559                              | 16,151              | —                          |
| Due to other governments                                     | 10,293                             | —                                   | 10,293              | —                          |
| Due to primary government                                    | —                                  | —                                   | —                   | 104                        |
| Other liabilities  | —                                  | 4,459                               | 4,459               | 20,849                     |
| Unearned revenues  | 633                                | —                                   | 633                 | 2,679                      |
| Current portion of long-term debt, capital leases, SWAPS     | 50,906                             | 170,280                             | 221,186             | 20,466                     |
| Current portion of other liabilities                         | 9,045                              | —                                   | 9,045               | —                          |
| <b>Total current liabilities</b>                             | <u>151,069</u>                     | <u>406,821</u>                      | <u>557,890</u>      | <u>52,731</u>              |
| <b>Noncurrent liabilities</b>                                |                                    |                                     |                     |                            |
| Noncurrent portion of long-term debt                         | 869,298                            | 6,267,060                           | 7,136,358           | 322,092                    |
| Noncurrent portion of capital leases                         | 64,120                             | 39,036                              | 103,156             | —                          |
| Noncurrent portion of contract retentions                    | —                                  | 3,322                               | 3,322               | —                          |
| Net OPEB obligation  | 180,356                            | 145,296                             | 325,652             | —                          |
| Due to primary government                                    | —                                  | —                                   | —                   | 24,000                     |
| Due to component unit  | 28,354                             | —                                   | 28,354              | —                          |
| Other long-term liabilities                                  | 44,073                             | 159,954                             | 204,027             | 25,593                     |
| <b>Total non-current liabilities</b>                         | <u>1,186,201</u>                   | <u>6,614,668</u>                    | <u>7,800,869</u>    | <u>371,685</u>             |
| <b>Total Liabilities</b>                                     | <u>1,337,270</u>                   | <u>7,021,489</u>                    | <u>8,358,759</u>    | <u>424,416</u>             |
| <b>Deferred inflows of resources</b>                         |                                    |                                     |                     |                            |
| Accumulated increase in fair value of derivative instruments | 7,089                              | —                                   | 7,089               | —                          |
| <b>Total liabilities and deferred inflows of resources</b>   | <u>1,344,359</u>                   | <u>7,021,489</u>                    | <u>8,365,848</u>    | <u>424,416</u>             |
| <b>NET POSITION</b>  |                                    |                                     |                     |                            |
| Net investment in capital assets                             | 95,513                             | 5,015,922                           | 5,111,435           | 56,070                     |
| <b>Restricted for:</b>                                       |                                    |                                     |                     |                            |
| Debt service   | 287,948                            | 534,521                             | 822,469             | —                          |
| Programs   | 72,591                             | —                                   | 72,591              | 61,490                     |
| Capital projects   | 47,962                             | 355,001                             | 402,963             | —                          |
| Unrestricted   | (131,646)                          | 1,281,856                           | 1,150,210           | (20,012)                   |
| <b>Total Net Position</b>                                    | <u>\$ 372,368</u>                  | <u>\$ 7,187,300</u>                 | <u>\$ 7,559,668</u> | <u>\$97,548</u>            |

CITY OF ATLANTA, GEORGIA

Statement of Activities  
For the Year Ended June 30, 2013  
(Dollars in Thousands)

| Functions/Programs                     | Program Revenues |                      |                                    |                                  | Net (Expenses) Revenues and Changes in Net Position |                          |              | Component Units |
|--|------------------|----------------------|------------------------------------|----------------------------------|---|--------------------------|--------------|-----------------|
|  | Expenses         | Charges for Services | Operating Grants and Contributions | Capital Grants and Contributions | Governmental Activities                             | Business-type Activities | TOTALS       |                 |
| <b>Primary Government</b>              |                  |                      |                                    |                                  |   |                          |              |                 |
| <b>Governmental activities:</b>        |                  |                      |                                    |                                  |   |                          |              |                 |
| General government                     | \$ 148,288       | \$ 92,510            | \$ 49,392                          | \$ —                             | \$ 6,386  | \$ —                     | \$ (6,386)   |                 |
| Police                                 | 210,751          | 17,506               | 14,057                             | —                                | (179,188)   | —                        | (179,188)    |                 |
| Fire                                   | 92,018           | 808                  | 4,700                              | —                                | (86,510)  | —                        | (86,510)     |                 |
| Corrections                            | 31,128           | 3,319                | 222                                | —                                | (27,587)  | —                        | (27,587)     |                 |
| Public Works                           | 64,467           | 3,731                | 5,338                              | —                                | (55,398)  | —                        | (55,398)     |                 |
| Parks, Recreation and Cultural Affairs | 59,732           | 3,581                | 1,948                              | —                                | (54,203)  | —                        | (54,203)     |                 |
| Interest on long-term debt             | 42,731           | —                    | —                                  | —                                | (42,731)  | —                        | (42,731)     |                 |
| Total Governmental activities          | 649,115          | 121,455              | 75,657                             | —                                | (452,003)   | —                        | (452,003)    |                 |
| <b>Business-type activities:</b>       |                  |                      |                                    |                                  |   |                          |              |                 |
| Watershed Management                   | 445,647          | 448,167              | —                                  | 23,077                           | 25,597  | 25,597                   | 25,597       |                 |
| Aviation                               | 585,148          | 490,386              | —                                  | 237,867                          | —   | 143,105                  | 143,105      |                 |
| Sanitation                             | 46,468           | 54,071               | —                                  | —                                | —   | 7,603                    | (7,603)      |                 |
| Parks and Recreational Facilities      | 556              | 475                  | —                                  | —                                | —   | (81)                     | (81)         |                 |
| Underground Atlanta                    | 6,957            | 1,707                | —                                  | —                                | —   | 5,250                    | (5,250)      |                 |
| Parking Deck                           | 1,415            | 805                  | —                                  | —                                | —   | (610)                    | (610)        |                 |
| Permit Fund                            | 6,607            | 18,464               | —                                  | —                                | —   | 11,857                   | 11,857       |                 |
| Civic Center                           | 2,047            | 1,196                | —                                  | —                                | —   | (851)                    | (851)        |                 |
| Total Business-type activities         | 1,094,845        | 1,015,271            | —                                  | 260,944                          | —   | 181,370                  | 181,370      |                 |
| Total Primary Government               | \$ 1,743,960     | \$ 1,136,726         | \$ 75,657                          | \$ 260,944                       | \$ (452,003)  | \$ 181,370               | \$ (270,633) |                 |
| <b>Component Units</b>                 | \$ 84,219        | \$ 18,881            | \$ 6,615                           | \$ 28,228                        | —   | —                        | \$ (30,495)  |                 |

(continued)

| Functions/Programs                                       | Program Revenues |                      |                                    | Net (Expenses) Revenues and Changes in Net Position |                         |                          |                     |                  |
|--|------------------|----------------------|------------------------------------|---|-------------------------|--------------------------|---------------------|------------------|
|  | Expenses         | Charges for Services | Operating Grants and Contributions | Capital Grants and Contributions                    | Governmental Activities | Business-type Activities | TOTALS              | Component Units  |
| <b>General revenues:</b>                                 |                  |                      |                                    |   |                         |                          |                     |                  |
| Taxes:   |                  |                      |                                    |   |                         |                          |                     |                  |
| Property Taxes Levied for general purposes               |                  |                      | 188,099                            |   |                         |                          | <b>188,099</b>      | —                |
| Property Taxes Levied for debt service                   |                  |                      | 97,690                             |   |                         |                          | <b>97,690</b>       | —                |
| Local and Municipal Option Sales Tax                     |                  |                      | 218,623                            |   |                         |                          | <b>218,623</b>      | —                |
| Public utility, alcoholic beverage and other taxes       |                  |                      | 156,227                            |   |                         |                          | <b>156,227</b>      | 3,000            |
| Federal and State aid not restricted                     |                  |                      | —                                  |   |                         |                          | —                   | —                |
| Investment income  |                  |                      | 679                                |   | 58,710                  |                          | <b>59,389</b>       | 140              |
| Loss on sale of assets                                   |                  |                      | (4,197)                            |   | —                       |                          | <b>(4,197)</b>      | —                |
| Other  |                  |                      | —                                  |   | 450                     |                          | <b>450</b>          | 2,553            |
| Total General revenues                                   |                  |                      | 657,121                            |   | 59,160                  |                          | <b>716,281</b>      | 5,693            |
| Transfers  |                  |                      | (114,431)                          |   | 114,431                 |                          | —                   | —                |
| Total general revenues, special items and transfers      |                  |                      | 542,690                            |   | 173,591                 |                          | <b>716,281</b>      | 5,693            |
| Change in net position                                   |                  |                      | 90,687                             |   | 354,961                 |                          | <b>445,648</b>      | (24,802)         |
| Net Position - beginning of period as adjusted (Note 1G) |                  |                      | 281,681                            |   | 6,832,339               |                          | <b>7,114,020</b>    | 122,350          |
| <b>NET POSITION-END OF PERIOD</b>                        |                  |                      | <b>\$ 372,368</b>                  |   | <b>\$ 7,187,300</b>     |                          | <b>\$ 7,559,668</b> | <b>\$ 97,548</b> |

## CITY OF ATLANTA, GEORGIA

**Reconciliation of Governmental Fund Balance Sheet  
To the Government-wide Statement of Net Position  
June 30, 2013  
(Dollars in Thousands)**

|  |                    |                       |
|--|--------------------|-----------------------|
| Total fund balances  |                    | \$ 532,175            |
| <p>Amounts reported for governmental activities in the Statement of Net Position are different because:</p>  |                    |                       |
| <p>Other liabilities are not recognized as current year revenues and, therefore, are classified as deferred in the above funds</p>   |                    | 21,067                |
| <p>Capital assets used in governmental activities are not financial resources and therefore are not reported in the above funds:</p>   |                    |                       |
| Land and construction in progress  | 342,226            |                       |
| Cost of capital assets   | 1,772,91           |                       |
| Less: accumulated depreciation   | <u>(1,026,787)</u> | 1,088,351             |
| <p>Internal service funds are used by management to charge the costs of automotive services as well as transactions related to the provision of life, accident and medical insurance benefits through outside insurance companies for permanent employees and retirees. The assets and liabilities of the internal service funds are included in governmental activities in the statement of net position.</p> |                    |                       |
| Capital assets included above related to the internal service fund   | (645)              |                       |
| Net Position for internal service fund   | <u>(14,100)</u>    | (14,745)              |
| <p>Long-term liabilities, including capital leases, are not due and payable in the current period and therefore are not reported in governmental funds.</p>  |                    |                       |
| Due to component unit  | (28,354)           |                       |
| Long-term debt   | (215,320)          |                       |
| SWMA revenue refunding bonds   | (15,410)           |                       |
| Limited obligation bonds   | (589,670)          |                       |
| Capital leases   | (64,120)           |                       |
| Other general long-term obligations  | (81,250)           |                       |
| Unamortized premiums (discounts) on bond issues  | (9,160)            |                       |
| Vacation and compensated absences payable  | (18,966)           |                       |
| Notes payable  | (9,394)            |                       |
| Net OPEB obligation  | (180,356)          |                       |
| Health, dental and general claims payable  | (21,372)           |                       |
| Workers' compensation  | <u>(21,108)</u>    | (1,254,480)           |
| <br>NET POSITION OF GOVERNMENTAL ACTIVITIES  |                    | <br><u>\$ 372,368</u> |

## Chapter 18 – Review Questions

The review questions accompanying this course are designed to assist you in achieving the course learning objectives. The review section is not graded; do not submit it in place of your qualified assessment. While completing the review questions, it may be helpful to study any unfamiliar terms in the glossary in addition to course content. After completing the review questions, proceed to the review question answers and rationales.

117. Which of the following is accurate regarding the minimum information required for fair presentation in conformity with GAAP for governments?
- Only government-wide financial statements require a balance sheet.
  - Proprietary funds can present either a balance sheet or a statement of net position.
  - Only fiduciary funds are required to present a balance sheet.
  - Government funds are not required to present a balance sheet.
118. While GASB-issued statements and interpretations form the most authoritative source of accounting guidance for governmental entities:
- Implementation guides issued by GASB rate the next highest in the hierarchy.
  - AICPA practice bulletins rate the next highest in the hierarchy.
  - AICPA Industry Audit and Accounting Guides serve as the lowest level of authoritative source for governmental accounting.
  - GASB Technical Bulletins rate the next highest in the hierarchy.
119. Which of the following is accurate regarding fiduciary funds?
- Agency funds are used to report escheat property.
  - Investment trust funds are used to report escheat property.
  - Private-purpose funds are used to report escheat property.
  - Internal service funds are used to report escheat property.
120. All of the following are governmental funds with the **EXCEPTION** of:
- Restricted funds.
  - Capital projects funds.
  - Special revenue funds.
  - Permanent funds.

121. Which of the following statements is accurate regarding the steps taken in a special revenue fund?
- A budget is established, but is not recorded in the accounts.
  - Encumbrances are used to control budgeted expenditures.
  - Fixed assets of a special revenue fund are reported as assets of the fund.
  - Liabilities of the special revenue fund must be recorded on the fund statement of net position.
122. Which of the following is true of debt service funds and their related liabilities?
- The liability will always be reported in the same fund used to service its debt.
  - General obligation debt is recorded in the same debt service fund as the liability while proprietary debt is not.
  - Payments of principal and interest is both an expenditure and a reduction of debt.
  - A proprietary fund issuing debt will account for the debt and the debt service within the proprietary fund.
123. General obligation bonds:
- Are serial bonds.
  - Are repaid from the general revenues of the issuing government.
  - Will accrue interest over the life of the bonds.
  - Are not tied to the resources of a specific fund.
124. All of the following statements are accurate regarding the financial disclosures for government-wide financials with the **EXCEPTION** of:
- Actuarial requirements must be disclosed for term bonds.
  - Interest payable must be recorded and disclosed on all bond issues regardless of bond interest payment dates.
  - Presentation of the bond fund balance must be shown as restricted.
  - Transfers from other funds to the debt service fund will be presented as Other Financing Sources on the Statement of Revenues, Expenditures, and Changes in Fund Balance.
125. Nonexpendable trust funds:
- Must be accounted for in accordance with the terms of the trust agreement or applicable provisions of statutory and common law.
  - Should be reported as special purpose funds.
  - Are only those in which both the principal and the interest must be retained intact.
  - May be required to transfer earnings to a permanent fund if they may be expended.

## **Chapter 19 – Accounting for Nongovernment Nonbusiness Organizations: Colleges and Universities, Hospitals and Other Health Care Organizations**

### **Learning Objectives**

After completing this section of the course, you will be able to:

- Identify the source of nongovernment, nonbusiness organizations (NNOs), noting the funds used and the statements required for such organizations.
- Differentiate between a current restricted fund and an unrestricted fund as well as the difference between a mandatory and a non-mandatory transfer.
- Identify the appropriate treatment of “assets whose use is limited” and donations, including donations of services, property, plant, and equipment, and endowments.
- Recognize the appropriate financial statement presentation for NNOs.
- Identify special issues including the use of loan funds, annuity or life income funds, and the needs of hospitals.



# ACCOUNTING FOR NONGOVERNMENT NONBUSINESS ORGANIZATIONS: COLLEGES AND UNIVERSITIES, HOSPITALS AND OTHER HEALTH CARE ORGANIZATIONS

## CHAPTER CONTENTS

- 19.1 SOURCES OF GENERALLY ACCEPTED ACCOUNTING STANDARDS FOR NONGOVERNMENT-NONBUSINESS ORGANIZATIONS
- 19.2 FUND ACCOUNTING
- 19.3 ACCRUAL BASIS OF ACCOUNTING
- 19.4 ACCOUNTING FOR CURRENT FUNDS
- 19.5 CONTRIBUTIONS
- 19.6 ACCOUNTING FOR PLANT FUNDS
- 19.7 ACCOUNTING FOR ENDOWMENT FUNDS
- 19.8 ACCOUNTING FOR INVESTMENTS
- 19.9 ACCOUNTING FOR LOAN FUNDS
- 19.10 ACCOUNTING FOR AGENCY (CUSTODIAL) FUNDS
- 19.11 ACCOUNTING FOR ANNUITY AND LIFE INCOME FUNDS
- 19.12 ISSUES RELATING TO COLLEGES, UNIVERSITIES, AND HOSPITALS

### IN THE NEWS

The public's concern about executive pay is affecting academia. In an article in the *Wall Street Journal*, Vanderbilt University's former chancellor came under fire for running up a tab of \$700,000 for frequent parties at his Greek-revival university-owned mansion. In addition, Vanderbilt University's Board of Trust did not approve the \$2.2 billion budget between 2000 and 2005 (which is larger than the revenues of all but the largest 800 public companies). The Board of Trust is creating a committee to monitor the chancellor's spending and his pay package. In addition, another committee is examining potential conflicts of interest.<sup>1</sup>

<sup>1</sup> *The Wall Street Journal*, "Vanderbilt Reins in Lavish Spending by Chancellor," by Joann S. Lublin and Daniel Golden, 9/26/06, by p. A1.

Nonbusiness organizations other than governmental units are referred to in this text as nongovernment nonbusiness organizations (NNOs). In this chapter, we describe the accounting for the following four major classifications of NNOs:

1. *Nonprofit institutions of higher education*. This category includes private colleges, universities, and community colleges.
2. *Hospitals and other health care providers*.
3. *Voluntary health and welfare organizations (VHWOs)*. These are organizations that derive their revenue from voluntary contributions of the general public to be used for purposes connected with health, welfare, or community services. Examples of such organizations include heart associations, family planning councils, mental health associations, and foundations for the blind.
4. *Other nongovernment nonbusiness organizations (ONNOs)*. ONNOs take a variety of forms and include a broad assortment of organizations such as cemetery organizations, civic organizations, fraternal organizations, labor unions, libraries, museums, other cultural institutions, performing arts organizations, political parties, private and community foundations, private elementary and secondary schools, professional associations, public broadcasting stations, religious organizations, social and country clubs, trade associations, and zoological and botanical societies.

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## 19.1 SOURCES OF GENERALLY ACCEPTED ACCOUNTING STANDARDS FOR NONGOVERNMENT NONBUSINESS ORGANIZATIONS

**Lo 1** The source of accounting standards

Until the early 1970s, accounting and reporting practices for NNOs were developed under the auspices of various interested professional associations such as the American Hospital Association, the Hospital Financial Management Association, the American Council on Education, and the National Association of College and University Business Officers. In the early 1970s, the AICPA exhibited an interest in financial reporting problems in this area that resulted in the issuance of separate *Industry Audit Guides for Hospitals, Colleges and Universities*, and *Voluntary Health and Welfare Organizations*. These *Audit Guides* were developed by different committees over approximately the same time period.

Inevitably, there were differences in the practices and reporting standards recommended in the different *Audit Guides*, as well as differences between those recommended in the *Audit Guides* and those recommended in the publications of the professional associations. Later, several *Statements of Position* issued by the Accounting Standards Division of the AICPA resulted in amendments to each of the *Audit Guides*. In addition, a *Statement of Position* was issued containing the recommendations of the AICPA on accounting and reporting standards for NNOs not covered under the three *Industry Audit Guides*. By the late 1970s, all significant differences between the financial accounting and reporting standards recommended in the *Audit Guides* and those recommended in the publications of the professional associations relating to hospitals and to colleges and universities had been resolved and the various professional association publications and *Audit Guides* had been amended accordingly. Unfortunately, there continue to be significant differences among the *Audit Guides* (as amended) themselves with regard to recommended accounting and reporting practices for different types of NNOs.

In 1979 the Financial Accounting Standards Board assumed responsibility for setting accounting and reporting standards for all nonbusiness organizations except governmental units. In preparation for addressing specific standards for NNOs, the Board first undertook to incorporate NNOs into its *Statements of Financial Accounting Concepts*. In 1980 the Board issued *FASB Concepts Statement No. 4*, “Objectives of

Financial Reporting by Nonbusiness Organizations.” In 1985, the Board amended *FASB Concepts Statement No. 2*, “Qualitative Characteristics of Accounting Information,” to apply to NNOs as well as to business enterprises and issued *Concepts Statement No. 6*, “Elements of Financial Statements,” which encompasses NNOs as well as business enterprises. FASB standards for nonprofits are found in FASB ASC topic 958 (Not-for-Profit Entities).

## Hierarchy of Generally Accepted Reporting Standards for Nongovernment Nonbusiness Organizations

Not-for-profit organizations (such as colleges and universities and health care providers) that may be either government owned or privately owned are referred to herein as *special entities*. Government-owned special entities come under the jurisdiction of the Government Accounting Standards Board (GASB). The hierarchy used to establish generally accepted reporting standards for all state and local governmental-owned entities was presented in Chapter 18. Government-owned special entities come under that hierarchy. The hierarchy used to establish generally accepted reporting standards for NNOs other than government-owned special entities is the same as that for business organizations and is included in the FASB Codification.

NNOs in the private sector should look to this hierarchy for accounting and reporting guidance.

With different hierarchies for entities under the jurisdiction of the FASB and entities under the jurisdiction of the GASB, different accounting standards may apply to special entities depending on whether they are privately owned or government owned. For example, FASB ASC paragraph 958-360-35-1 requires that all privately owned not-for-profit organizations record depreciation. *GASB Statement No. 34* requires governmental entities to begin recording depreciation in 2001. The issue of conflicts among multiple standard-setting bodies remains controversial.

*GASB Statement No. 15* allows public colleges and universities to use either the AICPA/NACUBO model (described in this chapter) or the government model (described in Chapter 18). In the discussion that follows, all illustrations, including those for colleges and universities, are based on the hierarchy described in this chapter for NNOs other than government-owned special entities.

### IN THE NEWS

“In a survey comparing the financial reporting of colleges and universities to publicly held corporations, a number of differences in styles and formats between the two groups were discovered. For example, 100% of the colleges responding to the survey listed the statement of financial position as the first statement that appeared in the annual report, while 69% of corporations listed the income statement first. In addition, 82% of colleges used the term ‘statement of financial position’ to describe the balance sheet, while 94% of the corporations surveyed used the term ‘balance sheet.’ All the income statements for publicly held corporations were single-column statements (for each year), unless they were part of some consolidating statement; in contrast, 84% of the national liberal arts colleges presented the statement of activities in multiple columns (with headings for different types of net assets), and only 10 out of 120 colleges used a single-column format, stacking the various categories of net assets.”<sup>2</sup>

<sup>2</sup> NACUBO Business Officer, “Corporate-Like,” by Frederick M. Weis, June 1999, pp. 28–33.

### FROM CONCEPTUAL FRAMEWORK— FINANCIAL ACCOUNTING STANDARDS BOARD

*FASB Statement of Financial Concepts No. 4, “Objectives of Financial Reporting by Nonbusiness Organizations”*

The purpose of this statement is to establish the objectives for external reporting by nonbusiness organizations. There are several major distinguishing characteristics of nonbusiness versus business organizations. Generally, nonbusiness organizations receive resources from providers who do not expect to receive anything or expect to receive amounts significantly less than the amounts given. This characteristic results in frequent transactions concerning grants and contributions, which are infrequent in business organizations. Nonbusiness organizations tend to operate for purposes other than profit. Finally, nonbusiness organizations tend not to have defined ownership interests that can be bought or sold, or tend not to have liquidation values.

*Concepts Statement No. 4* identifies seven major objectives of financial reporting.

1. Because the users of the financial statements make decisions about whether to provide resources to the organization, the information provided by the nonbusiness organization should be useful for such decisions.
2. The information provided should help the resource providers and others assess the nonbusiness organization’s service and its ability to provide the service.
3. The information provided should help the resource providers and others assess the nonbusiness organization’s stewardship responsibilities.
4. Information about the economic resources, obligations, and net resources of an organization, and the effects of changes in these resources, should be provided.
5. Information about the performance of the organization should be provided. Performance should be measured periodically and information should be provided about the service efforts and accomplishments along with information to assess this performance.
6. Information should be provided concerning how the organization obtains and spends cash and how the organization repays borrowing.
7. Information should be provided to help users understand the financial information provided.

## Financial Reporting for Not-for-Profit Organizations

In 1993, the FASB standardized much of the variability in reporting for nonprofit companies [see FASB ASC topic 958]. This statement requires far more aggregation of data than most organizations had previously reported. Three basic financial statements are required:

### LO 2 Three basic statements

IN  
THE  
NEWS

The categories of net assets required in FASB ASC topic 958

replace the fund balances used in previous reports. The term *restricted net assets* should not be confused with a restricted fund or assets whose use is limited. For example, a governing board of a hospital might designate certain resources to be used for a specific purpose; such items would still be classified on the statement of financial position as *unrestricted net assets*.

1. A statement of financial position (balance sheet).
2. A statement of activities.
3. A statement of cash flows.

Also, the FASB requires that net assets (assets less liabilities) be presented in three principal categories in the statement of financial position as follows:

1. **Unrestricted net assets.**
2. **Temporarily restricted net assets**—These are resources that must be used for a specific purpose or in a specific time period where the restriction is donor imposed.
3. **Permanently restricted net assets**—These are endowments, where the interest might be spent but the principal must not be used.

The FASB did not specify precise formats for the statements, but did require that information about liquidity be disclosed. Organizations can meet this requirement by classifying assets and liabilities as current or noncurrent, or they may choose to list the assets and liabilities in the order of liquidity. The FASB also expressed a strong preference for the term “statement of financial position” rather than balance sheet.

On the statement of activities, revenues may result in an increase in any one of the three categories of net assets. However, *all expenses must be reported as decreases in unrestricted net assets*. Thus, all expenses are listed in one column.

In the appendix to this chapter, (available online at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter)) four financial statements are illustrated for a private educational institution (Illustrations 19-4 through 19-7). Two formats are provided for the statement of financial position: one that displays a net asset desegregation (Illustration 19-4) and one that displays a fund group desegregation (Illustration 19-5). The statement of activities is shown in Illustration 19-6 and the statement of cash flows is presented in Illustration 19-7.

## Financial Report for Public Colleges and Universities

During November of 1999, the GASB issued *Statement No. 35*, Basic Financial Statements—and Management’s Discussion and Analysis—for Public Colleges and Universities—an amendment of *GASB Statement No. 34*. This statement established the standards for public colleges and universities using the reporting guidelines set out in *GASB Statement No. 34* (see Chapter 18). *Statement No. 35* allows public colleges and universities to apply the guidance designed for special-purpose governments. This means that colleges and universities, in separately issued financial statements, can follow the reporting requirements for such governments. Also, public institutions are required to include a management’s discussion and analysis (MDA) section, as well as other supplemental disclosures.

## 19.2 FUND ACCOUNTING

### LO 3 Basic funds of NNO

Whereas in some instances the total resources of an NNO may be available to finance its functions and operating activities, in most cases restrictions are placed on certain of the organization’s resources by donors, by law or contract, or by other external authorities. Donors, for example, often specify the specific purpose or program to which their contributions are to be applied, and sometimes the time period in which the resources contributed by them may be expended. To facilitate the observance of such restrictions, most NNOs use fund accounting for recordkeeping and reporting purposes.

The fund structure of different nonbusiness organizations is summarized in Illustration 19-1. The fund structure and terminology differ among NNOs primarily because of the

### ILLUSTRATION 19-1

#### Comparison of Fund Structures of Different Nonbusiness Organizations

| Primary Purpose of Funds and Account Group   | Names of the Funds Used by Different Nonbusiness Organizations   |  |                                  |   |
|--|--|--|----------------------------------|---|
|  | State and Local Governmental Units   | Colleges and Universities  | Hospitals                        | Voluntary Health and Welfare Organizations and ONNOs  |
| Financing of Current Operations  | General Fund<br>Special Revenue Fund   | Unrestricted Current<br>Restricted Current   | General Fund<br>Specific Purpose | Unrestricted Current<br>Restricted Current            |
| Acquisition of and Accountability for Major Capital Assets and Related Long-term Obligations | Capital Projects<br>Debt Service<br>General Fixed Assets Account Group<br>General Long-term Obligation Account Group | Plant:<br>Unexpended<br>For Renewals and Replacements<br>For Retirement of Debt<br>Investment in Plant | Plant Replacement and Expansion  | Plant (Land, Building, and Equipment)                 |
| Fiduciary Responsibilities   | Permanent<br>Agency  | Endowment<br>Loan<br>Agency<br>Annuity<br>Life Income  | Endowment<br>Agency              | Endowment<br>Loan<br>Agency<br>Annuity<br>Life Income |

separate development of accounting and reporting standards for the different organizations. There are six funds commonly used, each of which will be discussed in turn. They are:

1. **Current Fund** (restricted and unrestricted). The unrestricted fund is often referred to by hospitals as the general fund, and the restricted fund as a special purpose fund.
2. **Plant Fund**. Several subfunds may be used to account for different aspects of plant and equipment, including the debt to acquire them.
3. **Endowment Fund**.
4. **Loan Fund**.
5. **Agency or Custodial Fund**.
6. **Annuity and Life Income Fund**.

### 19.3 ACCRUAL BASIS OF ACCOUNTING

Generally accepted accounting standards require that financial statements for NNOs be prepared using the accrual basis of accounting. Thus, revenues are reported when earned and realized or realizable, and expenditures are reported when materials or services are received. Expenses incurred before the reporting date are accrued, and expenses applicable to future periods are deferred. Although accrual accounting is used, the primary emphasis in reporting for NNOs is the disclosure of the sources of the entity’s resources and how they were used to accomplish the objectives of the organization, rather than the determination of net income.

#### Classification of Revenue and Expense



“Moody’s Investors Service plans to make some changes in the way it rates the operating performance of colleges and universities, saying investors have been frustrated by accounting practices that can mask financial weaknesses. Most of the changes will be made in the ratings of private colleges and universities, which have widely divergent methods of reporting nonoperating revenues and expenses, rates of spending endowment funds, and participation in the private ‘off-balance-sheet’ financing of campus facilities, particularly dormitories.”<sup>3</sup>

For external reporting purposes, revenues are classified by source (such as net patient service revenue), and expenses and expenditures are classified by function or activity (such as research). An example of major sources of revenue is presented in Illustration 19-2.

ILLUSTRATION 19-2

Major Sources of Revenue for Different Classifications of Nongovernment Nonbusiness Organizations

| <i>Colleges and Universities</i>  | <i>Hospitals</i>  | <i>Voluntary Health and Welfare Organizations and ONNOs</i> |
|---|---|---|
| Tuition and Fees  | <b>Operating Revenue</b>  | <b>Public Support</b>                                       |
| Federal, State, or Local Appropriations   | Patient Service Revenue (Gross) Less  | Public Contributions  |
| Federal, State, or Local Grants and Contracts                                       | Deductions (charity allowances, courtesy allowances, policy discounts, contractual adjustments, etc.)             | Special Events  |
| Private Gifts, Grants, and Contracts  | Net Patient Service Revenue   | Legacies and Bequests                                       |
| Endowment Income  | Other Operating Revenue (tuition from schools, specific-purpose grants, revenue from auxiliary enterprises, etc.) | Federated and Nonfederated Campaigns                        |
| Sales and Services of Educational Activities (film rentals, testing services, etc.) |   | <b>Revenue</b>  |
| Sales and Services of Auxiliary Enterprises (residence halls, food services, etc.)  | <b>Nonoperating Revenue</b>   | Membership Dues   |
|   | Unrestricted Gifts and Grants   | Investment Income   |
|   | Unrestricted Income from Endowment Funds  | Realized Gains on Investment Activities                     |
|   | Donated Services  |   |
|   | Income from Board Designated Funds  |   |

<sup>3</sup> *Chronicle of Higher Education*, Vol. 45:22, “Investment Service Plans to Change the Way It Evaluates Colleges’ Finances,” by Martin van der Werf, 2/5/99, p. A40.

**ILLUSTRATION 19-3****Functional Classification of Expenditures and Expenses for Different Types of Nongovernment Nonbusiness Organizations**

| <i>Colleges and Universities</i>                 | <i>Hospitals</i>              | <i>Voluntary Health and Welfare Organizations and ONNOs</i> |
|--|-------------------------------|---|
| <b><i>Instruction</i></b>                        | Professional Care of Patients | <b><i>Program Services</i></b>                              |
| Academic Instruction                             | Dietary Services              | Research  |
| Community Education                              | General Services              | Public Education  |
| <b><i>Research</i></b>                           | Administrative Services       | Professional Education and Training                         |
| Institutes and Centers                           | Employee Health and Welfare   | Community Service   |
| Project Research                                 | Medical Malpractice Costs     | Other   |
| <b><i>Public Service</i></b>                     | Depreciation and Amortization | <b><i>Support Services</i></b>                              |
| Community Service                                | Interest                      | Management and General Fund Raising                         |
| Conferences and Institutes                       | Provision for Bad Debts       |   |
| Extension Service                                |                               |   |
| <b><i>Academic Support</i></b>                   |                               |   |
| Computer Services                                |                               |   |
| Libraries  |                               |   |
| <b><i>Student Services</i></b>                   |                               |   |
| Admissions                                       |                               |   |
| Counseling                                       |                               |   |
| Financial Aid                                    |                               |   |
| Health and Infirmary                             |                               |   |
| Intramural Athletics                             |                               |   |
| Student Organizations                            |                               |   |
| Registrar  |                               |   |
| Remedial Instruction                             |                               |   |
| <b><i>Institutional Support</i></b>              |                               |   |
| <b><i>Operation and Maintenance of Plant</i></b> |                               |   |
| <b><i>Scholarships and Fellowships</i></b>       |                               |   |
| <b><i>Auxiliary Enterprises</i></b>              |                               |   |

As indicated, hospitals and colleges and universities distinguish revenues between operating and nonoperating, while VHWOs and ONNOs classify revenues based on the source of the revenue, such as public support. Typical functional classifications of expenditures and expenses for different types of NNOs are presented in Illustration 19-3.

## 19.4 ACCOUNTING FOR CURRENT FUNDS

NNOs distinguish between unrestricted funds and restricted funds (or, for hospitals, between the general fund and specific purpose funds) in accounting for current operations. See Illustration 19-1.

### Current Unrestricted Funds

Current unrestricted funds include financial resources of the organization that may be *expended at the discretion of the governing board* to carry out the operations of the organization and to accomplish its objectives. The resources and operations of current unrestricted funds of NNOs are similar in many ways to the resources and operations of the general fund of a municipality.

## Current Restricted Funds

**LO 4** Distinguish between restricted and unrestricted funds

In a sense, all resources of an NNO that are not accounted for as current unrestricted funds are restricted because of *legal, contractual, or external restrictions on their use*. Current restricted funds are distinguished from other funds (such as plant or endowment funds) in that current restricted funds consist of financial resources that are *currently available* for use in *operations*, but which may be expended only for purposes specified by the donor, grantor, or other *external* party.

Thus, the resources of both current funds—restricted and unrestricted—may be used by the organization to carry out its current operations and activities. Current unrestricted resources may be expended at the discretion of the governing board, whereas current restricted resources may be expended only in accordance with externally imposed restrictions.

## Accounting for Board Designated Funds

The governing board of an NNO may designate resources of the current unrestricted fund (general fund of hospitals) for specific purposes, projects, or investment. An example of a specific purpose might include research expenditures, while an addition to the plant would be an example of a specific project. Such designations are intended to aid in the planning and control of expenditures and to limit the discretion of management (as distinguished from the governing board) over expenditures of the designated resources. However, these designations do not constitute, and should not be confused with, donor or external restrictions on the use of resources. The governing board has the authority to reverse or modify such designations at will. Accordingly, *board designated funds should be accounted for as unrestricted funds* and the term “restricted” should **not** be used in connection with them. Such funds should never be included in the current restricted (specific purpose) funds.

## Hospitals

**LO 4** Assets whose use is limited

Assets set aside by the governing board of a hospital for *board-designated purposes* are reported separately in the general funds portion of the statement of financial position as *assets whose use is limited*.

To illustrate, assume that the governing board designated \$200,000 of current unrestricted funds for future research grants and \$50,000 for financing an addition to plant and equipment. Hospitals would report these items separately from other assets in the assets section of the general fund statement of financial position as follows:

| <i>General Funds</i>                  |                  |
|---------------------------------------|------------------|
| <hr/>                                 |                  |
| <i>Assets whose use is limited:</i>   |                  |
| By board for research grants          | \$200,000        |
| By board for acquisition of equipment | 50,000           |
| Total assets whose use is limited     | <u>\$250,000</u> |

Assets whose use is limited under terms of debt indentures, trust agreements, third-party reimbursement arrangements, or other similar arrangements are also presented in the statement of financial position as “assets whose use is limited.”

## Other Nonbusiness Nongovernmental Organizations (ONNOs)

ONNOs report the amounts and purposes of board designated funds either in the *footnotes* to the financial statements *or by reclassification* of an equivalent portion of the Current Unrestricted Fund Balance similar to an appropriation of retained earnings. Using the



information from the previous example and assuming reclassification of a portion of the Current Unrestricted Fund Balance, an entry is made as follows:

| <b>Current Unrestricted Fund</b> |   |         |
|----------------------------------|---|---------|
| (1)                              | Fund Balance  | 250,000 |
|                                  | Board Designated Reserve for Research Grants                    | 200,000 |
|                                  | Board Designated Reserve for Plant Expansion                    | 50,000  |
|                                  | To record designation of reserves by action of governing board. |         |

The reserves would be reported as part of the total Current Unrestricted Fund Balance as follows:

| <b>Current Unrestricted Fund Balance</b>       |                           |
|--|---------------------------|
| Available for Current Expenditures             | \$1,500,000*              |
| Board Designated Reserve for Research Grants   | 200,000                   |
| Board Designated Reserve for Plant Expansion   | <u>50,000</u>             |
| <b>Total Current Unrestricted Fund Balance</b> | <b><u>\$1,750,000</u></b> |

\*This is an assumed amount.

## Colleges and Universities

Unrestricted current funds of colleges and universities that are designated by the board for specific current operating purposes are accounted for in the same manner as board designated funds of ONNOs (by footnote or by reclassification of the Unrestricted Current Fund Balance). However, *some board-restricted current resources can be transferred to other funds*. The allowable transfers are resources designated by the governing boards for loans, investments, or plant expansion. These funds can be transferred to loan funds, endowment funds, or plant funds.

If in the preceding example, the governing board was the Board of Regents of a university, the entries recorded on the books of the university would be as follows:

| <b>Unrestricted Current Funds</b> |  |         |
|-----------------------------------|--|---------|
| (1)                               | Fund Balance—Unallocated   | 200,000 |
|                                   | Fund Balance—Allocated for Research Grants                                       | 200,000 |
|                                   | To establish a reserve in Fund Balance for research grants.                      |         |
| (2)                               | Nonmandatory Transfer to Plant Funds   | 50,000  |
|                                   | Cash   | 50,000  |
|                                   | To record the transfer to Plant Funds for purposes of making additions to plant. |         |

| <b>Unexpended Plant Fund</b> |   |        |
|------------------------------|---|--------|
| (1)                          | Cash  | 50,000 |
|                              | Fund Balance—Unrestricted   | 50,000 |
|                              | To record the receipt of cash from the Unrestricted Current Fund for the purpose of financing additions to plant. |        |

## Mandatory and Nonmandatory Transfers

**LO 6** Distinguish between mandatory and nonmandatory transfers

The terms *mandatory transfer* and *nonmandatory transfer*, which are unique to accounting and reporting for colleges and universities, are described in the *Industry Audit Guide* as follows.<sup>4</sup>

**Mandatory Transfers.** This category includes *transfers* from the Current Funds group to other fund groups arising from (1) *binding legal agreements* related to the financing of educational plant, such as amounts for debt retirement, interest, and required provisions for renewals and replacements of plant not financed from other sources and (2) *grant agreements* with agencies of the federal government, donors, and other organizations to match gifts and grants to loan and other funds. Mandatory transfers may be specified to be made from unrestricted or from restricted current funds.

<sup>4</sup> *Audits of Colleges and Universities*, second edition (New York: AICPA, 1975), p. 104.

**Nonmandatory Transfers.** This category includes those *transfers* from the Current Funds group to other fund groups made *at the discretion of the governing board* to serve a variety of objectives, such as additions to loan funds, additions to quasi-endowment funds, general or specific plant additions, voluntary renewals and replacements of plant, and prepayments on debt principal. It also may include the retransfer of resources back to current funds.

The recording of a nonmandatory (board designated) transfer was illustrated in the preceding section. To illustrate a mandatory transfer, assume that a university is required by the terms of a mortgage agreement to transfer \$340,000 of tuition and fees that have been recorded as revenue in the unrestricted current funds to pay principal and interest on long-term debt that is carried as a liability in the plant fund accounts. The transfer of funds is recorded as follows:

*Mandatory Transfer*

| <b>Unrestricted Current Funds</b>  |         |         |
|--|---------|---------|
| Mandatory Transfer to Plant Funds  | 340,000 |         |
| Cash   |         | 340,000 |
| To record transfer of funds for payment of principal and interest on mortgage note carried as a liability in Plant Fund. |         |         |
| <b>Plant Fund (for Retirement of Indebtedness)</b>   |         |         |
| Cash   | 340,000 |         |
| Fund Balance—Restricted  |         | 340,000 |
| To record receipt of mandatory transfer from Unrestricted Current Funds.   |         |         |

Mandatory and nonmandatory transfers are shown separately in both the statement of changes in fund balances and in the statement of current funds revenues, expenditures, and other changes.

## Revenue and Support from Fund-Raising Events

The costs incurred by VHWOs and ONNOs in carrying out public support fund-raising events, such as dinners, dances, theater parties, auctions, and so on, are deducted from gross contributions received; and only the net funds provided by the event are reported as support (revenue) in the financial statements.

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## 19.5 CONTRIBUTIONS

**LO 7** How contributions are recorded.

All NNOs under FASB jurisdiction are required to recognize contributions, including unconditional promises to give, as *revenue* in the period received.<sup>5</sup> The standard does not apply to tax exemptions, abatements, or incentives, or to transfers of assets from a government to a business enterprise. Contributions include gifts of cash, pledges (promises to give cash or other assets), donated services, and gifts of noncash assets. Conditional promises to give (where the contribution would be returned if the conditions are not met) are recognized when they become unconditional, that is, when the conditions are substantially met. Donors sometimes restrict unconditional contributions to be used for a specific purpose. Donor-restricted contributions are still reported as revenues and result in an increase in *restricted* net assets. Other contributions are reported as revenues resulting in increases in *unrestricted* net assets. Expiration of donor restrictions results in a transfer from restricted net assets to unrestricted net assets.

<sup>5</sup> FASB ASC paragraphs 958-605-25-8 through 13. ASC 958 defines an unconditional promise to give as a promise to give that depends only on the passage of time or demand by the promises for performance.

## Pledges

### RELATED CONCEPTS

The objectives of financial accounting for both business and nonbusiness organizations is to provide information that is *useful to decision makers*. However, the absence of traditional owners in a non-business organization generally means that information needs to be presented for current and potential *resource-providers* to make rational decisions regarding resource allocation for the organization.

Pledges are signed commitments to contribute specific amounts of money to an organization on a future date or in installments. Although resembling promissory notes, pledges generally are not enforceable contracts. Regardless, pledges are recorded as revenues when a promise to give is nonrevocable and unconditional, at the present value of the expected receipts.<sup>6</sup> All NNOs should establish an allowance for uncollectible pledges.

The recording of pledges may be illustrated by assuming that, as a result of a fund-raising campaign, an organization receives written and signed pledges to contribute \$300,000 for unrestricted use by the organization in the current or future years. Experience indicates that about 15% of pledges from similar past campaigns were never collected. Entries to record the pledges using the accrual basis of accounting are as follows.

| <b>Current Unrestricted Fund</b> |  |         |         |
|----------------------------------|--|---------|---------|
|                                  | (1) Pledges Receivable                                   | 300,000 |         |
|                                  | Revenue—Contributions                                    |         | 300,000 |
|                                  | To record gross amount of campaign pledges.              |         |         |
|                                  | (2) Expense—Provision for Uncollectible Pledges          | 45,000  |         |
|                                  | Allowance for Uncollectible Pledges                      |         | 45,000  |
|                                  | To record provision for estimated uncollectible pledges. |         |         |

Contributions are shown net of the Provision for Uncollectible Pledges in the operating statement, and Pledges Receivable are shown net of the Allowance for Uncollectible Pledges in the statement of financial position. If the amounts pledged contain restrictions on their use, entries similar to those made in the current unrestricted fund (above) would be made in the current restricted fund or in a loan, endowment, or plant fund as appropriate. If the payments for unconditional promises to give are not received by year-end, the contribution should be discounted and recorded in temporarily restricted net assets.

## Donated Services

**LO 8** How donated services are recorded.

Some of the operations and activities of NNOs may be carried out by volunteers who donate their time and expertise. Donated services may range from the limited participation of large numbers of volunteers in fund-raising activities to active and sustained involvement in the organization by a few dedicated individuals.

Contributions of services are *recognized* only *if* the services received:

1. Create or enhance nonfinancial assets, *or*
2. a. Require specialized skills,
  - b. Are provided by individuals possessing those skills, *and*
  - c. Would need to be purchased if not provided by donation.

To illustrate the first alternative, consider an architect who contributes services to construct a building. Since the service helps create a fixed asset, the service would be recognized. For example, if a building valued at \$1,500,000 included an estimated value of \$400,000 assigned to the architectural services, then revenue from donated services of \$400,000 would be recognized.

If the first alternative is not met, then all three conditions of the second alternative (2 above) must be satisfied in order for the contribution to be recognized. Suppose that a retired tax partner from a Big Five firms offers to teach a tax course at a local college. Since the school would need to hire a qualified person possessing specialized skills to teach the course, the service would be recorded. These conditions generally prohibit organizations from recording the value of the services of volunteer solicitors and from recording the value of donated services received on a casual or intermittent basis.

<sup>6</sup> Suppose an alumnus offered to give \$10 million to the school *if* 90% of his fellow alumni contributed money to the school. This conditional promise would be disclosed in the footnotes and would not be recorded until the condition is met and the promise becomes unconditional.

When these conditions are met, NNOs record and report the value of the services received, net of incidental expenses reimbursed to the contributing personnel, as revenue or support in the current unrestricted fund (or the general fund for hospitals). In the same entry, an amount equal to the revenue or support recognized is recorded as an expense in the appropriate expense account (e.g., professional fees expense).

**Example of Donated Service** Assume that the necessary conditions are met and that the services of a CPA who audited the records of a heart association at no charge were valued at \$15,000, and those of an attorney who provided necessary legal services to the organization at no charge had a value of \$6,000. The entry to record the revenue and expense resulting from the donated services is:

| <b>Current Unrestricted Fund</b> |                                      |        |
|----------------------------------|--------------------------------------|--------|
| (1)                              | Management and General Expense       | 21,000 |
|                                  | Donated Services Revenue             | 21,000 |
|                                  | To record value of donated services. |        |

Had the organization incurred any costs for incidental expenses of the CPA or attorney, the value of the services recorded would be reduced by the amount of those costs.

## Donated Collection Items

Contributions of works of art, historical treasures, and similar assets are not capitalized if (a) the donated items are added to collections held for public exhibition, education, or research in furtherance of public service rather than financial gain; (b) the donated items are protected, cared for, and preserved; and (c) organizational policy requires proceeds from any future sale of the items to be used to acquire other items for collections.

## Donor-Imposed Restricted Contributions

Donor-imposed restrictions limit the use of assets that are received. Some restrictions limit the organization's ability to sell the asset. Restrictions may be permanent or temporary. For instance, temporary restrictions may stipulate that the resource can only be used after a specified date, for a particular program or service, or to acquire buildings or equipment. In any case, the organization needs to distinguish between contributions received that increase permanently restricted net assets, contributions that increase temporarily restricted net assets, and those that increase unrestricted net assets. This separation provides users with important information such as: Were aggregate net assets maintained only because permanently restricted net assets made up for a decline in unrestricted net assets? The primary difference between a donor-imposed restriction and a conditional contribution is that a donor-imposed restriction limits the use of donated assets while a conditional contribution creates a barrier that must be overcome before assets transferred or promised become contributions received. Therefore, donor-imposed restricted assets are recorded as contribution revenues (also known as restricted support) in the period received, thus increasing either temporarily or permanently restricted net assets. Then, as the expenditures are made, or the restriction expires, the net assets are released from temporarily restricted net assets or permanently restricted net assets and are reported as unrestricted net assets on the Statement of Activities.

For example, suppose a university received \$120,000 in contributions that were restricted for specific operating purposes and spent \$80,000 in the current year, with the remaining \$40,000 spent in the second year. The following entries would be recorded:

| <b>Restricted Current Funds</b> |  |         |
|---------------------------------|--|---------|
| (1)                             | Cash   | 120,000 |
|                                 | Contribution Revenue (restricted support)                  | 120,000 |
|                                 | To record restricted contributions.                        |         |
| (2)                             | Net Assets Released from Restrictions                      | 80,000  |
|                                 | Cash   | 80,000  |
|                                 | To release funds from restricted into unrestricted assets. |         |

**Unrestricted Current Funds**

|   |        |        |
|---|--------|--------|
| (1) Cash  | 80,000 |        |
| Net Assets Released from Restrictions                               |        | 80,000 |
| To receive funds into unrestricted from restricted assets.          |        |        |
| (2) Expenses—educational  | 80,000 |        |
| Cash  |        | 80,000 |
| To record expenditures of restricted assets for specified purposes. |        |        |

The effect of these transactions is reported in the following condensed statement of activities.

|                                       | <i>Unrestricted</i> | <i>Temporarily Restricted</i> |
|---------------------------------------|---------------------|-------------------------------|
| Revenues and Support                  |                     | \$120,000                     |
| Net Assets Released from Restrictions | \$80,000            | (80,000)                      |
| Total Revenues and Support            | 80,000              | 40,000                        |
| Expenses                              | (80,000)            |                               |
| Changes in Net                        |                     |                               |
| Assets                                | —0—                 | \$ 40,000                     |

In the next year, assuming that the money is spent as planned, the remaining \$40,000 is released from restrictions and recorded as an expense.

**TEST YOUR KNOWLEDGE 19.1**

**NOTE:** Solutions to *Test Your Knowledge* questions are found at the end of each chapter before the end-of-chapter questions.

**Short Answer**

Determine how much of the following contributions should be treated as unrestricted revenue during the current year.

- Mary contributed \$40,000 cash to her alma mater. She did not impose any restrictions on the contribution.
- David contributed \$60,000 cash to State University. He stipulated that the money could not be used until Professor Lowgrade retired. Professor Lowgrade is not expected to retire for five years.
- Betty pledged to give \$10,000 to the University of Tree-top by the end of the year.

**19.6 ACCOUNTING FOR PLANT FUNDS**

**Lo 9** Funds used to account for property, plant, and equipment.

Most transactions involving property, plant and equipment are accounted for by NNOs other than hospitals in a plant fund. The plant fund is used to account for (1) the property, plant and equipment owned by the organization and the net investment, (2) the accumulation of financial resources for the acquisition or replacement of property, plant and equipment, (3) the acquisition and disposal of property, plant and equipment, (4) liabilities relating to the acquisition of property, plant and equipment, and (5) depreciation expense and accumulated depreciation.

**Colleges and Universities**

Colleges and universities also account for the accumulation of financial resources to service-related indebtedness in the plant fund. All types of NNOs are required by generally accepted accounting principles to record depreciation expense.

**IN  
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NEWS**

The combination of rapid change in technology and university capital budgeting procedures can result in what amounts to the university “capitalizing scrap.” By the time the budgeting and purchasing procedures are implemented, and the equipment is delivered, it is not far from being obsolete, at which point the whole procedure has to start over. As an alternative, colleges can consider leasing equipment.<sup>7</sup>

<sup>7</sup> *Tax Adviser*, Vol. 29:11, “From Here to Technology in Less than an Eternity,” by Corey Schou, K. Smith, and W. Stratton, November 1998, pp. 790–793.

The plant fund of colleges and universities is usually divided into four separate self-balancing subgroups:<sup>8</sup>

1. *Unexpended Plant Fund*: to account for resources used to purchase property, plant and equipment (similar to a capital projects fund of a municipality).
2. *Funds for Renewals and Replacements*: to account for resources used to renovate or replace existing property, plant and equipment (also similar to a capital projects fund of a municipality).
3. *Funds for Retirement of Indebtedness*: to account for resources to be used to retire or pay interest on debt incurred in the acquisition or replacement of property, plant and equipment (similar to the debt service fund of a municipality).
4. *Investment in Plant*: to account for the institution's property, plant and equipment, related debt, and net investment in plant.

Both board-designated funds and externally restricted funds are accounted for in the plant fund of colleges and universities; therefore, a distinction is made between restricted and unrestricted fund balances.

To illustrate the funds and the procedures used to account for transactions relating to property, plant and equipment by different NNOs, consider the following example.

#### PLANT FUND EXAMPLE

1. During the year, resources are obtained for the acquisition of property, plant and equipment as follows:

|   |                  |  |
|---|------------------|--|
| Loan proceeds                               | \$500,000        |  |
| Contributions restricted by donor for plant | 200,000          |  |
| Board designation of unrestricted funds     | 50,000           |  |
|   | <u>\$750,000</u> |  |

2. Land is acquired for a building site for \$750,000.
3. Principal and interest of \$200,000 and \$20,000, respectively, are paid on long-term obligations relating to property, plant and equipment.
4. The amount of depreciation expense on all fixed assets for the year is \$235,000.

The transactions described above would be recorded by colleges and universities as follows (the journal entry numbers correspond to the information in the box above):

#### Unrestricted Current Fund

|      |  |        |        |
|------|--|--------|--------|
| (1A) | Nonmandatory Transfer to Plant Funds (unexpended)                        | 50,000 |        |
|      | Cash   |        | 50,000 |
|      | To record transfer of board designated unrestricted funds to Plant Fund. |        |        |

#### Unexpended Plant Fund

|      |   |         |         |
|------|---|---------|---------|
| (1B) | Cash  | 750,000 |         |
|      | Notes Payable   |         | 500,000 |
|      | Revenue—Contributions—Restricted  |         | 200,000 |
|      | Fund Balance—Unrestricted   |         | 50,000  |
|      | To record receipt of resources to be used for additions to property, plant and equipment. |         |         |

|      |                                |         |         |
|------|--------------------------------|---------|---------|
| (2A) | Land                           | 750,000 |         |
|      | Cash                           |         | 750,000 |
|      | To record acquisition of land. |         |         |

<sup>8</sup> It is likely that most NNOs will reorganize the plant fund in the future to agree more readily with the new external reporting practices. For example, instead of using the four subfunds of the plant fund, they might collapse them all into one fund.

|      |   |         |         |
|------|---|---------|---------|
| (2B) | Fund Balance—Restricted   | 200,000 |         |
|      | Fund Balance—Unrestricted   | 50,000  |         |
|      | Notes Payable   | 500,000 |         |
|      | Land  |         | 750,000 |
|      | To transfer assets and related liabilities to Investment in Plant Fund. |         |         |

#### Investment in Plant Fund

|      |  |         |         |
|------|--|---------|---------|
| (2C) | Land   | 750,000 |         |
|      | Notes Payable  |         | 500,000 |
|      | Net Investment in Plant  |         | 250,000 |
|      | To record acquisition of land and related indebtedness from the Unexpended Plant Fund. |         |         |

The construction of assets and related debt is accounted for in the *unexpended plant fund* until the construction is completed. On the completion of construction, the assets and related liabilities are transferred from the unexpended plant fund to the *investment in plant fund* using entries similar to those presented in (2B) and (2C) above.

#### Funds for Retirement of Indebtedness

|      |  |         |         |
|------|--|---------|---------|
| (3A) | Fund Balance—Restricted  | 200,000 |         |
|      | Cash (principal)   |         | 200,000 |
|      | Interest Expense   | 20,000  |         |
|      | Cash   |         | 20,000  |
|      | To record payment of principal and interest on obligations related to property, plant and equipment. |         |         |

#### Investment in Plant Fund

|      |  |         |         |
|------|--|---------|---------|
| (3B) | Notes Payable  | 200,000 |         |
|      | Net Investment in Plant  |         | 200,000 |
|      | To record reduction in indebtedness related to property, plant and equipment.  |         |         |
| (4)  | Depreciation Expense   | 235,000 |         |
|      | Accumulated Depreciation   |         | 235,000 |
|      | To record annual depreciation on property, plant and equipment that is included in the assets of the Investment in Plant Fund. |         |         |

Prior to 1990, depreciation of assets was not required for colleges and universities (except in endowment funds and nonexpendable trust funds). *SFAS No. 93*, "Recognition of Depreciation by Not-for-Profit Organizations," as amended by *SFAS No. 99*, requires that all NNOs including colleges and universities measure and report depreciation and accumulated depreciation on all depreciable property, plant and equipment.

## Hospitals

Most property, plant and equipment transactions of hospitals are accounted for in the General Fund and not in a Plant Fund. However, contributed resources that may be used only to acquire property, plant and equipment are accounted for in a *plant replacement and expansion (restricted) fund* until the expenditures that satisfy the donor's terms are made. At that time, the assets acquired and the related fund balance are recorded in (transferred to) the General Fund.

To illustrate, the transactions presented in the preceding example would be recorded by a hospital as follows:

#### Plant Replacement and Expansion Fund

|      |  |         |         |
|------|--|---------|---------|
| (1A) | Cash   | 200,000 |         |
|      | Revenue—Contributions—Restricted   |         | 200,000 |
|      | To record receipt of contributions that may be used only to acquire property, plant and equipment. |         |         |

**General Fund**

|      |   |         |         |
|------|---|---------|---------|
| (1B) | Cash  | 500,000 |         |
|      | Notes Payable   |         | 500,000 |
|      | To record proceeds from note authorized by governing board to be used for acquisition of property, plant and equipment. |         |         |

The hospital *may* also record a reclassification of the General Fund Balance and establish a Board Designated Reserve for Plant Expansion in an amount of unrestricted funds designated by the governing board for additions to property, plant and equipment. It is assumed here that such designations are not recorded but are simply disclosed in the footnotes to the financial statements.

**Plant Replacement and Expansion Fund**

|      |              |         |         |
|------|--------------|---------|---------|
| (2A) | Fund Balance | 200,000 |         |
|      | Cash         |         | 200,000 |

**General Fund**

|      |              |         |         |
|------|--------------|---------|---------|
| (2B) | Land         | 750,000 |         |
|      | Cash         |         | 550,000 |
|      | Fund Balance |         | 200,000 |

Taken together, entries (2A) and (2B) record the acquisition of land with \$200,000 in externally restricted funds and \$550,000 in unrestricted board designated funds.

**General Fund**

|     |  |         |         |
|-----|--|---------|---------|
| (3) | Interest Expense   | 20,000  |         |
|     | Notes Payable  | 200,000 |         |
|     | Cash   |         | 220,000 |
|     | To record payment of principal and interest.   |         |         |
| (4) | Depreciation Expense   | 235,000 |         |
|     | Accumulated Depreciation   |         | 235,000 |
|     | To record annual depreciation expense on property, plant and equipment that is included in assets of the General Fund. |         |         |

## Voluntary Health and Welfare Organizations and Other Nongovernment Nonbusiness Organizations

Voluntary health and welfare organizations and ONNOs use a single Plant Fund and report the fund balance in two classifications as “expended” or “unexpended.” The Expended Fund Balance is equal to the organization’s net investment in property, plant and equipment (gross assets less related liabilities and accumulated depreciation). The Unexpended Fund Balance represents the amount of resources available to replace or acquire additional property, plant and equipment.

These same transactions illustrated previously would be accounted for by VHWOs or ONNOs as follows:

**Current Unrestricted Fund**

|      |   |        |        |
|------|---|--------|--------|
| (1A) | Transfer to Plant Funds                   | 50,000 |        |
|      | Cash                                      |        | 50,000 |
|      | To record transfer of cash to Plant Fund. |        |        |

**Plant Fund**

|      |   |         |         |
|------|---|---------|---------|
| (1B) | Cash  | 750,000 |         |
|      | Notes Payable   |         | 500,000 |
|      | Contributions—Revenue—Restricted  |         | 200,000 |
|      | Transfer from Current Unrestricted Fund   |         | 50,000  |
|      | To record receipt of resources to be used for additions to property, plant and equipment. |         |         |



While VHWOs classify contributions that are restricted for the acquisition of plant assets as Support, ONNOs classify such contributions in a separate section of the operating statement entitled Capital Additions.

| <b>Plant Fund</b> |  |         |         |
|-------------------|--|---------|---------|
| (2)               | Land   | 750,000 |         |
|                   | Cash   |         | 750,000 |
|                   | To record acquisition of land.   |         |         |
| (3)               | Notes Payable  | 200,000 |         |
|                   | Interest Expense   | 20,000  |         |
|                   | Cash   |         | 220,000 |
|                   | To record payment of principal and interest on obligations related to property, plant and equipment.         |         |         |
| (4)               | Depreciation Expense   | 235,000 |         |
|                   | Accumulated Depreciation   |         | 235,000 |
|                   | To record annual depreciation expense on property, plant and equipment included in assets of the Plant Fund. |         |         |

As noted earlier, the Plant Fund Balance is classified as Expended Fund Balance and Unexpended Fund Balance. The Expended Fund Balance is analogous to the Net Investment in Plant recorded in the plant funds of a university. Before the financial statements are prepared, the Expended Fund Balance must be adjusted to reflect the change in the organization's net investment in plant resulting from the transactions above. The change in the net investment in plant is calculated as follows:

|            |                                     |           |           |
|------------|-------------------------------------|-----------|-----------|
| Increases: |                                     |           |           |
|            | Purchase of Land                    | \$750,000 |           |
|            | Reduction of Indebtedness           | 200,000   | \$950,000 |
| Decreases: |                                     |           |           |
|            | Issue Notes Payable                 | (500,000) |           |
|            | Depreciation Expense                | (235,000) | (735,000) |
|            | Net Increase in Investment in Plant |           | \$215,000 |

| <b>Plant Fund</b> |   |         |         |
|-------------------|---|---------|---------|
| (5)               | Unexpended Fund Balance   | 215,000 |         |
|                   | Expended Fund Balance   |         | 215,000 |
|                   | To recognize the effect on the Fund Balances of the increase in the organization's net investment in property, plant and equipment. |         |         |

## Nonexhaustible Assets of Other Nongovernment Nonbusiness Organizations

Prior to 1990, ONNOs were not required to recognize depreciation expense and accumulated depreciation on "nonexhaustible" assets such as landmarks, monuments, cathedrals, and historical treasures or on structures used primarily as houses of worship. In *SFAS No. 93*, the Board considered and rejected the assertions that such assets are nonexhaustible and that those assets and structures used primarily as houses of worship need not be depreciated. Thus depreciation concepts and measurement are applied to these as well as other depreciable assets of ONNOs. However, depreciation need not be recognized on historical treasures and works of art that have estimated useful lives that are extraordinarily long. To qualify, such assets must have cultural, historical, or esthetic value that is worth preserving perpetually, and the holder must have and exercise the financial and technological ability to protect and preserve the asset.

### 19.7 ACCOUNTING FOR ENDOWMENT FUNDS

**LO 10** Basic accounting by Endowment funds.

Endowment funds are similar to the nonexpendable trust funds of governmental units described in Chapter 18. When the donated funds have been given in perpetuity, the endowment fund is referred to as a *pure endowment fund*. When the donor has specified a particular date or event

after which the principal of the endowment fund may be expended, the endowment fund is referred to as a *term endowment fund*. Resources of an unrestricted fund that are designated by the governing board for endowment purposes are accounted for in the unrestricted fund by all NNOs except colleges and universities. Colleges and universities may transfer such resources from the unrestricted current fund to a separate fund referred to as a quasi-endowment fund. Since the establishment of a quasi-endowment fund may be rescinded at the discretion of the governing board, it is recorded as a non-mandatory transfer in the unrestricted current fund and as a credit to Fund Balance—Unrestricted in the quasi-endowment fund.

The income from endowment funds generally may be expended as earned either for specified purposes or at the discretion of the governing board. If there are no restrictions on the use of the endowment fund income, it is recognized as revenue in the organization's unrestricted or general fund. Otherwise, endowment fund income is recognized as a resource addition to current restricted (specific purpose) funds, loan funds, plant funds, or other funds as appropriate to the use of the endowment income specified by the donor.

To illustrate the recording of endowment fund income that may be used for restricted and unrestricted purposes, assume that dividends and interest on endowment fund investments amount to \$400,000, of which \$150,000 is restricted for research grants and the remainder is unrestricted. Suppose that \$100,000 in research grants is awarded during the period. Entries to record the income on endowment fund investments are summarized here:

| <b>Endowment Fund</b>            |   |         |
|----------------------------------|---|---------|
| (1)                              | Cash  | 400,000 |
|                                  | Due to Unrestricted Fund<br>(General Fund of Hospital)        | 250,000 |
|                                  | Due to Restricted Fund<br>(Specific Purpose Fund of Hospital) | 150,000 |
|                                  | To record receipt of dividends and interest.                  |         |
| <b>Current Unrestricted Fund</b> |   |         |
| (2)                              | Due from Endowment Fund                                       | 250,000 |
|                                  | Unrestricted Income (Investment Income)                       | 250,000 |
|                                  | To record unrestricted Endowment Fund income.                 |         |
| <b>Current Restricted Fund</b>   |   |         |
| (3)                              | Due from Endowment Fund                                       | 150,000 |
|                                  | Restricted Income (Investment Income)                         | 150,000 |
|                                  | To record restricted Endowment Fund income.                   |         |
| (4)                              | Research Expense  | 100,000 |
|                                  | Cash  | 100,000 |
|                                  | To record payment of research grants.                         |         |

**Accounting for Public Nonprofit Organizations** For *public* nonprofits (governmental nonprofits), accounting for endowment funds differs from the external reports of *private* NNOs. This section illustrates the differences in accounting between governmental nonprofits (under GASB rules) and private nonprofits (under FASB rules). For governmental nonprofits, restricted endowment fund income is not reported as revenue until it is expended for the restricted purposes. Entries (3) and (4) above would be replaced with entries (3a), (4a), and (4b) below:

| <b>Current Restricted Fund</b> |   |         |
|--------------------------------|---|---------|
| (3a)                           | Due from Endowment Fund                           | 150,000 |
|                                | Fund Balance (Deferred Income)                    | 150,000 |
|                                | To record availability of restricted income.      |         |
| (4a)                           | Expenditure                                       | 100,000 |
|                                | Cash  | 100,000 |
|                                | To record payment of research grants.             |         |
| (4b)                           | Fund Balance (Deferred Income)                    | 100,000 |
|                                | Income from Endowment Fund (Investment Income)    | 100,000 |
|                                | To record revenue for restricted assets expended. |         |

*Public* hospitals would report the cash as a reduction of fund balance in the specific purpose fund, with the expenditure and the income offsetting each other in the General Fund.

## 19.8 ACCOUNTING FOR INVESTMENTS

### LO11 Equity investments.

FASB ASC paragraph 958-320-35-1 requires that all not-for profit organizations report investments in equity securities with readily determinable fair values and all debt securities at fair value in the appropriate net asset category (unrestricted, temporarily restricted, or permanently restricted net assets). Unrealized gains and losses are to be recognized as well as realized gains and losses in the Statement of Activities. Investments accounted for using the equity method, as well as investments in consolidated subsidiaries, are excluded from this requirement.<sup>9</sup> Readily determined fair values are usually those quoted in a stock exchange.

To illustrate, suppose that Vanderbilt University receives an unrestricted cash gift of \$800,000 and immediately purchases an equity investment with the same fair value. The following entries are made:

|  |         |         |
|--|---------|---------|
| (1) Cash   | 800,000 |         |
| Revenue—Contributions—Unrestricted                       |         | 800,000 |
| To record unrestricted contribution.                     |         |         |
| (2) Equity Investments                                   | 800,000 |         |
| Cash   |         | 800,000 |
| To record the purchase of marketable equity investments. |         |         |

There are no specific requirements for reporting investment income (such as dividends or interest) other than distinguishing among the net assets. Suppose that during the year, the investments earned dividend income of \$30,000 and that at the end of the year, the investment was worth \$820,000. The following entries would be made:

|  |        |        |
|--|--------|--------|
| (1) Cash   | 30,000 |        |
| Investment Income—Unrestricted                                 |        | 30,000 |
| To record the receipt of dividends from investment.            |        |        |
| (2) Equity Investments   | 20,000 |        |
| Unrealized Gain on Investment—Unrestricted                     |        | 20,000 |
| To adjust the investment to market (\$820,000 less \$800,000). |        |        |

If the investment income is restricted by donors, the income would be classified as either temporarily or permanently restricted.

### Investment Pools

To improve effectiveness and flexibility in investing, NNOs often pool the investments of different funds into a single investment portfolio. Once placed in the pooled investment portfolio, individual securities are no longer identified with the contributing fund. Rather, they are pooled with all other investments. Gains, losses, and income of the investment portfolio pool are allocated by maintaining a record of the percentage interest (equity) of each fund in the investment pool. Investments that are nonmarketable should generally not be included in the pool but should be kept separate.

The initial equity interest of each fund in the investment pool is based on the *relative market value* of the investments contributed. Revised percentage (equity) interests in the investment pool must be calculated whenever additional resources are placed or removed from the investment pool. At the time securities are brought into, or removed from, the investment pool, the carrying values of the securities are usually adjusted to their fair market values on the records of the participating funds.

<sup>9</sup> Real estate, mortgage notes, equity securities without a determinable fair value, and venture capital funds are also excluded.


 IN  
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NEWS

A spokesperson for Sacred Heart Medical Center in Spokane, Washington, said the hospital did not belong to the list of “Fifty Fastest Growing Hospitals” recently released because a change in accounting methods had resulted in a deceptive depiction of its growth. Similarly, Ron Anderson, M.D. and CEO of a Dallas hospital, said a change recommended by the FASB in how the hospital recognized its revenues had made the hospital “look like” it had suddenly grown by \$80 to \$90 million.<sup>10</sup>

## 19.9 ACCOUNTING FOR LOAN FUNDS

### LO12 Accounting for loan funds.

Loan funds are used to account for loans to students and staff of colleges and universities, for loans to employees of hospitals, and for loans to beneficiaries of the interests of certain ONNOs (for example, loans to music students by symphony orchestra societies). Loan funds are generally revolving (repayments of loan balances and interest are in turn loaned to other individuals).

Historically, loan funds did not use any revenue or expense accounts, and all transactions were recorded directly to the fund balance. It was assumed that any income earned would offset the costs of operating the fund and was netted against the fund balance. For internal reporting purposes, these same procedures might be followed. Currently, for external reporting purposes, all revenues and expenses must be recognized on an accrual basis. Therefore, for external reporting purposes, the following entries would be made:

|  |         |         |
|--|---------|---------|
| (1) Cash   | 200,000 |         |
| Revenue—Contributions—Restricted   |         | 200,000 |
| To record contribution received for establishment of a Loan Fund.                  |         |         |
| (2) Loans Receivable   | 125,000 |         |
| Cash   |         | 125,000 |
| To record loans to students.   |         |         |
| (3) Bad Debt Expense   | 2,500   |         |
| Allowance for Uncollectible Loans  |         | 2,500   |
| To record estimated allowance for uncollectible loans.                             |         |         |
| (4) Investments  | 75,000  |         |
| Cash   |         | 75,000  |
| To record investment of excess funds in money market account.                      |         |         |
| (5) Allowance for Uncollectible Loans  | 500     |         |
| Loans Receivable   |         | 500     |
| To record write-off of a loan to student severely disabled in automobile accident. |         |         |
| (6) Investments  | 5,000   |         |
| Investment Income—Restricted   |         | 5,000   |
| To record income on money market account.  |         |         |

## 19.10 ACCOUNTING FOR AGENCY (CUSTODIAL) FUNDS

An agency (custodial) fund is the same as its counterpart in a governmental unit. It is used to account for the assets held by an NNO as a custodian for others. Unless significant amounts are involved, resources held by an NNO as an agent for others are often accounted for as assets and liabilities in the unrestricted or general fund rather than in a separate agency fund. When a separate agency fund is used, the balance in the fund is reported as a liability since the organization does not have any equity in the fund. To illustrate, assume that resources in the amount of \$15,000 belonging to the Association of Volunteer Aids are

<sup>10</sup> *Health Care Strategic Management*, Vol. 17:4, “Some on ‘Fastest Fifty’ List of Fast-Growing Hospitals Say They Don’t Belong There,” by Ed Egger, April 1999, pp. 17–19.

deposited with an NNO. Entries to account for this agency relationship in the unrestricted fund are as follows:

| <b>Unrestricted Fund</b> |   |        |        |
|--------------------------|---|--------|--------|
| (1)                      | Cash  | 15,000 |        |
|                          | Due to Volunteer Aids   |        | 15,000 |
|                          | To record deposit of assets belonging to Association of Volunteer Aids. |        |        |
| (2)                      | Due to Volunteer Aids   | 15,000 |        |
|                          | Cash  |        | 15,000 |
|                          | To record distribution of assets to Association of Volunteer Aids.      |        |        |

Similar entries are made in an agency fund if such a fund is used.

## 19.11 ACCOUNTING FOR ANNUITY AND LIFE INCOME FUNDS

### Lo13 The use of an annuity fund.

An NNO may accept the contribution of assets to the organization on the condition that the organization make annuity payments to a specified recipient for a specified period of time (*annuity fund*) or that the organization pay the income earned on the contributed assets to a specified recipient during his or her lifetime (*life income fund*). The major distinction between the two funds is that the beneficiary of an annuity fund is assured of periodic payments of a **stated amount**, whereas life income fund beneficiaries receive periodic payments of **varying amounts** depending on the earnings of the fund. At the end of the annuity or on the death of the life income beneficiary, the unexpended assets of the fund are transferred to the unrestricted fund or to an endowment fund, loan fund, plant fund, or other fund specified by the donor.

To illustrate transactions recorded in an Annuity Fund, assume that on January 1, 2014, an individual donated securities with a market value of \$325,000 to an NNO on the condition that she be paid \$40,000 a year for 10 years beginning December 31, 2014. At the end of the 10-year period, unexpended assets are to be placed in a permanent endowment fund. It is estimated that the investments in the Annuity Fund will yield at least 8% annually. Entries to account for the basic transactions of the Annuity Fund are presented here:

| <b>Annuity Fund</b> |   |         |         |
|---------------------|---|---------|---------|
| (1)                 | Investments   | 325,000 |         |
|                     | Annuity Payable   |         | 268,403 |
|                     | Revenue—Contributions—Permanent Restriction   |         | 56,597  |
|                     | To record establishment of an Annuity Fund with an Annuity Payable equal to the present value of an annuity of \$40,000 discounted over 10 periods at 8% ( $6.71008 \times \$40,000 = \$268,403$ ). |         |         |
| (2)                 | Cash  | 26,000  |         |
|                     | Annuity Payable   |         | 26,000  |
|                     | To record investment income for year at 8%.   |         |         |
| (3)                 | Annuity Payable   | 40,000  |         |
|                     | Cash  |         | 40,000  |
|                     | To record annual annuity payment.   |         |         |

Each year the Annuity Payable balance is reduced by annuity payments and by losses on investments and is increased by investment income and gains on investments. The reasoning is that if actual investment earnings equal expected investment earnings, the net decrease in the Annuity Payable balance each year will be equal to the decrease in its present value. If the actuarial assumptions change, an entry to Annuity Payable would be made with an offset to a Change in Annuity Payable—Permanent Restriction account. This account is reported on the Statement of Activities.

## 19.12 ISSUES RELATING TO COLLEGES AND UNIVERSITIES

### College and University Issues

*Recognition of Service Fee Revenue:* The full amount of university tuition and fees is recorded as revenue at standard rates even though the university does not intend to collect the full amount because of remissions or waivers for scholarships and fellowships. Amounts of tuition and fees that are waived are recorded as expenditures for scholarships and fellowships.

*Operating versus Nonoperating Income:* The FASB does not require that organizations disclose a measure of operating income. Therefore, if an organization has a 5% spending rate, any investment income earned above or below this rate might be classified as nonoperating. It will be important to users to understand the institution's policies and any relevant state laws.

### Issues Relating to Hospitals

#### Lo14 Reporting issues of hospitals.

Hospital patient service revenue is recorded at established rates, regardless of whether the hospital expects to collect the full amount. Some exceptions and several other issues relating to hospital revenues are addressed below:

*Charity Care:* Hospitals are required by some federal grant programs to provide health-care services to individuals who cannot pay. Charity care revenues are not included in net revenues reported on the income statement. If the revenue was recorded, an entry to Debit Revenue and Credit Accounts Receivable should be made to reverse it out.

*Contractual Allowances:* Contractual allowances result from agreements made with third-party payers. Hospitals have standard rates that they charge for specific procedures. However, third-party payers, such as Blue Cross/Blue Shield, stipulate amounts that they are willing to pay. Therefore, contractual allowances are used to reduce the hospital's gross revenue to revenues net of contractual allowances.

*Capitation Revenues:* Health care organizations may contract with groups (or individuals) to provide health care services for some defined period of time. The health care firms generally receive a fixed amount each month to provide any necessary services needed for that month. Thus revenues are easily budgeted, and cost control becomes an important issue if a large percentage of revenues comes from capitation contracts.

*Malpractice:* Potential losses from malpractice claims are enormous. Health care organizations are constantly monitoring and altering the controls needed to help prevent such claims. Current rules for malpractice follow FASB ASC topic 450 (Contingencies).

*Presentation of Bad Debts on the Statement of Operations:* A proposed Accounting Standard Update by the FASB would require reclassifying the provision for bad debts (bad debt expense) from an operating expense to a reduction from revenue (net of contractual allowances).

### SUMMARY

- 1 *Describe the source of accounting standards for nongovernment nonbusiness organizations (NNOs).* Before 1970, there were several professional bodies that prescribed accounting practices for nongovernment nonbusiness organizations. During the 1970s, the AICPA developed audit guides for hospitals, colleges and universities, and voluntary health and welfare organizations. In 1979, the FASB assumed responsibility for setting accounting standards for all nonbusiness organizations except government units. Government units follow the direction of the GASB.
- 2 *Identify the three basic statements for NNOs.* The three basic financial statements include a statement of financial position (balance sheet), a statement of activities, and a statement of cash flows. Net assets are presented in three categories in the statement of financial position. These categories are unrestricted net assets, temporarily restricted net assets, and permanently restricted net assets.
- 3 *Describe the basic funds used by nongovernment nonbusiness organizations.* Basic funds used by NNOs include the following six funds. (1) Current funds (both restricted and unrestricted):

These funds account for financial resources used in current period operations. Hospitals typically call these special purpose funds and general funds respectively. (2) Plant funds: These funds are used to account for different aspects of property, plant, and equipment, including the debt to acquire them. (3) Endowment funds: These funds are used to account for donated contributions that must be maintained permanently (pure endowment funds) or that must be maintained until a certain date (term endowment funds). (4) Loan funds: These funds are used to account for loans to students and staff of colleges and universities, for loans to employees of hospitals, and often to beneficiaries of other nongovernment nonbusiness organizations (ONNOs). (5) Agency or custodial funds: These funds are used to account for funds held for others. (6) Annuity or life income funds: Sometimes an NNO accepts a contribution on the condition that periodic payments be made to some recipient for a specific period of time (annuity fund) or that the earnings be paid to some recipient during his or her lifetime (life income fund).

- 4 *Distinguish between a current restricted fund and an unrestricted fund.* Current funds are used to account for current period resources. Current unrestricted funds include resources that may be expended at the discretion of the governing board, while current restricted funds account for resources that are restricted because of legal, contractual, or other external restrictions. Therefore, current restricted resources can only be expended in accordance with externally imposed restrictions.
- 5 *Explain the term “assets whose use is limited.”* The governing board may designate resources of the current unrestricted fund for specific purposes, projects, or investments. Because the governing body can reverse such decisions, these funds should never be classified as restricted. These resources are typically reported separately on the statement of financial position.
- 6 *Distinguish between a mandatory and a nonmandatory transfer.* These terms are specific to accounting for colleges and universities. Mandatory transfers are interfund transfers made because of binding legal agreements or agreements made in receiving grants. For instance, if a debt agreement specifies that a portion of tuition revenues be used to meet interest payments, a university would transfer resources from a current unrestricted fund to the appropriate fund. A nonmandatory transfer would include any other transfer from the current funds to other funds made at the discretion of the governing board.
- 7 *Explain how contributions are recorded by NNOs.* Contributions, including unconditional promises to give, are recognized as revenue in the period received. Conditional promises are recognized when they become unconditional. Conditional promises should be distinguished from donor-restricted contributions. Donors sometimes restrict unconditional contributions to be used for a specific purpose. Donor-restricted contributions are still reported as revenues and result in an increase in restricted net assets. Pledges are recognized as revenues at the present value of the expected receipts when a promise is nonrevocable and unconditional.
- 8 *Understand how donated services are recorded.* If certain conditions are met, donated services are recognized as both revenue and expense. Contributions of services are recognized only if the services received create a nonfinancial asset (such as a building) or if the services received require specialized skills, are provided by someone possessing those skills, and would have to be purchased if not provided by the donation. Donated collections of art, historical treasures, or other similar assets are generally not capitalized.
- 9 *Describe the funds used to account for property, plant and equipment.* Plant funds may include an unexpended plant fund (to account for resources used to purchase plant and equipment), funds for renewals and replacement, funds for retirement of indebtedness, and investment in plant (to account for the assets and the related debt).
- 10 *Explain the basic accounting used by endowment funds.* When an endowment fund receives interest or dividends on endowment investments, the cash is recorded against a “due to fund” account. When the appropriate fund receives the cash, it is recognized as income for that fund. Also, any expenditures paid with the income of the endowment is recognized as an expense of the fund that incurred the expenditure.
- 11 *Indicate how equity investments are reported in the financial statements.* Equity investments (less than 20% ownership) and all debt investments are reported at fair value with any unrealized gains and losses reported on the Statement of Activities. Equity investments with ownership over 20% are excluded from this requirement. If the income from the investment is restricted by donors, then the income would be classified as either temporarily or permanently restricted.
- 12 *Explain the change in accounting for loan funds brought about by new standards.* Loan funds are typically revolving in that repayments of loan balances and interest are usually loaned to other individuals. Therefore, historically no revenues or expenses have been recorded. For external reporting purposes, since accrual accounting must be used, all revenues and expenses of the loan fund must now be recorded on the Statement of Activities.
- 13 *Understand the use of an annuity or life income fund.* Sometimes donors give institutions money with the condition that either a stated amount (annuity fund) or a part of the earnings (life income fund) be paid to some beneficiary. The organization records the investment at market value. A payable is recorded at the present value of the estimated amount to be paid. Revenues are then recognized for the difference. As payments are made, the payable is reduced. As income is earned, no income is recorded but, instead, the Annuity Payable account is increased. Any adjustments to the actuarial assumptions result in an adjustment to the Payable account and to the statement of activities.
- 14 *Discuss the special reporting issues of hospitals.* Some of the issues related to hospitals include accounting for charity care, contractual allowances, and capitation revenues. Charity revenues should not be included in net revenues reported on the income statement. However, hospitals are free to disclose the amount of charity care that they provide. Contractual allowances result from agreements that hospitals have made with third-party payers. Some third-party payers, such as Blue Cross/Blue Shield, stipulate amounts that they are willing to pay. The contractual allowance equals the hospital’s billing rate and the amount the third-party payer actually pays. Health care organizations often contract with groups to provide health care services for a fixed fee. Therefore, the capitation revenues are the amount the health care organization receives from this contract. Under a capitation system, revenues are fixed and the costs of providing the service and cost control are key factors in measuring the organization’s performance.

Appendix 12A, “Sample Financial Statements for Private Educational Institutions” is available online at [www.wiley.com/college/jeter](http://www.wiley.com/college/jeter).

**TEST YOUR KNOWLEDGE SOLUTIONS**

19.1

1. \$40,000
2. Zero, treated as restricted support
3. If the amount pledged is received by the end of the year, the revenue is unrestricted. Otherwise the revenue is considered restricted support.

**QUESTIONS**

- LO 1** 1. What authoritative body(s) is (are) responsible for establishing financial accounting standards for NNOs?
- LO 1** 2. Why do most NNOs use fund accounting?
- LO 4** 3. NNOs distinguish between restricted and unrestricted funds. Why is this distinction important?
- LO 3** 4. What is the major difference in accounting for the general fund of a hospital and the unrestricted fund of other NNOs?
- LO 7** 5. What is the major difference in accounting between conditional and unconditional pledges? Give an example of each.
- LO 6** 6. What is the relationship (if any) between board designated funds and nonmandatory transfers?
- LO 5** 7. May board designated funds ever be accounted for in the unrestricted current fund? Explain.
- LO 8** 8. When should an NNO record donated services in its accounting records?
- LO 8** 9. The donated services of volunteer workers on fund-raising campaigns are usually not given accounting recognition. Why?
- LO 14** 10. Universities and hospitals often reduce their standard service charge to students or patients. How are these reductions reflected in the statements of revenue and expenses of these organizations? Explain.
- LO 9** 11. What fund is used to account for the library books owned by a university? How should depreciation of the library books be reflected in the financial statements of the university?
- LO 9** 12. In which fund of a hospital are medical equipment and related long-term obligations recorded? Would your answer be the same for a voluntary health and welfare organization? Explain.
- LO 9** 13. What capital assets (if any) of ONNOs need not be depreciated?
- LO 10** 14. Identify three different types of endowment funds and explain how they differ.
- LO 13** 15. Distinguish an annuity fund from a life income fund.

**Business Ethics**

On the first page of this chapter, an article is referenced describing the recent activities of the chancellor of Vanderbilt University. Comment on the pros and cons, from an ethical perspective, of allowing a university employee in such a position great flexibility in spending.

**ANALYZING FINANCIAL STATEMENTS**

**AFS19-1 America Service Group**

America Service Group Inc. (ASG) contracts to provide and/or administer managed health-care services to over 140 correctional facilities throughout the United States. The partial statement of operations for the years ending December 31, 2010, 2009, and 2008 is shown below:

| <i>Statement of Operations (partial)</i> | <i>2010</i>    | <i>2009</i>    | <i>2008</i>    |
|--|----------------|----------------|----------------|
| Health-care revenues                     | \$ 630,303     | \$ 579,474     | \$ 460,457     |
| Health-care expenses                     | <u>575,628</u> | <u>533,928</u> | <u>423,075</u> |
| Gross margin                             | 54,675         | 45,546         | 37,382         |

**Required:**

Go online and find ASG’s 10-K for the period ending 12/31/2011 (it was filed on 03/03/2011). Read footnote 2 on the summary of significant accounting policies.



1. Which GAAP does ASG follow?
2. Revenues fall into three categories of contracts. What are these categories (define each); which category is growing (as a percentage of total revenues)?
3. List the expenses that are included in the health-care expense category on the income statement.
4. Which category of contracts would an investor prefer to see grow to help mitigate the risk of cost increases? Dose the gross margin earned on each contract vary depending on how this risk is included?

#### AFS19-2 Private Educational Institution

In the appendix to the chapter, partial financial statements are presented.

##### Required:

1. What is the institution's largest source of unrestricted revenue? What is the largest source of total revenue?
2. What is the largest asset on the statement of financial position? What is the largest expense on the statement of operations? Are these to be expected? Explain why.
3. Net assets include three items. What are they and what do you think each represents?
4. What is the largest adjustment on the statement of cash flows in adjusting the change in net assets to cash provided by operating activities (also is it positive or negative)? Do you think this adjustment is common for a private university? Why or why not?

## EXERCISES

### EXERCISE 19-1 Cash Gift to a College LO3

A \$36,000 cash gift was received by a college during the year.

#### Required:

- A. In which fund should the gift be recorded if there were no restrictions on the use of the cash?
- B. In which fund should the gift be recorded if the donor specified that the cash was to be used to replace obsolete and damaged equipment?

### EXERCISE 19-2 Donated Services LO8

During 2015 volunteer pinstripers donated their services to General Hospital at no cost. The staff at General Hospital was in control of the pinstripers' duties. If regular employees had provided the services rendered by the volunteers, their salaries would have totaled \$6,000.

While working for the hospital, the pinstripers received complimentary meals from the cafeteria, which normally would have cost \$500.

#### Required:

Prepare the journal entry necessary in the General Fund to record the donated services on the books of General Hospital.

### EXERCISE 19-3 Journal Entries for a Library LO3 LO7

The Franklin Public Library received a restricted contribution of \$300,000 in 2015. The donor specified that the money must be used to acquire books of poetry written in the sixteenth century. As of December 31, 2015, only \$100,000 of the restricted resources had been expended.

#### Required:

Prepare the journal entries necessary to record these events during 2015. Indicate the fund in which each journal entry is recorded.

**EXERCISE 19-4 University Loan LO12**

The following events relate to Gearson University Loan Fund:

- \$100,000 is received from an estate to establish a faculty and student loan fund. Annual interest rates range from 8% for students to 10% for faculty.
- Loans to students totaled \$60,000, and \$40,000 was disbursed to faculty members (of the total loans made, 10% are estimated to be uncollectible).
- Gearson wrote off a \$1,000 student loan as uncollectible.
- The following loans were repaid.

|         | <i>Principal</i> | <i>Interest</i> |
|---------|------------------|-----------------|
| Faculty | \$ 5,000         | \$500           |
| Student | 10,000           | 800             |

**Required:**

Prepare the journal entries necessary to record these transactions and indicate the fund(s) in which the transactions are recorded.

**EXERCISE 19-5 Pooled Investment Fund LO3**

Hastings College pooled the individual investments of three of its funds on December 31, 2014. The recorded value and the fair market value of the investments on December 31, 2014, are presented here:

|                      | <i>Recorded Value</i> | <i>Fair Value</i> |
|----------------------|-----------------------|-------------------|
| Loan fund            | \$121,000             | \$105,000         |
| Quasi-endowment fund | 128,000               | 147,000           |
| Life income fund     | 151,000               | 168,000           |
| Total                | <u>\$400,000</u>      | <u>\$420,000</u>  |

During 2015 the investment pool earned dividends of \$12,000 and interest of \$18,000 and distributed cash in these amounts to the respective funds. Realized gains on transactions of the investment pool amounted to \$20,000 and were reinvested in securities held in the pool.

**Required:**

Prepare the journal entries that are necessary in the records of each of the funds to account for the earnings of the investment pool during 2015.

**EXERCISE 19-6 Reporting Contributions LO7**

A well-known celebrity sponsored a telethon for the Help for the Blind Foundation on November 1, 2015. Pledges in the amount of \$1,000,000 were called in. Using similar telethon campaigns as a basis, it is estimated that 25% of the pledges will be uncollectible.

During 2016, \$700,000 of contributions from these pledges were collected. The remainder were uncollectible.

**Required:**

Identify the appropriate fund(s) and prepare the journal entries necessary in 2015 and 2016 to record these transactions.

**EXERCISE 19-7 Endowment and Related Funds LO10**

Jefferson Hospital received money from a donor to set up an endowment fund. The following information pertains to this contribution:

*During 2015*

- \$2,000,000 was received to establish the fund. The requirements were
  - \$100,000 of the endowment fund's income must be used for research grants each year.
  - The remainder of income is under the discretion of the governing board.
  - The principal is expendable after the donor's death. It shall be used to purchase equipment.
- The cash received was invested in a number of securities.

*During 2016*

- Dividends of \$100,000 and interest of \$300,000 were received.
- The income was transferred to the appropriate funds.

5. Of the restricted income, only \$80,000 was expended for its specified purpose during 2016.
6. The governing board specified that \$200,000 of the income would be used for loans for deserving medical students.

*During 2017*

7. \$180,000 was lent to medical students.
8. The donor died of cancer.

**Required:**

Set up headings for the following funds: Endowment, General, Specific Purpose, and Plant Replacement and Expansion. Prepare the entries necessary in each fund to record the events listed above.

**EXERCISE 19-8 Plant Fund LO 9**

After the election of a prominent political figure, the principal from a term endowment fund was expendable by Crandall University. The official was elected this year. The fund was restricted to the construction of a Political Science building annex. The following transactions occurred because of this event:

1. A transfer of \$3,000,000 is made from the Endowment Fund (Term) to the Unexpended Plant Fund.
2. Construction is begun on the Political Science annex. Costs of construction during the year amounted to \$1,000,000, of which \$30,000 remained unpaid at the end of the year. (The financial controller does not record transfers to the Investment in Plant subgroup until a project has been completed.)
3. By the end of the following year, the annex is completed at an additional cost of \$2,100,000. All costs have been paid.
4. The completed building is recorded in the Investment in Plant subgroup.

**Required:**

Record the journal entries for each transaction and identify the fund or fund subgroup in which each entry is recorded.

**EXERCISE 19-9 Multiple Choice LO 4**

Select the best answer for each of the following items:

1. Which of the following should be included in the current funds revenue of a not-for-profit private university?

|     | <i>Tuition<br/>Waivers</i> | <i>Unrestricted<br/>Bequests</i> |
|-----|----------------------------|----------------------------------|
| (a) | Yes                        | No                               |
| (b) | Yes                        | Yes                              |
| (c) | No                         | Yes                              |
| (d) | No                         | No                               |

2. The current funds group of a not-for-profit private university includes which of the following subgroups?

|     | <i>Term-Endowment<br/>Funds</i> | <i>Life-Income<br/>Funds</i> |
|-----|---------------------------------|------------------------------|
| (a) | No                              | No                           |
| (b) | No                              | Yes                          |
| (c) | Yes                             | Yes                          |
| (d) | Yes                             | No                           |

3. Tuition waivers for which there is **no** intention of collection from the student should be classified by a not-for-profit university as

|     | <i>Revenue</i> | <i>Expenditures</i> |
|-----|----------------|---------------------|
| (a) | No             | No                  |
| (b) | No             | Yes                 |
| (c) | Yes            | Yes                 |
| (d) | Yes            | No                  |

4. Which of the following is utilized for current expenditures by a not-for-profit university?

|     | <i>Unrestricted<br/>Current Funds</i> | <i>Restricted<br/>Current Funds</i> |
|-----|---------------------------------------|-------------------------------------|
| (a) | No                                    | No                                  |
| (b) | No                                    | Yes                                 |
| (c) | Yes                                   | No                                  |
| (d) | Yes                                   | Yes                                 |

5. In the loan fund of a college or university, each of the following types of loans would be found except
- (a) Student.
  - (b) Staff.
  - (c) Building.
  - (d) Faculty.

*(AICPA adapted)*

**EXERCISE 19-10 Multiple Choice LO 4**

Select the best answer choice for each of the following items:

1. Which of the following receipts is properly recorded as unrestricted current funds on the books of a university?
  - (a) Tuition.
  - (b) Student laboratory fees.
  - (c) Housing fees.
  - (d) Research grants.
2. The current funds group of a not-for-profit private university includes which of the following?

|     | <i>Annuity Funds</i> | <i>Loan Funds</i> |
|-----|----------------------|-------------------|
| (a) | Yes                  | Yes               |
| (b) | Yes                  | No                |
| (c) | No                   | No                |
| (d) | No                   | Yes               |

3. On January 2, 2015, John Reynolds established a \$500,000 trust, the income from which is to be paid to Mansfield University for general operating purposes. The Wyndham National Bank was appointed by Reynolds as trustee of the fund. What journal entry is required on Mansfield's books?

|                                  |         |         |
|----------------------------------|---------|---------|
| (a) Memo entry only              |         |         |
| (b) Cash                         | 500,000 |         |
| Endowment Fund Balance           |         | 500,000 |
| (c) Nonexpendable Endowment Fund | 500,000 |         |
| Endowment Fund Balance           |         | 500,000 |
| (d) Expendable Funds             | 500,000 |         |
| Endowment Fund Balance           |         | 500,000 |

4. For the fall semester of 2015, Cherry College assessed its students \$2,300,000 for tuition and fees. The net amount realized was only \$2,100,000 because of the following revenue reductions:

|   |           |
|---|-----------|
| Refunds occasioned by class cancellations and student withdrawals | \$ 50,000 |
| Tuition remissions granted to faculty members' families           | 10,000    |
| Scholarships and fellowships                                      | 140,000   |

How much should Cherry College report for the period for unrestricted current funds revenues from tuition and fees?

- (a) \$2,100,000.
  - (b) \$2,150,000.
  - (c) \$2,250,000.
  - (d) \$2,300,000.
5. During the years ending June 30, 2014 and June 30, 2015, Schafer University conducted a cancer research project financed by a \$2,000,000 gift from an alumnus. This entire amount was pledged by the donor on July 10, 2013, although he paid only \$500,000 at that date. The gift was restricted to the financing of this

particular research project. During the two-year research period, Schafer's related gift receipts and research expenditures were as follows:

|   | <i>Year Ended June 30</i> |             |
|---|---------------------------|-------------|
|   | <i>2014</i>               | <i>2015</i> |
| Gift receipts                           | \$700,000                 | \$ 800,000  |
| Cancer research restricted expenditures | 900,000                   | 1,100,000   |

How much gift revenue should Schafer University report in the temporarily restricted column of its statement of activities for the year ended June 30, 2015?

- (a) \$0.
- (b) \$800,000.
- (c) \$1,100,000.
- (d) \$2,000,000.

*(AICPA adapted)*

**EXERCISE 19-11 Multiple Choice LO7 LO8**

Select the best answer for each of the following items:

1. Cura Foundation, a voluntary health and welfare organization, supported by contributions from the general public, included the following costs in its statement of functional expenses for the year ended December 31, 2016.

|                |           |
|----------------|-----------|
| Fund raising   | \$500,000 |
| Administrative | 300,000   |
| Research       | 100,000   |

Cura's functional expenses for 2016 program services included

- (a) \$900,000.
  - (b) \$500,000.
  - (c) \$300,000.
  - (d) \$100,000.
2. Community Service Center is a voluntary welfare organization funded by contributions from the general public. During 2015 unrestricted pledges of \$900,000 were received, half of which were payable in 2015 with the other half payable in 2016 for use in 2016. It was estimated that 10% of these pledges would be uncollectible. How much should Community report as net contribution revenue for 2015 with respect to the pledges?
    - (a) \$0.
    - (b) \$405,000.
    - (c) \$810,000.
    - (d) \$900,000.
  3. Theresa Plato is a social worker on the staff of Community Service Center, a voluntary welfare organization. She earns \$30,000 annually for a normal workload of 2,000 hours. During 2015 she contributed an additional 800 hours of her time to Community at no extra charge. How much should Community record in 2015 as contributed service expense?
    - (a) \$12,000.
    - (b) \$6,000.
    - (c) \$1,200.
    - (d) \$0.
  4. The basis of accounting used by nonprofit organizations is the
    - (a) Cash basis.
    - (b) Modified accrual basis.
    - (c) Accrual basis.
    - (d) Modified cash basis.

*(AICPA adapted)*

**EXERCISE 19-12 Multiple Choice LO3 LO7**

Select the best answer for each of the following items:

1. Which NNOs must record depreciation on exhaustible assets?
  - (a) Hospitals.
  - (b) VHWOs.
  - (c) ONNOs.
  - (d) All of the above.
2. Which statement relating to VHWOs is most nearly correct?
  - (a) Use modified accrual accounting practices.
  - (b) Report expenditures on a functional basis.
  - (c) Record pledges when they are received.
  - (d) Recognize donated services as revenue if measurable.
3. Which of the following funds of a VHWO does not have a counterpart fund in governmental accounting?
  - (a) Current Unrestricted Fund.
  - (b) Land, Building, and Equipment Fund.
  - (c) Agency Fund.
  - (d) Endowment Fund.
4. A voluntary health and welfare organization received a pledge in 2014 from a donor specifying that the amount pledged be used in 2016. The donor paid the pledge in cash in 2015. The pledge should be accounted for as
  - (a) A deferred credit in the balance sheet at the end of 2014, and as support in 2015.
  - (b) A deferred credit in the balance sheet at the end of 2014 and 2015, and as support in 2016.
  - (c) Support in 2016.
  - (d) Support in 2015, and no deferred credit in the balance sheet at the end of 2014.
  - (e) None of the above.
5. Which of the following should be used in accounting for nonprofit health agencies?
  - (a) Fund accounting and accrual accounting.
  - (b) Fund accounting but not accrual accounting.
  - (c) Accrual accounting but not fund accounting.
  - (d) Neither accrual accounting nor fund accounting.

*(AICPA adapted)*

**EXERCISE 19-13 Multiple Choice LO4 LO7**

Select the best answer for each of the following items:

1. Depreciation should be recognized in the financial statements of
  - (a) Private sector proprietary (for profit) hospitals only.
  - (b) Both private sector proprietary (for profit) hospitals and not-for-profit hospitals.
  - (c) Both private sector proprietary (for profit) hospitals and not-for-profit hospitals, only when they are affiliated with a university.
  - (d) All private sector hospitals, as a memorandum entry not affecting the statement of revenue and expenses.
2. Securities donated to a nonbusiness organization should be recorded at the
  - (a) Donor's recorded amount.
  - (b) Fair market value at the date of the gift.
  - (c) Fair market value at the date of the gift or the donor's recorded value, whichever is lower.
  - (d) Fair market value at the date of the gift or the donor's recorded value, whichever is higher.
3. The Charity Services ledger account of a nonprofit hospital is a(an)
  - (a) Contra-asset account.
  - (b) Expense account.
  - (c) Contra-revenue account.
  - (d) Loss account.

4. The restricted groupings recommended for hospitals do not include
  - (a) Specific purpose funds.
  - (b) Endowment funds.
  - (c) Plant funds.
  - (d) Plant replacement and expansion funds.

*(AICPA adapted)***EXERCISE 19-14 Multiple Choice LO7 LO8**

Select the best answer for each of the following items:

1. An unrestricted pledge from an annual contributor to a not-for-profit hospital made in December 2014 and paid in cash in March 2015 would generally be credited to
  - (a) Nonoperating revenue in 2014.
  - (b) Nonoperating revenue in 2015.
  - (c) Operating revenue in 2014.
  - (d) Operating revenue in 2015.
2. A gift to a not-for-profit hospital that is not restricted by the donor should be credited directly to
  - (a) Fund balance.
  - (b) Deferred revenue.
  - (c) Operating revenue.
  - (d) Nonoperating revenue.
3. During the year ended December 31, 2015, Melford Hospital received the following donations, stated at their respective fair values:

|   |           |
|---|-----------|
| Employee services from members of a religious group.  | \$100,000 |
| Medical supplies from an association of physicians. These supplies were restricted for indigent care and were used for such purposes in 2015. | 30,000    |

How much revenue (both operating and nonoperating) from donations should Melford report in its 2015 statement activities?

- (a) \$0.
  - (b) \$30,000.
  - (c) \$100,000.
  - (d) \$130,000.
4. On July 1, 2014, Lilydale Hospital's Board of Trustees designated \$200,000 for expansion of outpatient facilities. The \$200,000 is expected to be expended in the fiscal year ending June 30, 2017. In Lilydale's balance sheet at June 30, 2015, this cash should be classified as a \$200,000
    - (a) Restricted current asset.
    - (b) Restricted noncurrent asset.
    - (c) Unrestricted current asset.
    - (d) Asset whose use is limited.

*(AICPA adapted)*

**ASC Exercises:** For all ASC exercises indicate as part of your answer: the Codification topic, subtopic, section, and paragraph upon which your answer is based (unless otherwise specified). All ASC questions require access to the FASB Codification.

**ASC19-1**

**Cross-Reference** AICPA Statement of Position (SOP) 02-2 addresses how nongovernmental not-for-profit health care organizations should report gains or losses on hedging derivative instruments. List all the topics (and their names) in the Codification where this information can be found, and summarize the appropriate treatment.

- ASC19-2** **Scope** Topic 954 provides guidance on health care entities. Does the guidance cover both investor-owned health care entities and not-for-profit entities? If not, which is covered?
- ASC19-3** **Glossary** What is a diagnosis-related group? What is capitation?
- ASC19-4** **Glossary** Define *charity care*. Does it qualify for revenue recognition?
- ASC19-5** **Overview** Distinguish between premium revenue and patient service revenue generated by a health care entity.
- ASC19-6** **Glossary** How is a not-for-profit entity defined in the Codification?
- ASC19-7** **Case:** A resident of a continuing-care retirement community pays an advance fee in return for future services and the use of facilities. Such services include continuing-care retirement community housing-related services (for example, meals, laundry, housekeeping, and social services) and health care. These services usually are provided to the resident for the remainder of his or her life or until the contract is terminated. Additional periodic fees are not paid, regardless of how long a resident lives or whether the resident requires more services than anticipated. How should the retirement community recognize revenue? Cite the Codification to support your answer.

## PROBLEMS

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### PROBLEM 19-1 Statement of Activities—Hospital LO2

The following events were recorded on the books of Mercy Hospital for the year ended December 31, 2015.

1. Revenue from patient services totaled \$16,000,000. The allowance for uncollectibles was established at \$3,400,000. Of the \$16,000,000 revenue, \$6,000,000 was recognized under cost reimbursement agreements. This revenue is subject to audit and retroactive adjustment by third-party payers (estimated adjustments are included in the allowance account).
2. Patient service revenue is accounted for at established rates on the accrual basis.
3. Other operating revenue totaled \$346,000, of which \$160,000 was from specific purpose funds.
4. Mercy received \$410,000 in unrestricted gifts and bequests. They are recorded at fair market value when received.
5. Endowment funds earned \$160,000 in unrestricted income.
6. Board designated funds earned \$82,000 in income.
7. Mercy's operating expenses for the year amounted to \$13,370,000. This included \$500,000 in straight-line depreciation.

**Required:**

Prepare a statement of activities for Mercy Hospital for the year ended December 31, 2015.

*(AICPA adapted)*

### PROBLEM 19-2 Various Funds—Hospital LO3

On January 1, 2015, a new Board of Directors was elected for Bradley Hospital. The new board switched to a different accountant. After reviewing the hospital's books, the accountant decided that the accounts should be adjusted. Effective January 1, 2015, the board decided that

1. Separate funds should be established for the General Fund, the Bradley Endowment Fund, and the Plant Replacement and Expansion Fund (the old balances will be reversed to eliminate them).



2. The accounts should be maintained in accordance with fund accounting principles. The balances in the general ledger at January 1, 2015, are presented here:

|                                   |                    |                    |
|-----------------------------------|--------------------|--------------------|
| Cash                              | \$ 50,000          |                    |
| Investment in U.S. treasury bills | 105,000            |                    |
| Investment in common stock        | 417,000            |                    |
| Interest receivable               | 4,000              |                    |
| Accounts receivable               | 40,000             |                    |
| Inventory                         | 25,000             |                    |
| Land                              | 407,000            |                    |
| Building                          | 245,000            |                    |
| Equipment                         | 283,000            |                    |
| Allowance for depreciation        |                    | \$ 376,000         |
| Accounts payable                  |                    | 70,000             |
| Bank loan                         |                    | 150,000            |
| Endowment fund balance            |                    | 119,500            |
| Other fund balances               |                    | 860,500            |
| Total                             | <u>\$1,576,000</u> | <u>\$1,576,000</u> |

The following additional information is available:

1. Under the terms of the will of J. Ethington, founder of the hospital, "The principal of the bequest is to be fully invested in trust forevermore in mortgages secured by productive real estate in Central City and/or in U.S. Government securities . . . and the income therefrom is to be used to defray current expenses."

2. The Endowment Fund consists of the following:

|  |                  |
|--|------------------|
| Cash received in 1898 by bequest from Ethington  | \$ 81,500        |
| Net gains realized from 1956 through 1989 from the sale of real estate acquired in mortgage foreclosures | 23,500           |
| Income received from 1990 through 2014 from 90-day U.S. treasury bill investments                        | 14,500           |
| Balance per general ledger on January 1, 2015  | <u>\$119,500</u> |

3. The land account balance is composed of

|   |                  |
|---|------------------|
| 1900 appraisal of land at \$10,000 and building at \$5,000, received by donation at that time. The building was demolished in 1934. | \$ 15,000        |
| Appraisal increase based on insured value in land title policies issued in 1954.  | 380,000          |
| Landscaping costs for trees planted.  | 12,000           |
| Balance per general ledger on January 1, 2015   | <u>\$407,000</u> |

4. The building balance is composed of

|   |                   |
|---|-------------------|
| Cost of present hospital building completed in January 1974, when the hospital commenced operations | \$ 300,000        |
| Adjustment to record appraised value of building in 1984.   | (100,000)         |
| Cost of elevator installed in hospital building in January 2000.                                    | 45,000            |
| Balance per general ledger on January 1, 2015   | <u>\$ 245,000</u> |

The estimated useful lives of the hospital building and the elevator when new were 50 years and 20 years, respectively.

5. The hospital's equipment was inventoried on January 1, 2015. The costs shown in the inventory agreed with the equipment account balance in the general ledger. The allowance for depreciation account at January 1, 2015, included \$158,250 applicable to equipment, and that amount was determined to be accurate. All depreciation is computed on a straight-line basis.
6. A bank loan was obtained to finance the cost of new operating room equipment purchased in 2011. Interest was paid to December 31, 2014.
7. Common stock with a market value of \$417,000 was donated to Bradley Hospital with the stipulation that the proceeds from the sale of the stock must be used for facilities expansion. The hospital plans to undertake expansion of its facilities next year and to sell these securities at that time.

**Required:**

Using the workpaper form below, prepare the entries necessary to establish the correct balances as of January 1, 2015.

| <i>Account<br/>Description</i> | <i>Trial Balance</i> |               | <i>Adjustments</i> |               | <i>General Fund</i> |               | <i>Endowment<br/>Fund</i> |               | <i>Plant<br/>Replacement<br/>Fund</i> |               |
|--------------------------------|----------------------|---------------|--------------------|---------------|---------------------|---------------|---------------------------|---------------|---------------------------------------|---------------|
|                                | <i>Debit</i>         | <i>Credit</i> | <i>Debit</i>       | <i>Credit</i> | <i>Debit</i>        | <i>Credit</i> | <i>Debit</i>              | <i>Credit</i> | <i>Debit</i>                          | <i>Credit</i> |

(AICPA adapted)

**PROBLEM 19-3 Various Funds—University LO 2 LO 3**

A partial statement of financial position of Century University is shown below.

**Century University  
Partial Statement of Financial Position  
June 30, 2014**

| <i>Assets</i>   |                  |
|---|------------------|
| <b>Current Funds</b>  |                  |
| Unrestricted  |                  |
| Cash  | \$210,000        |
| Accounts Receivable (less allowance for doubtful accounts, \$9,000) | 341,000          |
| State Appropriations Receivable                                     | 75,000           |
| Total Unrestricted  | <u>626,000</u>   |
| Restricted  |                  |
| Cash  | 7,000            |
| Investments   | 60,000           |
| Total Restricted  | <u>67,000</u>    |
| Total Current   | <u>\$693,000</u> |
| <i>Liabilities and Fund Balances</i>                                |                  |
| <b>Current Funds</b>  |                  |
| Unrestricted  |                  |
| Accounts Payable  | \$ 45,000        |
| Deferred Revenues   | 66,000           |
| Fund Balance  | 515,000          |
| Total Unrestricted  | <u>626,000</u>   |
| Restricted  |                  |
| Fund Balance  | 67,000           |
| Total Restricted  | <u>67,000</u>    |
| Total Current   | <u>\$693,000</u> |

During the fiscal year ended June 30, 2011, the following transactions occurred:

1. A gift of \$100,000 was received from an alumnus on July 7, 2014. One-half of the gift was to be used for the purchase of books for the university's library and the rest was to be used to establish a scholarship fund per the alumnus's request. It was also requested that the income generated by the scholarship fund be awarded annually as a scholarship for a qualified disadvantaged student. The board decided that the funds for the new scholarship should be invested in savings certificates on July 20, 2014. These savings certificates were purchased on July 21, 2014.
2. Revenue for the fiscal period from student tuition and fees amounted to \$1,900,000. During the fiscal year, \$1,686,000 of this amount was collected; \$66,000 had been collected in the prior year. The university had also received \$158,000 by June 30, 2015, for fees for the session beginning July 1, 2015.
3. During the year ended June 30, 2015, the university collected \$349,000 of the outstanding accounts receivable at the beginning of the year. The balance was determined to be uncollectible and was written off against the allowance account. At June 30, 2015, the allowance account was increased by \$3,000.
4. Because of late student fee payments, \$6,000 in interest charges were earned and collected.

5. The state appropriation was received. Another unrestricted appropriation of \$50,000 was made by the state. This had not been paid to the university by the fiscal year-end.
6. An unrestricted gift of \$25,000 cash was received from alumni of the university.
7. During the year, investments of \$21,000 were sold for \$26,000. Investment income amounting to \$1,900 was received.
8. Unrestricted operating expenses were recorded at \$1,777,000, \$59,000 of which remains unpaid.
9. Restricted current funds of \$13,000 were spent for authorized purposes during the year.
10. The accounts payable at June 30, 2014, were paid during the year.
11. During the year, \$7,000 interest was earned and received on the savings certificates purchased in accordance with the board's resolution [in item (1)].

**Required:**

- A. Prepare journal entries to record in summary form the transactions above for the year ended June 30, 2015. Each journal entry should be numbered to correspond with the transaction described above. Set up the following headings:

| <i>Accounts</i> | <i>Current Funds</i> |            |                   |            |                       |            |
|-----------------|----------------------|------------|-------------------|------------|-----------------------|------------|
|                 | <i>Unrestricted</i>  |            | <i>Restricted</i> |            | <i>Endowment Fund</i> |            |
|                 | <i>Dr.</i>           | <i>Cr.</i> | <i>Dr.</i>        | <i>Cr.</i> | <i>Dr.</i>            | <i>Cr.</i> |
|                 |                      |            |                   |            |                       |            |

- B. Prepare a statement of activities for the year ended June 30, 2015.
- C. Prepare a statement of activities for the current funds for the year ended June 30, 2015. Include more details about the revenues and expenses.

**PROBLEM 19-4 Journal Entries—University LO 3**

The following transactions of Beltville College transpired during 2015. The funds necessary are the Endowment Fund, the Annuity Fund, the Plant Fund—Unexpended, the Plant Fund—Investment in Plant, the Loan Fund, the Unrestricted Current Fund, and the Restricted Current Fund.

*January 1*

1. A gift of \$10,000 was received from Carl Brown. The principal was to be held intact and the income to be used for any purpose designated by the governing board.
2. David Gross donated \$20,000. The principal was to be held intact and the income to be used for scholarships for worthy students.
3. Roxanne Norton donated \$30,000, of which the principal was to remain intact while the interest was to be used for student loans. All income is to be relent; all losses from loans are to be charged against income.
4. A gift of \$205,000 was received from Brian Carr. Semiannual payments of \$10,000 are to be made to the donor during his lifetime. On his death the fund is to be used to purchase or construct a students' residence. Mr. Carr has a life expectancy of five years and investments are expected to earn 8% annually.
5. Kathy Jackson donated 1,000 shares of BIM stock, which had a market value of \$150 per share on that date. All income received from the shares is to be held intact and the shares cannot be held for more than five years. Once the board sells the shares, all the proceeds are to be used to build a student hospital.
6. The assets of the Brown and Gross funds were consolidated into a pooled investment account by the governing board (in proportion to the principal accounts). Electric Power Bonds worth \$30,000 were purchased. The 12% interest was payable on January 1 and July 1.
7. The Norton Fund cash is used to purchase Cravit Company 10% bonds at par for \$30,000. January 1 and July 1 are the interest dates.
8. With the cash from the Carr Fund, \$200,000 of 8% U.S. Treasury notes was purchased at par. The interest dates are January 1 and July 1.

*July 1*

9. The interest was received on all bonds and notes and was transferred to the proper funds. Dividends of \$4,000 were received from BIM stock.
10. The stipulated payment is made to Mr. Carr from the Endowment Fund.
11. Electric Power Company bonds bought at par value for \$20,000 are sold at 102. The gain is added to the principal.
12. A \$300 student loan was made from the Norton Fund.

October 1

13. A notice of Brian Carr's death is received. There is no liability to his estate.
14. The Gross Scholarship Fund awards a \$200 scholarship.
15. \$200,000 par of U.S. Treasury notes are sold for \$206,000.

December 31

16. Interest on bonds is received.
17. \$100 of principal and \$5 of interest were repaid on the student loan.
18. A building was purchased for \$250,000 using the funds available from the Carr gift. The residence hall will have a 20-year mortgage payable to account for the balance.

**Required:**

Using the following format, record the journal entries necessary for each event.

| <i>Event</i> | <i>Fund</i> | <i>Journal Entry</i> |
|--------------|-------------|----------------------|
|--------------|-------------|----------------------|

*(AICPA adapted)*

**PROBLEM 19-5 Journal Entries—Financial Statements—Library LO 2**

Preston Library, a nonprofit organization, presented the following statement of financial position and statement of activities for its fiscal year ended February 28, 2014.

**Preston Library  
Statement of Financial Position  
February 28, 2014**

| <i>Assets</i>  | <i>Unrestricted</i> | <i>Temporarily<br/>Restricted</i> |
|--|---------------------|-----------------------------------|
| <i>Current Assets</i>  |                     |                                   |
| Cash   | \$ 285,000          | \$80,000                          |
| Grants Receivable  | 80,000              |                                   |
| Prepaid Expenses   | 65,000              |                                   |
| Total  | 430,000             |                                   |
| Investments (at market)  | 1,020,000           |                                   |
| Land, Building, and Equipment<br>(less accumulated depreciation of \$50,000) | 530,000             |                                   |
| Total Assets   | \$1,980,000         | \$80,000                          |

*Liabilities and Fund Balances*

|                                       |             |          |
|---------------------------------------|-------------|----------|
| <i>Current Liabilities</i>            |             |          |
| Accounts Payable and Accrued Expenses | \$ 150,000  |          |
| Total                                 | 150,000     |          |
| Long-Term Debt                        | 200,000     |          |
| Fund Balances                         | 1,630,000   | 80,000   |
| Total Liabilities and Fund Balances   | \$1,980,000 | \$80,000 |

**Preston Library  
Statement of Activities  
for Year Ended February 28, 2014**

| <i>Support and Revenue</i> | <i>Unrestricted</i> | <i>Temporarily<br/>Restricted</i> |
|----------------------------|---------------------|-----------------------------------|
| <i>Support</i>             |                     |                                   |
| Grants                     | \$ 70,000           | \$—0—                             |
| Gifts                      | 300,000             | 80,000                            |
| Total                      | 370,000             | 80,000                            |
| <i>Revenue</i>             |                     |                                   |
| Service Fees               | 22,000              |                                   |
| Book Rentals and Fines     | 107,000             |                                   |
| Investment Income          | 71,000              |                                   |
| Total                      | 200,000             | —0—                               |
| Total Support and Revenue  | \$ 570,000          | \$80,000                          |

| <i>Expenses</i>                   |                    |                 |
|-----------------------------------|--------------------|-----------------|
| Program Services                  |                    |                 |
| Circulating library               | \$ 212,000         |                 |
| Research library                  | 86,000             |                 |
| Exhibits                          | 20,000             |                 |
| Community services                | 10,000             |                 |
| Total                             | <u>328,000</u>     | <u>—0—</u>      |
| Supporting Services               |                    |                 |
| General and administrative        | 175,000            |                 |
| Fund raising                      | 111,000            |                 |
| Total                             | <u>286,000</u>     | <u>—0—</u>      |
| Total Expenses                    | <u>614,000</u>     | <u>—0—</u>      |
| Increase (decrease) in net assets | (44,000)           | 80,000          |
| Fund Balances—beginning of year   | <u>1,674,000</u>   | <u>—0—</u>      |
| Fund Balances—end of year         | <u>\$1,630,000</u> | <u>\$80,000</u> |

The following transactions occurred during the fiscal year ended February 28, 2015.

1. Fees were billed as follows:

|              |          |
|--------------|----------|
| Service fees | \$30,000 |
| Book rentals | 43,000   |
| Book fines   | 78,000   |

2. \$40,000 of the Grant Receivable was received. Another grant in the amount of \$20,000 was promised.

3. Contributions in the amounts summarized below were received:

|              |           |
|--------------|-----------|
| Unrestricted | \$215,000 |
| Restricted   | 108,000   |

4. Investment income totaled \$75,000 for the year.

5. Vouchers for the year were approved as follows:

|                            |                  |
|----------------------------|------------------|
| Circulating library        | \$189,000        |
| Research library           | 74,000           |
| Exhibits                   | 15,000           |
| Community services         | 12,000           |
| General and administrative | 166,000          |
| Fund raising               | <u>103,000</u>   |
| Total                      | <u>\$559,000</u> |

6. During the year, \$500,000 worth of vouchers were paid.

*Adjustment Data*

7. Accounts Payable and Accrued Expenses at February 28, 2015, should be \$217,000. The difference should be allocated to the following expenses:

|                            |         |
|----------------------------|---------|
| Research library           | \$5,000 |
| General and administrative | 3,000   |

8. Additions to the research library in the amount of \$68,000 that were approved in (5) above were made in accordance with the terms of a contribution that had been received earlier and that was restricted for that purpose.

9. The current market value of the investments is \$1,035,000 (no investment transactions occurred).

10. Depreciation amounted to \$9,000 for the year. It should be allocated as follows:

|                            |         |
|----------------------------|---------|
| Circulating library        | \$3,500 |
| Research library           | 2,900   |
| General and administrative | 2,600   |

11. Prepaid Expenses should be \$60,000. The difference should be allocated to:

|                            |         |
|----------------------------|---------|
| Exhibits                   | \$3,700 |
| General and administrative | 1,300   |

**Required:**

- A. Prepare journal entries to record the transactions.
- B. Prepare the statement of financial position and the statement of activities for the year ended February 28, 2015.

(AICPA adapted)

**PROBLEM 19-6 Statement of Financial Position LO 2**

The December 31, 2015, statement of financial position for the Blood Donors of America Foundation is presented below.

**Statement of Financial Position  
December 31, 2015**

| <i>Assets</i>                       |                     |
|-------------------------------------|---------------------|
| Cash                                | \$ 470,000          |
| Accounts Receivable                 | 160,000             |
| Allowance for Doubtful Accounts     | (30,000)            |
| Pledges Receivable                  | 930,000             |
| Allowance for Doubtful Pledges      | (130,000)           |
| Inventories                         | 400,000             |
| Investments                         | 19,300,000          |
| Land                                | 1,300,000           |
| Buildings and Improvements          | 46,500,000          |
| Equipment                           | 2,700,000           |
| Accumulated Depreciation            | (13,500,000)        |
| Other Assets                        | 200,000             |
| Total Assets                        | <u>\$58,300,000</u> |
| <i>Liabilities</i>                  |                     |
| Accounts Payable                    | \$ 700,000          |
| Accrued Expenses                    | 130,000             |
| Deferred Revenue—Unrestricted       | 100,000             |
| Deferred Capital Addition           | 1,600,000           |
| Long-term Debt                      | 7,350,000           |
| Total Liabilities                   | <u>9,880,000</u>    |
| <i>Fund Balances</i>                |                     |
| Plant                               | 29,000,000          |
| Endowment                           | 3,850,000           |
| Restricted                          | 7,300,000           |
| Unrestricted                        | 8,270,000           |
| Total Fund Balances                 | <u>48,420,000</u>   |
| Total Liabilities and Fund Balances | <u>\$58,300,000</u> |

Additional information concerning the statement of financial position is as follows:

1. Except for \$70,000 of cash, the Endowment Fund is made up of investments only. There are no liabilities.
2. The Plant Fund has no current liabilities and includes some investments and \$15,000 in cash.
3. In addition to investments, the Current Restricted Fund consists of the pledges receivable, \$35,000 of accounts payable, and cash of \$155,000.

**Required:**

Prepare a corrected statement of financial position for the Blood Donors of America Foundation at December 31, 2015, using the following columnar format:

| (Account Titles) | <i>Current<br/>Unrestricted</i> | <i>Current<br/>Restricted</i> | <i>Plant</i> | <i>Endowment</i> | <i>Total</i> |
|------------------|---------------------------------|-------------------------------|--------------|------------------|--------------|
|                  | \$                              | \$                            | \$           | \$               | \$           |

*(AICPA adapted)*

**PROBLEM 19-7 Investment Pool LO11**

Three funds of the Leukemia Foundation, a nonprofit welfare organization, began an investment pool on January 1, 2016. The costs and fair market values on this date were as follows:

|                        | <i>Cost</i> | <i>Market<br/>Value</i> |
|------------------------|-------------|-------------------------|
| Restricted fund        | \$ 55,000   | \$ 70,000               |
| Lambert endowment fund | 215,000     | 210,000                 |
| Plant fund             | 200,000     | 220,000                 |
| Total                  | \$470,000   | \$500,000               |

During 2016 the investment pool reinvested \$20,000 in realized gains and received interest of \$15,000 and dividends of \$10,000. Interest and dividend income was distributed to the respective funds. The Plant Fund withdrew from the investment pool on December 31, 2016, when the total current market value was \$540,000. It distributed securities in the amount of its percentage share.

On January 3, 2017, the Fargot Annuity Fund entered the investment pool with investments costing \$100,000 and having a current market value of \$117,600. During 2017 the pool received interest of \$25,000 and dividends of \$15,000, which were distributed to the participating funds. Realized gains of \$30,000 were reinvested in the pool.

**Required:**

- A. Calculate the equity percentages of the contributing funds in the investment pool at January 1, 2016, and at January 3, 2017.
- B. Using the format shown below, prepare entries necessary on the records of the funds that contributed securities to the investment pool to account for the earnings of the investment pool in 2016 and 2017.

| <i>Date</i> | <i>Fund</i> | <i>Journal Entry</i> |
|-------------|-------------|----------------------|
|-------------|-------------|----------------------|

# Chapter 19

## APPENDIX 19A – SAMPLE FINANCIAL STATEMENTS FOR PRIVATE EDUCATIONAL INSTITUTIONS (ONLINE)

### ILLUSTRATION 19-4

#### Private Educational Institution Statement of Financial Position Net Asset Class Desegregation

| <i>Assets</i>  | <i>Unrestricted</i> | <i>Temporarily Restricted</i> | <i>Permanently Restricted</i> | <i>Total</i>     |
|--|---------------------|-------------------------------|-------------------------------|------------------|
| Cash and Cash Equivalents  | \$ 22,368           | \$ 14,912                     | —                             | \$ 37,280        |
| Short-term Investments   | 55,920              | 37,280                        | —                             | 93,200           |
| Accounts Receivable  | 55,920              | —                             | —                             | 55,920           |
| Accrued Interest Receivable                                      | 11,184              | 7,456                         | —                             | 18,640           |
| Contributions Receivable   | 41,940              | 33,552                        | 8,388                         | 83,880           |
| Prepaid Expenses and Other Assets                                | 55,920              | —                             | —                             | 55,920           |
| Loans to Students and Faculty                                    | 93,200              | 74,560                        | 18,640                        | 186,400          |
| Deposits with Trustees   | 37,280              | —                             | —                             | 37,280           |
| Long-term Investments  | 97,860              | 78,288                        | 19,572                        | 195,720          |
| Land, Buildings, and Equipment, Less<br>Accumulated Depreciation | 83,880              | 67,104                        | 16,776                        | 167,760          |
| <b>Total Assets</b>  | <u>\$555,472</u>    | <u>\$313,152</u>              | <u>\$63,376</u>               | <u>\$932,000</u> |
| <b>Liabilities and Net Assets</b>                                |                     |                               |                               |                  |
| Accounts Payable and Accrued Liabilities                         | \$ 34,500           | —                             | —                             | \$ 34,500        |
| Deferred Revenues  | 13,800              | —                             | —                             | 13,800           |
| Other Liabilities  | 11,500              | —                             | —                             | 11,500           |
| Amounts Held on Behalf of Others                                 | 20,700              | —                             | —                             | 20,700           |
| Annuities Payable  | 36,800              | —                             | —                             | 36,800           |
| Long-term Debt   | 82,800              | —                             | —                             | 82,800           |
| U.S. Government Grants Refundable                                | 29,900              | —                             | —                             | 29,900           |
| <b>Total Liabilities</b>   | <u>\$230,000</u>    | <u>—</u>                      | <u>—</u>                      | <u>230,000</u>   |
| Net Assets:  |                     |                               |                               |                  |
| Unrestricted   | 325,472             | —                             | —                             | 325,472          |
| Temporarily restricted   | —                   | 313,152                       | —                             | 313,152          |
| Permanently restricted   | —                   | —                             | 63,376                        | 63,376           |
| <b>Total Net Assets</b>  | <u>325,472</u>      | <u>313,152</u>                | <u>63,376</u>                 | <u>702,000</u>   |
| <b>Total Liabilities and Net Assets</b>                          | <u>\$555,472</u>    | <u>\$313,152</u>              | <u>\$63,376</u>               | <u>\$932,000</u> |



## ILLUSTRATION 19-5

**Private Educational Institution  
Statement of Financial Position  
Fund Groups Desegregation**

| <i>Assets</i>  | <i>Current<br/>Funds</i> | <i>Loan<br/>Funds</i> | <i>Endowment<br/>&amp; Similar<br/>Funds</i> | <i>Plant<br/>Funds</i> | <i>Total</i>     |
|--|--------------------------|-----------------------|--|------------------------|------------------|
| Cash and Cash Equivalents  | \$ 22,368                | \$ 5,592              | —  | \$ 9,320               | \$ 37,280        |
| Short-term Investments   | 55,920                   | 13,980                | —  | 23,300                 | 93,200           |
| Accounts Receivable  | 55,920                   | —                     | —  | —                      | 55,920           |
| Accrued Interest Receivable                                      | 7,456                    | 5,592                 | 3,728  | 1,864                  | 18,640           |
| Contributions Receivable   | 50,328                   | —                     | 12,582                                       | 20,970                 | 83,880           |
| Prepaid Expenses and Other Assets                                | 55,920                   | —                     | —  | —                      | 55,920           |
| Loans to Students and Faculty                                    | —                        | 186,400               | —  | —                      | 186,400          |
| Deposits with Trustees   | —                        | —                     | —  | 37,280                 | 37,280           |
| Long-term Investments  | —                        | —                     | 195,720                                      | —                      | 195,720          |
| Land, Buildings, and Equipment, Less<br>Accumulated Depreciation | —                        | —                     | —  | 167,760                | 167,760          |
| <b>Total Assets</b>  | <u>\$247,912</u>         | <u>\$211,564</u>      | <u>\$212,030</u>                             | <u>\$260,494</u>       | <u>\$932,000</u> |
| <b>Liabilities and Net Assets</b>                                |                          |                       |  |                        |                  |
| Accounts Payable and Accrued Liabilities                         | \$ 20,700                | —                     | —  | \$ 13,800              | \$ 34,500        |
| Deferred Revenues  | 13,800                   | —                     | —  | —                      | 13,800           |
| Other Liabilities  | 11,500                   | —                     | —  | —                      | 11,500           |
| Amounts Held on Behalf of Others                                 | 20,700                   | —                     | —  | —                      | 20,700           |
| Annuities Payable  | —                        | —                     | 36,800                                       | —                      | 36,800           |
| Long-term Debt   | —                        | —                     | —  | 82,800                 | 82,800           |
| U.S. Government Grants Refundable                                | —                        | 29,900                | —  | —                      | 29,900           |
| <b>Total Liabilities</b>   | <u>\$ 66,700</u>         | <u>\$ 29,900</u>      | <u>\$ 36,800</u>                             | <u>\$ 96,600</u>       | <u>\$230,000</u> |
| Net Assets:  |                          |                       |  |                        |                  |
| Unrestricted   | \$163,091                | \$ 61,766             | \$ 54,724                                    | \$ 45,891              | \$325,472        |
| Temporarily restricted   | 18,121                   | 98,099                | 89,807                                       | 107,125                | 313,152          |
| Permanently restricted   | —                        | 21,799                | 30,699                                       | 10,878                 | 63,376           |
| <b>Total Net Assets</b>  | <u>\$181,212</u>         | <u>\$181,664</u>      | <u>\$175,230</u>                             | <u>\$163,894</u>       | <u>\$702,000</u> |
| <b>Total Liabilities and Net Assets</b>                          | <u>\$247,912</u>         | <u>\$211,564</u>      | <u>\$212,030</u>                             | <u>\$260,494</u>       | <u>\$932,000</u> |

## ILLUSTRATION 19-6

**Private Educational Institution  
Statement of Activities  
Multicolumn Format**

|   | <i>Unrestricted</i> | <i>Temporarily<br/>Restricted</i> | <i>Permanently<br/>Restricted</i> | <i>Total</i>     |
|---|---------------------|-----------------------------------|-----------------------------------|------------------|
| <b>Revenues and Gains:</b>                          |                     |                                   |                                   |                  |
| Tuition and Fees, Net of Scholarship                |                     |                                   |                                   |                  |
| Allowances  | \$ 90,400           | —                                 | —                                 | \$ 90,400        |
| Contributions                                       | 74,580              | 40,680                            | 20,340                            | 135,600          |
| Contracts and Other Exchange                        |                     |                                   |                                   |                  |
| Transactions  | 45,200              | —                                 | —                                 | 45,200           |
| Investment Income on Endowment                      | 10,576              | 8,407                             | 8,137                             | 27,120           |
| Other Investment Income                             | 10,848              | 7,232                             | —                                 | 18,080           |
| Net Realized Gains on Investments                   | 27,120              | 24,327                            | 16,353                            | 67,800           |
| Net Unrealized Appreciation on                      |                     |                                   |                                   |                  |
| Investments   | 18,080              | 18,080                            | 9,040                             | 45,200           |
| Auxiliary Services                                  | 22,600              | —                                 | —                                 | 22,600           |
| <b>Total Revenues and Gains</b>                     | <b>\$299,404</b>    | <b>\$ 98,726</b>                  | <b>\$53,870</b>                   | <b>\$452,000</b> |
| Net Assets Released from Restrictions               | 91,450              | (91,450)                          | —                                 | —                |
| <b>Total Revenues, Gains, and Other<br/>Support</b> | <b>\$390,854</b>    | <b>\$ 7,276</b>                   | <b>\$53,870</b>                   | <b>\$452,000</b> |
| <b>Expenses and Losses:</b>                         |                     |                                   |                                   |                  |
| <b>Educational and General:</b>                     |                     |                                   |                                   |                  |
| Instruction   | \$ 87,964           | —                                 | —                                 | \$ 87,964        |
| Research  | 64,507              | —                                 | —                                 | 64,507           |
| Public Service                                      | 29,321              | —                                 | —                                 | 29,321           |
| Academic Support                                    | 32,253              | —                                 | —                                 | 32,253           |
| Student Services                                    | 41,049              | —                                 | —                                 | 41,049           |
| Institutional Support                               | 8,796               | —                                 | —                                 | 8,796            |
| <b>Total Educational and General<br/>Expenses</b>   | <b>263,890</b>      | <b>—</b>                          | <b>—</b>                          | <b>\$263,890</b> |
| Auxiliary Enterprises                               | 20,525              | —                                 | —                                 | 20,525           |
| <b>Total Expenses</b>                               | <b>284,415</b>      | <b>—</b>                          | <b>—</b>                          | <b>\$284,415</b> |
| Fire Loss   | 8,796               | —                                 | —                                 | 8,796            |
| Present Value Adjustment to                         |                     |                                   |                                   |                  |
| Annuity Obligations                                 | —                   | 4,144                             | —                                 | 4,144            |
| <b>Total Expenses and Losses</b>                    | <b>\$293,211</b>    | <b>4,144</b>                      | <b>—</b>                          | <b>\$297,355</b> |
| <b>Increase (Decrease) in Net Assets</b>            | <b>\$ 97,643</b>    | <b>\$ 3,132</b>                   | <b>\$53,870</b>                   | <b>\$154,645</b> |
| Net assets at beginning of year                     | 227,829             | 310,020                           | 9,506                             | 547,355          |
| Net assets at end of year                           | <u>\$325,472</u>    | <u>\$313,152</u>                  | <u>\$63,376</u>                   | <u>\$702,000</u> |

**ILLUSTRATION 19-7****Private Educational Institution  
Statement of Cash Flows  
Indirect Method*****Cash Flows from Operating Activities:***

|   |                  |
|---|------------------|
| Changes in net assets   | \$154,645        |
| Adjustments to reconcile change in net assets to net cash provided by<br>(used for) operating activities: |                  |
| Depreciation  | 23,240           |
| Amortization of discounts on investments  | (10,315)         |
| Amortization of discounts on indebtedness   | 9,860            |
| Increase in accounts receivable   | (7,680)          |
| Decrease in contributions receivable  | 6,290            |
| Increase in accounts payable and accrued expenses   | 4,513            |
| Decrease in deferred revenues   | (1,800)          |
| Contributions restricted for long-term investment   | (5,100)          |
| Interest and dividends restricted for reinvestment  | (1,400)          |
| Net realized and unrealized gains from investments  | (113,000)        |
| Fire loss   | 8,796            |
| Net cash provided by (used for) operating activities  | <u>\$ 68,049</u> |

***Cash Flows from Investing Activities:***

|  |                   |
|--|-------------------|
| Proceeds from sales and maturities of investments    | 5,678             |
| Purchases of investments                             | (19,049)          |
| Purchases of land, building, and equipment           | (65,867)          |
| Disbursements of loans to students and faculty       | (23,156)          |
| Repayments of loans from students and faculty        | 19,880            |
| Net cash provided by (used for) investing activities | <u>\$(82,514)</u> |

***Cash Flows from Financing Activities:***

|  |                  |
|--|------------------|
| Proceeds from issuance of indebtedness                         | 20,500           |
| Repayments of principal of indebtedness                        | (10,500)         |
| Receipts of interest and dividends restricted for reinvestment | 4,200            |
| Contributions received restricted for long-term investment     | 5,500            |
| Payments to annuitants   | (16,403)         |
| Receipts of refundable governmental loan funds                 | 12,600           |
| Net cash provided by (used for) financing activities           | <u>\$ 15,897</u> |
| Net increase (decrease) in cash and cash equivalents           | \$ 1,432         |
| Cash and cash equivalents at beginning of year                 | 35,850           |
| Cash and cash equivalents at end of year                       | <u>\$ 37,282</u> |

# APPENDIX PV: TABLES OF PRESENT VALUES

TABLE 1 Present Value of 1

$$p^n = \frac{1}{(1 + i)^n} = (1 + i)^{-n}$$

| (n)<br>PERIODS | 2%     | 2.5%   | 3%     | 4%     | 5%     | 6%     | 8%     | 9%     | 10%    | 12%    | 15%    |
|----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1              | .98039 | .97561 | .97087 | .96154 | .95238 | .94340 | .92593 | .91743 | .90909 | .89286 | .86957 |
| 2              | .96117 | .95181 | .94260 | .92456 | .90703 | .89000 | .85734 | .84168 | .82645 | .79719 | .75614 |
| 3              | .94232 | .92860 | .91514 | .88900 | .86384 | .83962 | .79383 | .77218 | .75132 | .71178 | .65752 |
| 4              | .92385 | .90595 | .88849 | .85480 | .82270 | .79209 | .73503 | .70843 | .68301 | .63552 | .57175 |
| 5              | .90573 | .88385 | .86261 | .82193 | .78353 | .74726 | .68058 | .64993 | .62092 | .56743 | .49718 |
| 6              | .88797 | .86230 | .83748 | .79031 | .74622 | .70496 | .63017 | .59627 | .56447 | .50663 | .43233 |
| 7              | .87056 | .84127 | .81309 | .75992 | .71068 | .66506 | .58349 | .54703 | .51316 | .45235 | .37594 |
| 8              | .85349 | .82075 | .78941 | .73069 | .67684 | .62741 | .54027 | .50187 | .46651 | .40388 | .32690 |
| 9              | .83676 | .80073 | .76642 | .70259 | .64461 | .59190 | .50025 | .46043 | .42410 | .36061 | .28426 |
| 10             | .82035 | .78120 | .74409 | .67556 | .61391 | .55839 | .46319 | .42241 | .38554 | .32197 | .24719 |
| 11             | .80426 | .76214 | .72242 | .64958 | .58468 | .52679 | .42888 | .38753 | .35049 | .28748 | .21494 |
| 12             | .78849 | .74356 | .70138 | .62460 | .55684 | .49697 | .39711 | .35554 | .31863 | .25668 | .18691 |
| 13             | .77303 | .72542 | .68095 | .60057 | .53032 | .46884 | .36770 | .32618 | .28966 | .22917 | .16253 |
| 14             | .75788 | .70773 | .66112 | .57748 | .50507 | .44230 | .34046 | .29925 | .26333 | .20462 | .14133 |
| 15             | .74301 | .69047 | .64186 | .55526 | .48102 | .41727 | .31524 | .27454 | .23939 | .18270 | .12289 |
| 16             | .72845 | .67362 | .62317 | .53391 | .45811 | .39365 | .29189 | .25187 | .21763 | .16312 | .10687 |
| 17             | .71416 | .65720 | .60502 | .51337 | .43630 | .37136 | .27027 | .23107 | .19785 | .14564 | .09293 |
| 18             | .70016 | .64117 | .58739 | .49363 | .41552 | .35034 | .25025 | .21199 | .17986 | .13004 | .08081 |
| 19             | .68643 | .62553 | .57029 | .47464 | .39573 | .33051 | .23171 | .19449 | .16351 | .11611 | .07027 |
| 20             | .67297 | .61027 | .55368 | .45639 | .37689 | .31180 | .21455 | .17843 | .14864 | .10367 | .06110 |
| 21             | .65978 | .59539 | .53755 | .43883 | .35894 | .29416 | .19866 | .16370 | .13513 | .09256 | .05313 |
| 22             | .64684 | .58086 | .52189 | .42196 | .34185 | .27751 | .18394 | .15018 | .12285 | .08264 | .04620 |
| 23             | .63416 | .56670 | .50669 | .40573 | .32557 | .26180 | .17032 | .13778 | .11168 | .07379 | .04017 |
| 24             | .62172 | .55288 | .49193 | .39012 | .31007 | .24698 | .15770 | .12641 | .10153 | .06588 | .03493 |
| 25             | .60953 | .53939 | .47761 | .37512 | .29530 | .23300 | .14602 | .11597 | .09230 | .05882 | .03038 |
| 26             | .59758 | .52623 | .46369 | .36069 | .28124 | .21981 | .13520 | .10639 | .08391 | .05252 | .02642 |
| 27             | .58586 | .51340 | .45019 | .34682 | .26785 | .20737 | .12519 | .09761 | .07628 | .04689 | .02297 |
| 28             | .57437 | .50088 | .43708 | .33348 | .25509 | .19563 | .11591 | .08955 | .06934 | .04187 | .01997 |
| 29             | .56311 | .48866 | .42435 | .32065 | .24295 | .18456 | .10733 | .08216 | .06304 | .03738 | .01737 |
| 30             | .55207 | .47674 | .41199 | .30832 | .23138 | .17411 | .09938 | .07537 | .05731 | .03338 | .01510 |
| 31             | .54125 | .46511 | .39999 | .29646 | .22036 | .16425 | .09202 | .06915 | .05210 | .02980 | .01313 |
| 32             | .53063 | .45377 | .38834 | .28506 | .20987 | .15496 | .08520 | .06344 | .04736 | .02661 | .01142 |
| 33             | .52023 | .44270 | .37703 | .27409 | .19987 | .14619 | .07889 | .05820 | .04306 | .02376 | .00993 |
| 34             | .51003 | .43191 | .36604 | .26355 | .19035 | .13791 | .07305 | .05340 | .03914 | .02121 | .00864 |
| 35             | .50003 | .42137 | .35538 | .25342 | .18129 | .13011 | .06763 | .04899 | .03558 | .01894 | .00751 |
| 36             | .49022 | .41109 | .34503 | .24367 | .17266 | .12274 | .06262 | .04494 | .03235 | .01691 | .00653 |
| 37             | .48061 | .40107 | .33498 | .23430 | .16444 | .11579 | .05799 | .04123 | .02941 | .01510 | .00568 |
| 38             | .47119 | .39128 | .32523 | .22529 | .15661 | .10924 | .05369 | .03783 | .02674 | .01348 | .00494 |
| 39             | .46195 | .38174 | .31575 | .21662 | .14915 | .10306 | .04971 | .03470 | .02430 | .01204 | .00429 |
| 40             | .45289 | .37243 | .30656 | .20829 | .14205 | .09722 | .04603 | .03184 | .02210 | .01075 | .00373 |

**TABLE 2 Present Value of an Ordinary Annuity of 1**

| (n) | $P_{ni} = \frac{1 - (1+i)^{-n}}{i} = \frac{1 - v^n}{i}$ |          |          |          |          |          |          |          |         |         |         |  |  |  |  |
|-----|---|----------|----------|----------|----------|----------|----------|----------|---------|---------|---------|--|--|--|--|
|     | 2%  | 2.5%     | 3%       | 4%       | 5%       | 6%       | 8%       | 9%       | 10%     | 12%     | 15%     |  |  |  |  |
| 1   | .98039  | .97561   | .97087   | .96154   | .95238   | .94340   | .92593   | .91743   | .90909  | .89286  | .86957  |  |  |  |  |
| 2   | 1.94156   | 1.92742  | 1.91347  | 1.88609  | 1.85941  | 1.83339  | 1.78326  | 1.75911  | 1.73554 | 1.69005 | 1.62571 |  |  |  |  |
| 3   | 2.88388   | 2.85602  | 2.82861  | 2.77509  | 2.72325  | 2.67301  | 2.57710  | 2.53130  | 2.48685 | 2.40183 | 2.28323 |  |  |  |  |
| 4   | 3.80773   | 3.76197  | 3.71710  | 3.62990  | 3.54595  | 3.46511  | 3.31213  | 3.23972  | 3.16986 | 3.03735 | 2.85498 |  |  |  |  |
| 5   | 4.71346   | 4.64583  | 4.57971  | 4.45182  | 4.32948  | 4.21236  | 3.99271  | 3.88965  | 3.79079 | 3.60478 | 3.35216 |  |  |  |  |
| 6   | 5.60143   | 5.50813  | 5.41719  | 5.24214  | 5.07569  | 4.91732  | 4.62288  | 4.48592  | 4.35526 | 4.11141 | 3.78448 |  |  |  |  |
| 7   | 6.47199   | 6.34939  | 6.23028  | 6.00205  | 5.78637  | 5.58238  | 5.20637  | 5.03295  | 4.86842 | 4.56376 | 4.16042 |  |  |  |  |
| 8   | 7.32548   | 7.17014  | 7.01969  | 6.73274  | 6.46321  | 6.20979  | 5.74664  | 5.53482  | 5.33493 | 4.96764 | 4.48732 |  |  |  |  |
| 9   | 8.16224   | 7.97087  | 7.78611  | 7.43533  | 7.10782  | 6.80169  | 6.24689  | 5.99525  | 5.75902 | 5.32825 | 4.77158 |  |  |  |  |
| 10  | 8.98259   | 8.75206  | 8.53020  | 8.11090  | 7.72173  | 7.36009  | 6.71008  | 6.41766  | 6.14457 | 5.65022 | 5.01877 |  |  |  |  |
| 11  | 9.78685   | 9.51421  | 9.25262  | 8.76048  | 8.30641  | 7.88687  | 7.13896  | 6.80519  | 6.49506 | 5.93770 | 5.23371 |  |  |  |  |
| 12  | 10.57534  | 10.25776 | 9.95400  | 9.38507  | 8.86325  | 8.38384  | 7.53608  | 7.16073  | 6.81369 | 6.19437 | 5.42062 |  |  |  |  |
| 13  | 11.34837  | 10.98319 | 10.63496 | 9.98565  | 9.39357  | 8.85268  | 7.90378  | 7.48690  | 7.10336 | 6.42355 | 5.58315 |  |  |  |  |
| 14  | 12.10625  | 11.69091 | 11.29607 | 10.56312 | 9.89864  | 9.29498  | 8.24424  | 7.78615  | 7.36669 | 6.62817 | 5.72448 |  |  |  |  |
| 15  | 12.84926  | 12.38138 | 11.93794 | 11.11839 | 10.37966 | 9.71225  | 8.55948  | 8.06069  | 7.60608 | 6.81086 | 5.84737 |  |  |  |  |
| 16  | 13.57771  | 13.05500 | 12.56110 | 11.65230 | 10.83777 | 10.10590 | 8.85137  | 8.31256  | 7.82371 | 6.97399 | 5.95424 |  |  |  |  |
| 17  | 14.29187  | 13.71220 | 13.16612 | 12.16567 | 11.27407 | 10.47726 | 9.12164  | 8.54363  | 8.02155 | 7.11963 | 6.04716 |  |  |  |  |
| 18  | 14.99203  | 14.35336 | 13.75351 | 12.65930 | 11.68959 | 10.82760 | 9.37189  | 8.75563  | 8.20141 | 7.24967 | 6.12797 |  |  |  |  |
| 19  | 15.67846  | 14.97889 | 14.32380 | 13.13394 | 12.08532 | 11.15812 | 9.60360  | 8.95012  | 8.36492 | 7.36578 | 6.19823 |  |  |  |  |
| 20  | 16.35143  | 15.58916 | 14.87747 | 13.59033 | 12.46221 | 11.46992 | 9.81815  | 9.12855  | 8.51356 | 7.46944 | 6.25933 |  |  |  |  |
| 21  | 17.01121  | 16.18455 | 15.41502 | 14.02916 | 12.82115 | 11.76408 | 10.01680 | 9.29224  | 8.64869 | 7.56200 | 6.31246 |  |  |  |  |
| 22  | 17.65805  | 16.76541 | 15.93692 | 14.45112 | 13.16300 | 12.04158 | 10.20074 | 9.44243  | 8.77154 | 7.64465 | 6.35866 |  |  |  |  |
| 23  | 18.29220  | 17.33211 | 16.44361 | 14.85684 | 13.48857 | 12.30338 | 10.37106 | 9.58021  | 8.88322 | 7.71843 | 6.39884 |  |  |  |  |
| 24  | 18.91393  | 17.88499 | 16.93554 | 15.24696 | 13.79864 | 12.55036 | 10.52876 | 9.70661  | 8.98474 | 7.78432 | 6.43377 |  |  |  |  |
| 25  | 19.52346  | 18.42438 | 17.41315 | 15.62208 | 14.09394 | 12.78336 | 10.67478 | 9.82258  | 9.07704 | 7.84314 | 6.46415 |  |  |  |  |
| 26  | 20.12104  | 18.95061 | 17.87684 | 15.98277 | 14.37519 | 13.00317 | 10.80998 | 9.92897  | 9.16095 | 7.89566 | 6.49056 |  |  |  |  |
| 27  | 20.70690  | 19.46401 | 18.32703 | 16.32959 | 14.64303 | 13.21053 | 10.93516 | 10.02658 | 9.23722 | 7.94255 | 6.51353 |  |  |  |  |
| 28  | 21.28127  | 19.96489 | 18.76411 | 16.66306 | 14.89813 | 13.40616 | 11.05108 | 10.11613 | 9.30657 | 7.98442 | 6.53351 |  |  |  |  |
| 29  | 21.84438  | 20.45355 | 19.18845 | 16.98371 | 15.14107 | 13.59072 | 11.15841 | 10.19828 | 9.36961 | 8.02181 | 6.55088 |  |  |  |  |
| 30  | 22.39646  | 20.93029 | 19.60044 | 17.29203 | 15.37245 | 13.76483 | 11.25778 | 10.27365 | 9.42691 | 8.05518 | 6.56598 |  |  |  |  |
| 31  | 22.93770  | 21.39541 | 20.00043 | 17.58849 | 15.59281 | 13.92909 | 11.34980 | 10.34280 | 9.47901 | 8.08499 | 6.57911 |  |  |  |  |
| 32  | 23.46833  | 21.84918 | 20.38877 | 17.87355 | 15.80268 | 14.08404 | 11.43500 | 10.40624 | 9.52638 | 8.11159 | 6.59053 |  |  |  |  |
| 33  | 23.98856  | 22.29188 | 20.76579 | 18.14765 | 16.00255 | 14.23023 | 11.51389 | 10.46444 | 9.56943 | 8.13535 | 6.60046 |  |  |  |  |
| 34  | 24.49859  | 22.72379 | 21.13184 | 18.41120 | 16.19290 | 14.36814 | 11.58693 | 10.51784 | 9.60858 | 8.15656 | 6.60910 |  |  |  |  |
| 35  | 24.99862  | 23.14516 | 21.48722 | 18.66461 | 16.37419 | 14.49825 | 11.65457 | 10.56682 | 9.64416 | 8.17550 | 6.61661 |  |  |  |  |
| 36  | 25.48884  | 23.55625 | 21.83225 | 18.90828 | 16.54685 | 14.62099 | 11.71719 | 10.61176 | 9.67651 | 8.19241 | 6.62314 |  |  |  |  |
| 37  | 25.96945  | 23.95732 | 22.16724 | 19.14258 | 16.71129 | 14.73678 | 11.77518 | 10.65299 | 9.70592 | 8.20751 | 6.62882 |  |  |  |  |
| 38  | 26.44064  | 24.34860 | 22.49246 | 19.36786 | 16.86789 | 14.84602 | 11.82887 | 10.69082 | 9.73265 | 8.22099 | 6.63375 |  |  |  |  |
| 39  | 26.90259  | 24.73034 | 22.80822 | 19.58448 | 17.01704 | 14.94907 | 11.87858 | 10.72552 | 9.75697 | 8.23303 | 6.63805 |  |  |  |  |
| 40  | 27.35548  | 25.10278 | 23.11477 | 19.79277 | 17.15909 | 15.04630 | 11.92461 | 10.75736 | 9.77905 | 8.24378 | 6.64178 |  |  |  |  |

## Chapter 19 – Review Questions

The review questions accompanying this course are designed to assist you in achieving the course learning objectives. The review section is not graded; do not submit it in place of your qualified assessment. While completing the review questions, it may be helpful to study any unfamiliar terms in the glossary in addition to course content. After completing the review questions, proceed to the review question answers and rationales.

126. FASB's first attempt to incorporate NNOs into their standards came in:
- FASB Concepts Statement No. 2.
  - FASB Concepts Statement No. 3.
  - FASB Concepts Statement No. 4.
  - FASB Concepts Statement No. 6.
127. Which of the following organizations uses a Plant Replacement and Expansion fund?
- State and local government.
  - Colleges and universities.
  - Hospitals.
  - Voluntary Health and Welfare Organizations.
128. Board designated funds:
- May only be used in the manner designated because of a donor or other external restriction.
  - Are shown as current restricted funds.
  - Are legally designated and such designation cannot be changed once enacted.
  - Are current, unrestricted resources to be used for a specific purpose, project, or investment.
129. Which of the following is accurate regarding revenue recognition for NNOs?
- Contributions, including unconditional promises to give, should be recognized when they are measurable and there is a reasonable probability of collection.
  - Revenue from fund-raising events for VHWOs should be recognized at the gross amount with expenses of fund-raising shown as expenditures.
  - Donor-restricted contributions are reported as revenue when received and shown as restricted.
  - Conditional gifts are recognized as revenue in the period received and are shown as restricted.

## Review Question Answers and Rationales

Review question answer choices are accompanied by unique, logical reasoning (rationales) as to why an answer is correct or incorrect. Evaluative feedback to incorrect responses and reinforcement feedback to correct responses are both provided.

### Chapter 1

1. Which of the following is accurate regarding merger and acquisition activity historically?
  - a. 2009 M&A activity reached historic highs and has trailed off since. Incorrect. By the latter half of 2009, M&A activity had almost come to a halt due to the recession in the U.S. and the low stock valuations.
  - b. Low stock valuations in late 2008 and early 2009 fueled M&A activity. Incorrect. High stock valuations fuel M&A activity and after the 2008 market crash, valuations were low.
  - c. Lower interest rates after 2009 spurred the largest growth in M&A activity since the 1990s. Incorrect. Companies want to use stock to buy other companies, not debt.
  - d. **2008 saw a dramatic rise in bankruptcy-related M&A activity. Correct. After the market crash and the subsequent recession in the U.S. in late 2008, M&A activity began to center around bankruptcy-avoidance mergers.**
  
2. Which of the following types of M&A benefits was seen consistently from 2001 to 2010 accounting for more than 30% of the M&A activity each quarter during that period?
  - a. Diversification. Incorrect. Diversification was not a driving motivation during this time period.
  - b. Expansion to international markets. Incorrect. While the financial crisis in Asia accelerated the pace for a time, it did not sustain the momentum during this period.
  - c. Financial “tax gain” synergies. Incorrect. It is harder to quantify the number of companies motivated by purely tax incentives or benefit especially after the Tax Reform Act of 1986 limited the use of NOLs in merged companies.
  - d. **Divestitures. Correct. “Shredding division that are not part of the company’s core business became common during this period.”**

3. Which of the following is accurate regarding a stock acquisition versus an asset acquisition?
- a. A stock acquisition means that the acquiring firm will issue its own stock in order to acquire the stock of the other firm. Incorrect. The medium of exchange is not a central part of a stock acquisition.
  - b. In an asset acquisition, the acquiring firm must acquire 100% of the assets of the other firm regardless of the medium of exchanged used to do so. Correct. It does not matter how the firm pays for the assets; the differentiator is that the acquiring company must buy 100% of the assets.**
  - c. In an asset acquisition, the acquiring firm will issue its own stock in order to acquire the assets of the other company. Incorrect. It may issue its own stock, use cash or debt or some combination but it must buy 100% of the assets.
  - d. In a stock acquisition, the acquiring firm must acquire 100% of the stock of the other firm regardless of the medium of exchanged used to do so. Incorrect. In a stock acquisition, the acquiring may only need to acquire 50% of the stock (or less depending on the split of ownership) in order to have control over the company.
4. Which of the following statements is accurate regarding a statutory merger?
- a. Only the acquiring company survives the merger as a legal entity. Correct. The acquiring company buys 100% of the assets and the acquired company ceases to exist after the merger.**
  - b. The acquiring company may buy 100% of the stock of the acquired company or some smaller percentage depending on the dispersion of stock among stockholders. Incorrect. In a statutory merger, the acquiring company is buying the assets of the company.
  - c. Both companies will continue in existence for at least some period of time after the merger. Incorrect. The acquired company will cease to exist after the merger.
  - d. The board of the acquired company does not have much input into the terms of the merger. Incorrect. Typically a statutory merger is negotiated by the two boards and presented to the shareholders.



5. Which of the following has different recognition rules for acquisitions which must be considered as part of due diligence?
- a. LIFO inventory. Incorrect. Part of due diligence is to consider allocation of expenses, standard cost variances, and LIFO liquidations and the resulting impact on earnings.
  - b. Indirect production expense allocations. Incorrect. Part of due diligence would be to look for significant changes in management's allocation of such, but there are not different recognition rules in an acquisition situation.
  - c. **Contingent liabilities. Correct. Contingent liability recognition is different in an acquisition as they "must be measured and recognized at their fair values ... even if they do not meet the usual recognition criteria for recording contingent items."**
  - d. Changes in estimates. Incorrect. This is an important consideration during due diligence as any significant changes to estimation methods should be investigated.
6. Which of the following is accurate regarding the economic entity concept of consolidation?
- a. The primary purpose of consolidated financial statements is to provide information relevant to the controlling stockholders. Incorrect. This is the viewpoint of the parent company concept.
  - b. **It represents the view that the affiliated companies are a separate, identifiable entity and evaluation is only possible if all of the assets, liabilities and equity are combined. Correct. Subscribers to the economic entity concept hold that all of the components of the complete economic entity should be reported.**
  - c. The non-controlling or minority interest is presented as a liability. Incorrect. This is how the parent company concept purposes to handle minority interest.
  - d. The consolidated balance sheet is essentially a modification of the parent's balance sheet with the assets and liabilities of all subsidiaries substituted for the parent's investment in subsidiaries. Incorrect. This is the presentation under the parent company model.
7. SFAC #6 fails to define:
- a. Revenues. Incorrect. Revenues are defined "inflows or other enhancements of assets of an entity or settlement of its liabilities (or a combinations of both) during a period from delivering or producing goods, rendering services, or other activities that constitute the entity's ongoing major or central operations."
  - b. Comprehensive income. Incorrect. Comprehensive income is defined within SFAC #6.
  - c. Investment by owners. Incorrect. This is one of the terms defined as well as distributions to owners.
  - d. **Earnings. Correct. Earnings is not defined within SFAC #6 "in fact, the FASB explicitly stated that it reserved the term earnings for possible use to designate a significant intermediate measure or component of comprehensive income."**

## Chapter 2

8. Which of the following statements is accurate regarding the comparison of SFAS No. 141R and FASB Statement No. 141?
- Most of the primary conclusions reached in the original SFAS No. 141 were revised in SFAS No. 141R. Incorrect. Most were carried forward without revision.
  - The essence of the change is that the acquired company should be recognized at its fair value on the acquisition date. Correct. The heart of the change was the move toward fair value even if the company acquired less than 100% of the acquired company.**
  - The driving force was the complete convergence of U.S. GAAP and IFRS for business combinations. Incorrect. The two boards did attempt to come together, but the resulting standards are not identical.
  - The outcome was the pooling of interest method was eliminated. Incorrect. Pooling of interests was eliminated in 2001, and SFAS No. 141R the “purchase method” was replaced by the “acquisition method.”
9. Goodwill:
- Must be amortized over its useful life, not to exceed 40 years, for all public companies. Incorrect. This was the rule prior to SFAS No. 142.
  - Must be amortized over 10 years for all public companies. Incorrect. This is an alternative method allowed for private companies.
  - Must be assigned to a reporting unit for all public companies. Correct. The reporting unit “owns” the goodwill and its performance is the basis for determining if there has been an impairment.**
  - May be evaluated under an alternative method if certain public companies meet the criteria. Incorrect. The alternative method is available for certain private companies.
10. Which of the following is accurate regarding acquisition costs under FASB ASC 805-10-25-23?
- Expected restructuring costs resulting from the business combination must be accounted for separately from the business combination accounting. Correct. Restructuring costs which are not obligations from the original deal are accounted for separately from the business combination.**
  - Only direct expenses can be capitalized as part of the purchase price. Incorrect. This is the old purchase accounting; ASC 805-10-25-23 now requires expensing.
  - Only security issuance costs, if any, can be capitalized as part of the purchase price. Incorrect. These are accounted for separately as an adjustment to the capital (stock) or the bond premium or discount.
  - Direct costs may be capitalized as part of the purchase but indirect costs must be expensed. Incorrect. This is the old purchase method accounting which is no longer used.

11. Earnouts:
- a. Measured and recognized when they are earned. Incorrect. This the old method of accounting.
  - b. Measured at the acquisition date and reflected as equity. Incorrect. Per FASB ASC Topic 480, equity classification generally requires that a fixed number of shares be paid and that the performance target be based on the operations of the acquirer or acquire and not on something external (like an index).
  - c. Measured at the acquisition date and reflected as a liability. Incorrect. They may or may not be reflected as equity based on the criteria laid out in FASB ASC Topic 480.
  - d. Must be measured at fair value as of the acquisition date and recognized as part of the transaction. Correct. SFAS No. 141R changed the accounting for earnouts and considers them a “level 3 fair value liability.”**
12. Which of the following is accurate regarding GAAP versus IFRS standards in the area of business combinations?
- a. IFRS offers acquiring companies a choice in the valuation of goodwill whereas U.S. GAAP does not. Correct. IFRS allows a write up on goodwill even if there is minority interest.**
  - b. IFRS does not allow for the recognition of goodwill whereas U.S. GAAP requires it if there is goodwill. Incorrect. IFRS does require the recognition of goodwill if it is present and offers the acquiring company a choice regarding the value recognized.
  - c. IFRS requires that companies write all assets, including goodwill, up fully even if there is a minority interest. Incorrect. IFRS does not require that but allows it.
  - d. IFRS does not require the recognition of contingent consideration at the acquisition. Incorrect. IFRS follows the same rules as U.S. GAAP.

### Chapter 3

13. In a stock acquisition:
- The acquiring company, referred to as the parent, will record its share of the acquired company's (the subsidiary's) assets and liabilities on its own balance sheet. Incorrect. The acquired company will maintain its own books and records and is still a separate legal entity.
  - The party or parties holding any remaining stock in an acquired subsidiary are referred to as the non-controlling interest. Correct. This type of acquisition creates affiliated companies but the acquiring company may not acquire all of the stock and thus there will be a non-controlling or minority interest in the acquired company.**
  - At acquisition, the acquired company will cease to exist and the acquiring company will account for any minority interest. Incorrect. The acquired company continues to exist and maintain its own books and records; however, the acquiring company will account for the minority interest in the consolidated financial statements.
  - There is no longer a need for the acquired company to maintain separate financial statements other than for unit or division reporting. Incorrect. The acquired company is a separate legal entity and will maintain its own books and records although the financial statements themselves may be for internal use only.
14. All of the following statements regarding variable interest entities (VIEs) are accurate with the **EXCEPTION** of:
- In a thinly capitalized entity, the company that owns a majority of the stock may not actually have financial control of the entity. Incorrect. This statement is accurate. In this case, the debt-holder actually wields more controls than the stockholder.
  - Variable interest entities have historically been a vehicle for avoiding rules of consolidation, delaying reporting incurred losses or to report illusory gains. Incorrect. This is a true statement and much of the current guidance resulted from Enron's manipulation of VIEs for just such purposes.
  - FASB has determined that all interests in VIEs should be consolidated unless such interest is "insignificant." Correct. This statement is not accurate. Actually, FASB developed a risk and reward model to determine who should consolidate a VIE in order to properly reflect the economic substance of the arrangement.**
  - The identification of variable interests requires an economic analysis of the rights and obligation of a legal entity's assets, liabilities, equity, and other contracts. Incorrect. This is a correct statement. Since investments or other interests that absorb portions of a VIE's expected losses or receive portions of its residual returns, an economic analysis of this flow is required to appropriately account for the economic realities inherent in the VIE.

15. With respect to “control”:
- a. IFRS differentiates between voting interest entities which are not VIEs and VIEs when determining the definition of control. Incorrect. U.S GAAP has this distinction.
  - b. U.S. GAAP defines control for VIEs as the power to direct the activities that impact economic performance, the obligation to absorb the expected losses, and the right to receive expected residual returns. Correct. Since U.S. GAAP differentiates between voting (non-VIE) and VIE entities, there are different definitions of control for each.**
  - c. U.S. GAAP defines control for all entities as the power to govern the entities’ financial and operating policies so as to obtain benefits from its activities. Incorrect. This is the IFRS definition for all entities.
  - d. IFRS defines control for voting interest entities as the direct or indirect ability to determine the direction of management and policies through ownership, contract, or otherwise. Incorrect. This is the definition under U.S. GAAP for voting interest entities which are not VIEs.
16. The first step in the consolidation process is to:
- a. Determine the difference between implied value and book value. Correct. The Computation and Allocation of Difference between Implied Value and Book Value schedule (CAD) is a useful first step.**
  - b. Eliminate the intercompany account. Incorrect. Eliminations will need to be made but preparing the CAD schedule is the best way to begin.
  - c. Eliminate the investment in subsidiary account. Incorrect. Eliminations will need to be made, but that is not the preferred first step.
  - d. Convert the subsidiary’s account from cost basis to fair value. Incorrect. We need the CAD schedule first before we look to adjust the subsidiary’s values from book value to fair value.

17. Which of the following is accurate about limitations and advantages of consolidated financial statements?
- a. Financial analysts usually favor consolidated financial statements over segment reporting. Incorrect. Financial analysts criticize consolidation especially with highly diversified companies because it is hard to compare them to other companies in the same industry.
  - b. The SEC has limited use for segment reporting despite FASB's requirement that it be shown in GAAP financial statements. Incorrect. The SEC requires segment reporting.
  - c. **Consolidated financial statements of highly diversified companies operating across industries can be hard to interpret and compare to other companies. Correct. It is hard to find comparable companies when a consolidated conglomerate operates in numerous different industries.**
  - d. FASB is considering a proposal to do away with segment reporting because there is so little need for it among financial statement users. Incorrect. Segment reporting is becoming more important as companies become conglomerates.

## Chapter 4

18. Which of the following is accurate regarding the requirements on a parent company for accounting for the subsidiary?
- a. If the investor owns less than 20%, they are considered to have no significant influence but would need to use the equity method if they owned between 10% and 20%. Incorrect. Anything less than 20% is considered “no significant influence” and would be indicative of carrying the investment at fair value as of the balance sheet date. (Referred to as cost method with an adjustment for market changes.)
  - b. Any ownership percentage greater than 40% is presumed to be effective control unless a single shareholder owns a block in excess of 40%. Incorrect. The cutoff is 50% rather than 40%.
  - c. “Significant influence” ranges from 10% to 40% depending on the facts and circumstances. Incorrect. The range is 20% to 50%.
  - d. **The parent company has a certain amount of discretion over how it accounts for its investment in the subsidiary internally unless the parent issues parent-only financial statements for any reason. Correct. If the parent is only issuing consolidated financial statements, the internal treatment of the investment won’t matter; however, if they issue parent-only financials, they must account for the investment on the equity method if they have significant influence or effective control.**
19. A liquidating dividend:
- a. Occurs when the investee company repurchases some of its stock from the investor. Incorrect. A liquidating dividend is the excess of dividends declared over earnings after acquisition.
  - b. **Occurs when the cumulative amount of its dividends declared exceed its cumulative reported earnings after acquisition. Correct. This would result in a return of capital and a reduction in the investment account.**
  - c. Is treated as a gain if the amount per share exceeds the original cost per share. Incorrect. There is no gain recognition as shares are not sold; it’s a return of capital.
  - d. Is recorded as dividend income on the books of the investor company. Incorrect. It’s recorded as a reduction of the investment account.

20. The computation and allocation difference schedule:
- Will only be calculated at the acquisition date and will remain unchanged over time. Incorrect. The difference between implied value and book value does not change, but allocation of that difference must be computed each balance sheet date.
  - Will change at each balance sheet date. Incorrect. The implied value is based on purchase price so does not change.
  - Will reflect the same difference between implied value and book value as at the acquisition date; however, the makeup of that distribution may shift over time. Correct. The difference in value is based on purchase price at acquisition so that difference doesn't change but the fair valuation of the underlying assets will change over time.**
  - Is only necessary when recording the investment at acquisition. Incorrect. The difference must still be allocated among the assets of the subsidiary at each consolidation date.
21. Which of the following statements is accurate about preparing the consolidation workpapers?
- It is best to prepare three separate workpapers, one for each financial statement. Incorrect. All three statements flow on the same workpaper.
  - Elimination entries should be documented in journal entry form, numbered, and "nicknamed" to describe the reason for the entry. Correct. It is best to prepare them in journal form prior to entering them in the workpaper to ensure that they balance.**
  - Only the controlling interest share of net income from the income statement is transferred to the retained earnings statement. Incorrect. The total entity consolidated net income flows to the retained earnings statement.
  - In the years after acquisition, the retained earnings of the subsidiary is eliminated in the balance sheet section of the workpapers. Incorrect. It is eliminated on the retained earnings statement in the years after the acquisition.
22. The entry to establish reciprocity or convert from the cost to the equity method usually involves a debit to investment in subsidiary and a credit to:
- Subsidiary end-of-year retained earnings. Incorrect. The entry flows to parent beginning of year retained earnings.
  - Parent end-of-year retained earnings. Incorrect. We want to accurately show the current year activity that flows through retained earnings so we are adjusting beginning of year retained earnings.
  - Parent beginning-of-year retained earnings. Correct. The accountant must eliminate the past activity from date of acquisition to the beginning of the current year by adjusting beginning of year parent retained earnings.**
  - Subsidiary beginning-of-year retained earnings. Incorrect. We want to make the adjustment to the parent retained earnings account.



23. Under the cost method:
- a. **Income is recorded by the parent company when it is distributed as dividends. Correct. It becomes dividend income on the books of the parent under the cost method.**
  - b. Income is recorded on the books of the parent during the same accounting period that it is reported by the subsidiary. Incorrect. This is true under the equity method.
  - c. The parent records dividends as a reduction in the investment in subsidiary account. Incorrect. Under the cost method, the parent recognizes dividend income.
  - d. Income will be recognized by the parent whether or not it is distributed by the subsidiary. Incorrect. This is true of the equity method.
24. In periods subsequent to acquisition and in the absence of intercompany profits or other complicating transactions, the noncontrolling interest (as shown on the consolidated balance sheet) can be determined by summing the noncontrolling interest in equity at acquisition and:
- a. The noncontrolling percentage of the book value of the subsidiary's net assets. Incorrect. The accountant would need to add the net change in retained earnings multiplied by the noncontrolling percentage.
  - b. The noncontrolling percentage of the fair value of the subsidiary's net assets. Incorrect. The accountant would be looking at the net change in subsidiary retained earnings during the year.
  - c. The noncontrolling percentage of the subsidiary's year-end retained earnings. Incorrect. This would double-count the beginning equity at acquisition.
  - d. **The noncontrolling percentage of the change in subsidiary retained earnings from acquisition to the end of the current year. Correct. The step-by-step approach would apply the noncontrolling percentage to the income and then to the dividend activity but that is the represented by the net change.**

25. When a company acquires another company in the middle of the year:
- The acquiring company will reflect the income and expense activity prior to the acquisition because in effect, they bought those earnings. Incorrect. Those results will be reflected in retained earnings but for purposes of the P&L, the subsidiary will only report from the date of acquisition to year-end.
  - The acquiring company will reflect the revenue and expenses of the pre-acquisition period if such period is 3 months or less. Incorrect. The FASB requires that the P&L only reflect activity from the acquisition to year-end.
  - The subsidiary will close their books to retained earnings as of the acquisition date and then reflect the post-acquisition results from that day forward. Correct. The subsidiary will close their books to retained earnings on the date of acquisition so that their P&L will reflect only the activity after the acquisition.**
  - The acquired company will need to maintain the balances of their income statement accounts as of the acquisition date so the revenue and expenses pre-acquisition can be adjusted out of their full annual results. Incorrect. They will close out like it is a year-end and then start fresh for the post-acquisition activity.
26. Which of the following statements is accurate regarding the comparison of U.S. GAAP and IFRS accounting for investments in other companies?
- GAAP requires consideration of potential voting rights on currently exercisable or convertible instruments while IFRS does not consider them. Incorrect. It is the reverse where IFRS has such a consideration.
  - IFRS requires the use of the equity method whenever the investor has “significant influence” except as it relates to subsidiaries and joint ventures. Correct. This is the same for U.S. GAAP.**
  - IFRS requires use of the equity method for lower levels of ownership than does U.S. GAAP. Incorrect. The significant influence is the same for both – 20% or more of the voting rights.
  - IFRS considers there to be significant influence at 10% of the voting rights in a corporate investee. Incorrect. They are both the same.
27. Which of the following is accurate regarding IFRS and U.S. GAAP similarities and differences?
- IFRS and the U.S. use the equity method for joint ventures. Incorrect. IFRS has the proportionate consolidation method for joint ventures.
  - IFRS uses the proportionate consolidation for joint ventures while the U.S. uses the equity method. Correct. Although IFRS has the equity method it is not recommended rather proportionate consolidation is the preferred approach.**
  - In the U.S., the significant influence principle is applied to the determination of account method for limited partnerships. Incorrect. This is an IFRS approach.
  - IFRS uses the equity method for limited partnerships where the investment is more than 3-5%. Incorrect. This is U.S.GAAP.

## Chapter 5

28. A bargain purchase is when:
- Fair value is less than implied value. Incorrect. When purchase price (implied value) is greater than the fair value of the assets acquired, the acquiring company has paid a premium.
  - Fair value is below book value. Incorrect. Determining a bargain purchase requires a comparison of fair value and the implied value.
  - Book value is greater than implied value. Incorrect. Book value is not relevant in the determination of the bargain purchase.
  - The implied value is below the aggregate fair value of identifiable assets less liabilities. Correct. This is the definition of a bargain purchase.**
29. Historically, in a bargain purchase:
- All assets and liabilities of the subsidiary were recorded at fair value as the first step. Incorrect. There was a specific list of assets which were required to be recorded at fair value and all assumed liabilities were recorded at fair value.
  - An extraordinary gain was recognized for the difference between fair value of net assets and the purchase price. Incorrect. An extraordinary gain was recorded only in the event that all long-lived assets (other than those required to be recorded at fair value) were reduced to zero.
  - Long-lived assets (other than some specifically required to be accounted for differently) were recorded at fair value less an adjustment for the bargain. Correct. The historic approach to accounting for a bargain purchased required that certain assets and all liabilities be recorded at fair value and then the long-lived assets would be adjusted for the bargain.**
  - Only current assets and marketable securities were recorded at fair value. Incorrect. There was an identified group of asset which were recorded at full fair value as well as all liabilities.

30. If the price paid by the acquiring company for a subsidiary is *between* the fair value of the net assets and the book value of the net assets:
- The acquiring company will recognize goodwill. Incorrect. Goodwill would result if the price paid is more than the fair value of the net assets.
  - The acquiring company will write down the assets on a pro rata basis. Incorrect. This was one aspect of the old approach.
  - The acquiring company will recognize a gain for the excess of fair value over implied value. Correct. When the purchase price is greater than book value, assets are adjusted to fair value as usual; however, when the purchase price is less than the full fair value of the net assets, there is “excess fair value” which is then recognized as a gain.**
  - The acquiring company will recognize a noncontrolling interest. Incorrect. Noncontrolling interest is only recorded if the acquiring company acquires less than 100% of the subsidiary.
31. Which of the following statements is accurate regarding the parent company’s required entries for the subsidiary under the cost method?
- After the acquisition, the only entry the parent company will record on its books is for any dividend income paid by the subsidiary. Correct. The parent will record dividend income if the subsidiary paid them cash dividends.**
  - After the acquisition, the parent company will record dividends and its share of subsidiary income on its books. Incorrect. There would not be an entry needed for subsidiary income under the cost method.
  - After the acquisition, the parent company will not record any entries related to the investment in subsidiary unless there is a permanent impairment. Incorrect. If the subsidiary pays any dividends, the parent will record dividend income.
  - After the acquisition, the parent company will reduce the value of the investment in subsidiary for any dividends paid. Incorrect. Dividends would be recorded as dividend income on the cost method.

32. Which of the following entries would only be required in consolidation in the years after the acquisition if the subsidiary had been accounted for under the cost method?
- a. Debit the equity accounts of the subsidiary and credit the investment in subsidiary. Incorrect. This is the standard elimination entry for the investment in subsidiary account and the subsidiaries equity accounts.
  - b. Debit investment in subsidiary and credit beginning retained earnings of the parent company. Correct. This is the reciprocity entry that adjusts for the subsidiary income from the date of acquisition to the beginning of the year. It is only needed if the parent is using the cost method for an investment in a subsidiary which requires consolidation.**
  - c. Debit asset accounts and credit difference between implied value and book value for the amount that fair value of individual assets exceeds their book values. Incorrect. This is the standard consolidation entry to increase the assets from book value to fair value.
  - d. Debit goodwill and credit difference between implied value and book value. Incorrect. This is a standard consolidation entry to record goodwill if there is any.
33. Which of the following statements is accurate regarding the correct accounting for a goodwill impairment 2 years after acquisition by the parent of an 80% ownership in the subsidiary?
- a. The amount of impairment will permanently reduce goodwill on the parent company's balance sheet. Incorrect. Goodwill will continue to be adjusted in the consolidating workpapers but it will subsequently reflect the reduced value.
  - b. The amount of impairment will be recognized as a loss and there will be a valuation account set up for goodwill. Incorrect. Goodwill continues to be adjusted as part of the consolidation.
  - c. The amount of the impairment will be recognized as a loss in the consolidated income statement and such loss will be fully reflected in the controlling interest in consolidated income. Incorrect. The loss on the impairment is split between the controlling and noncontrolling interests.
  - d. The amount of the impairment will be recognized as a loss in the consolidated income statement and such loss will be allocated between the controlling and noncontrolling interests. Correct. As with all income and expense items, the impairment loss is allocated between the controlling and noncontrolling interests.**

34. Which of the following is the correct course of action if goodwill is determined to be impaired?
- a. Reduce the difference between implied value and book value account. Incorrect. A loss must be recognized in the current period and the balance of goodwill reduced.
  - b. Recognize an extraordinary loss in the current period. Incorrect. Extraordinary items are no longer used.
  - c. Set up an allowance account for goodwill to adjust for current and future increases and decreases in value. Incorrect. Goodwill, once determined to be impaired will not be adjusted back up so an allowance account is not needed.
  - d. Recognize impairment loss on the income statement. Correct. The impairment loss is recognized and goodwill is permanently written down.**
35. Which of the following is accurate regarding the calculation of consolidated retained earnings when using the partial equity method?
- a. It is the parent's ending retained earnings plus their share of the subsidiary's current year income/loss. Incorrect. The partial equity method requires the inclusion of the subsidiary's income/loss in parent retained earnings.
  - b. It is the beginning retained earnings of the parent plus the cumulative effect of the subsidiary's earnings/loss since the acquisition. Incorrect. Subsidiary earnings are included in the parent's retained earnings under the partial equity method.
  - c. It is the parent's retained earnings plus or minus the cumulative effect of adjustments to date related to depreciation of the difference between implied and book value. Correct. Under the partial method, the parent has recorded their share of the subsidiary's income/loss since acquisition so the only adjustment is for the extra depreciation related to the differences between implied and book value over time.**
  - d. It is the parent's beginning retained earnings plus the current year consolidated earnings less the noncontrolling interest. Incorrect. Under the partial equity method, parent retained earnings already include the subsidiary's income or loss since acquisition.

36. When a company uses the complete equity method, which of the following accounts must be eliminated in consolidation?
- a. **Equity in subsidiary income. Correct. Under the complete equity method, the parent is recording the subsidiary's income to this account so it must be eliminated and the actual revenue and expense account added to the parent's in consolidation.**
  - b. Dividend income. Incorrect. Equity in subsidiary income is the account which must be eliminated under the complete equity method.
  - c. Goodwill. Incorrect. If there is goodwill, it will be recorded as part of the consolidation not eliminated.
  - d. Minority interest in income. Incorrect. If there is minority interest, it must be recorded in consolidation not eliminated.
37. Which of the following statements is accurate regarding calculating the fair value of liabilities?
- a. Fair value does not take into consideration nonperformance risk. Incorrect. Fair value must take into account nonperformance risk.
  - b. The valuation technique used to value the debt should be the approach that is the best match to the nature of the debt and the circumstances so it will necessarily vary across the various liabilities. Incorrect. "Valuation techniques used to measure fair value should be consistently applied."
  - c. **Recording additional liabilities at acquisition can be a way to manipulate future earnings by running the related expenses through the liability accounts rather than recording the expenses. Correct. Disney was accused of this issue in their acquisition of Capital Cities/ABC with respect to future programming.**
  - d. FASB greatly favors use of the income approach over the market approach for valuing liabilities. Incorrect. Both techniques are valid and would apply based on the company's approach to valuation.
38. Push down accounting:
- a. **Is required in the banking industry. Correct. Some industries require it with banking being one since there are so many mergers and acquisitions.**
  - b. Is required when 100% of the stock is acquired. Incorrect. The requirement is industry specific but could make sense in an acquisition with 100% ownership.
  - c. Is not allowed in any industry but some companies maintain a separate set of "push down" books for internal purposes. Incorrect. It is allowed but not required except in certain industries such as banking.
  - d. Was used heavily in the early 2000s, but because of abuses after the financial crisis has been disallowed. Incorrect. There are pros and cons of using push down accounting, but it has not been disallowed.

## Chapter 6

39. Which of the following is accurate regarding the financial reporting objectives of intercompany sales?
- a. Transactions recorded on subsidiary and parent books should reflect the cost without the profit component. Incorrect. The initial transaction will be recorded as a sale and a purchase on each company's books and intercompany profits will be eliminated in consolidation.
  - b. The selling company must recognize profit from intercompany sales but the acquiring company must reduce the cost down to the affiliates original cost in order to properly reflect cost of goods sold. Incorrect. The objective after consolidation is to present cost of goods sold and inventory based on the cost to the affiliated group which would eliminate any intercompany profit.
  - c. The selling company must not recognize profit on intercompany sales on their own company books. Incorrect. Typically the company will want to follow the same process for recording sales within their systems and be able to look at the margins for internal management purposes regardless of who the buyer is.
  - d. **Consolidated cost of sales includes only the cost to the affiliated group for goods that have been sold to parties outside the affiliated group. Correct. This is one of the objectives of financial reporting for the affiliated group.**
40. Which of the following statements is accurate regarding the impact of a failure to eliminate intercompany sales for the consolidated entity (assuming that all goods bought through intercompany activity are sold to third parties by year-end)??
- a. Failing to eliminate an intercompany sale will result in an incorrect consolidated gross profit. Incorrect. The net gross profit will be correct as sales and cost of sales will both be overstated.
  - b. **The gross profit percentage will be wrong. Correct. While consolidated gross profit will be correct, consolidated sales will be overstated so the percentage will be skewed.**
  - c. Consolidate net income will be incorrect. Incorrect. Consolidated net income will be correct but sales and cost of goods sold will be overstated by the same amount.
  - d. Cost of goods sold will be understated. Incorrect. Cost of goods sold would be overstated as would sales.



41. Which of the following is accurate regarding the differences between the three methods as it relates to intercompany downstream sales?
- a. Under the partial method, parent company retained earnings does not need to be adjusted in year 2 for any activity from year 1. Incorrect. Under both the partial and the cost method, intercompany profits that remained in ending inventory the prior year need to be adjusted out.
  - b. Under the cost method, the year 1 entries will not have any impact on year 2. Incorrect. Under the cost method, you have to “rebuild” the cumulative impact of the year 1 adjustments.
  - c. **Under the complete method, the retained earnings account on the separate company books of the parent is the same as consolidated retained earnings. Correct. The complete method results in the parent company’s retained earnings being equivalent to consolidated retained earnings.**
  - d. Under both the partial method and the complete method, beginning retained earnings of the parent company equals ending consolidated retained earnings. Incorrect. Under neither method is this true.
42. In which of the following situations would the noncontrolling interest in consolidated net income need to be adjusted for intercompany sales?
- a. Downstream sales. Incorrect. In a downstream sale, the parent is selling so the noncontrolling interest is not impacted.
  - b. **Subsidiary sales to another affiliate (not the parent). Correct. In horizontal sales, the income of the subsidiary is impacted thus the noncontrolling interest is impacted.**
  - c. Parent sells to the subsidiary. Incorrect. This is a downstream sale.
  - d. Subsidiary purchases from the parent. Incorrect. The adjustment only needs to be made if the subsidiary is selling to an affiliate whether it the parent (upstream) or another subsidiary of the parent (horizontal).
43. In comparing the cost method and the partial equity method, which of the following entries will be different depending on which method you use?
- a. The entry to eliminate intercompany sales. Incorrect. The entry to eliminate intercompany sales will be the same under both methods.
  - b. The entry to eliminate intercompany profit. Incorrect. The entry to eliminate intercompany profit will be the same under both methods.
  - c. **The entry to establish reciprocity. Correct. The entry to establish reciprocity will be different depending on which method you use.**
  - d. The entry to recognize intercompany profit in beginning inventory realized during the year. Incorrect. The entry to recognize intercompany profit in beginning inventory that was realized during the year will be the same under both methods.

44. All of the following statements regarding the complete equity method are accurate with the **EXCEPTION** of:
- a. Under the complete equity method, no formal calculation of the controlling interest in consolidated net income is needed. Incorrect. This is an accurate statement since the parent already made adjustments for realized/unrealized profit by adjusting the equity in subsidiary income account.
  - b. Under the complete equity method, consolidated retained earnings is equal to the parent company's recorded complete equity basis retained earnings. Incorrect. This statement is accurate. The adjusted subsidiary income is already in the parent's retained earnings under the complete method so they are equal.
  - c. Under the complete equity method, consolidated net income equals the parent company's recorded income. Incorrect. This statement is accurate. The parent records both their share of the subsidiary income and eliminates the intercompany profit from that income so the incomes are equal. The components of income and expense are not equal under consolidated.
  - d. **Under the complete equity method, intercompany profits will have to be adjusted out of the parent company's retained earnings. Correct. This is an inaccurate statement. Under the complete method the subsidiary's adjusted earnings have flowed through the parent's retained earnings so no adjustments need to be made.**
45. Which of the following is accurate regarding the elimination of intercompany profits realized prior to the affiliation?
- a. It is required under GAAP to eliminate such intercompany profit if the selling company is the new subsidiary. Incorrect. GAAP does not require it and is silent on it while the author feels that the intercompany profit is implicitly considered in determining book value so has been factored in and elimination is inappropriate.
  - b. It is required under GAAP to eliminate such intercompany profit if the purchasing company is the new subsidiary. Incorrect. GAAP is silent on the treatment of intercompany profits prior to affiliation.
  - c. **GAAP is silent as to the appropriate treatment of intercompany profits prior to acquisition. Correct. GAAP is silent while the author feels that it is unnecessary regardless of who the purchaser and seller were.**
  - d. GAAP requires that profits be eliminated only when the selling company is the subsidiary. Incorrect. GAAP has no requirement or prohibition when it comes to this issue.

## Chapter 7

46. In looking at the objectives for consolidated reporting related to exchanges of non-depreciable assets between affiliated parties, which the following is **NOT** a financial reporting objective?
- a. **To show the economic impact of a transaction on each separate company. Correct. This may be an objective for management of the individual entity but it is not an objective for reporting on the consolidated entity.**
  - b. To include gains or losses on non-depreciable property only when the property has been sold to a third party. Incorrect. This is an objective of reporting for the consolidated entity.
  - c. To uphold the revenue recognition principle for the consolidated entity and not the individual entities. Incorrect. This is the principle related to reporting at the consolidated entity level.
  - d. To present non-depreciable property in the consolidated balance sheet at its cost to the consolidated entity. Incorrect. The economic entity approach requires that the consolidated entity report at cost to the entity.
47. P Company owns all of the common stock of S Company. On January 1, P sold to S for a \$5,000 gain a fixed assets that S will use over the next five years. How should this gain be reflected in the consolidated financial statements?
- a. Not be recorded. Incorrect. It gets in to the financial statements via the downward adjustment to depreciation expense over the useful life of the equipment.
  - b. **Be recognized over 5 years. Correct. Since there will be an entry to reduce depreciation expense from what is recorded on the subsidiaries books, this will increase consolidated income.**
  - c. Be recognized in its entirety in the year of sale. Incorrect. The gain will be eliminated in consolidation.
  - d. Be recognized in its entirety only when it is sold to outsiders. Incorrect. Because of the impact to depreciation, the gain essentially gets realized over the useful life of the asset.

48. P Corporation owns all of the common stock of S Company. On January 2, P sells a machine with a book value of \$30,000 to S for \$40,000. S uses straight-line depreciation and intends to use the machine for five years. The adjustments (net) needed to compute the consolidated net income (before tax) for the first 2 years are:
- Year 1: (\$10,000); year 2: \$0. Incorrect. This only reflects the reduction in income due to the gain. Depreciation expense is also impacted.
  - Year 1: (\$10,000); year 2: \$2,000. Incorrect. Year 1 only reflects the reduction in income due to the gain. Depreciation expense is also reduced by \$2,000 which increase consolidated income.
  - Year 1: (\$8,000); year 2: \$0. Incorrect. Year 2 fails to recognize the reduction in depreciation expense which has the effect of increasing income.
  - Year 1: (\$8,000); year 2: \$2,000. Correct. In year 1, the company must reduce income by \$10,000 for the gain and increase income (via reduced depreciation expense) by \$2,000 for a net of \$8,000. In year 2, depreciation expense must be reduced by \$2,000 in consolidation which increases consolidated income.**
49. P Corp owns 80% of the common stock of S Corp. S sold an asset with a carrying value of \$10,000 to its parent for \$15,000 on January 1, year 1. P intended to use the asset for five years but actually sold it on December 31, year 2 to a third party for \$17,000. If no adjustments were made for this intercompany transaction in the consolidating process, identify the amount (and direction) of balance sheet misstatements at the end of year 2.
- No misstatements occurred. Correct. Once the asset is sold to an outside party, the intercompany impacts “clear out” and both the balance sheet and income statement will reflect the economic impacts to the entity.**
  - The noncontrolling interest is overstated by \$600. Incorrect. Once the asset is sold to an outside party, there is no longer a noncontrolling interest in that asset.
  - The noncontrolling interest is overstated by \$2,000. Incorrect. Once the asset is sold to an outside party, there is no longer a noncontrolling interest in that asset.
  - Retained earnings and controlling interest are both overstated by \$2,400. Incorrect. Once the gain is recognized upon the sale to the third party, the intercompany differences “wash out.”

50. Which of the following is accurate regarding the differences between the cost, partial equity, and complete equity methods assuming an upstream sale of depreciable property?
- a. The entries used to eliminate the effects of intercompany sales of equipment will be the same whether the parents uses the partial equity method or the complete equity method. Incorrect. The workpapers entries to eliminate the effects of intercompany sales of equipment are the same when the parent uses the partial equity or the cost method. However, when the investment is recorded using the complete equity method the workpaper entries differ slightly.
  - b. The entries used to eliminate the effects of intercompany sales of equipment will be different when the parents uses the cost method or the partial equity method. Incorrect. The workpapers entries to eliminate the effects of intercompany sales of equipment are the same when the parent uses the partial equity or the cost method.
  - c. **The balances of the parent company for income, retained earnings, and in the investment in subsidiary account differ depending on the method used by the parent company to record its investment. Correct. This statement is accurate. However, the method used by the parent company to record its investment has no effect on the *consolidated* balances.**
  - d. The reciprocity entry will need to be made regardless of the method used by the parent to account for the investment in subsidiary. Incorrect. When the parent company records its investment using the partial equity method, a workpaper entry to reverse the effect of parent company entries during the year for subsidiary dividends and income replaces the cost method entries to establish reciprocity (convert to equity) and to eliminate dividend income. However, the workpaper entries to allocate the difference between implied and book value, to record additional amortization, depreciation, and/or impairment on differences between market and book values, to eliminate intercompany sales, and to eliminate unrealized intercompany profit are the same regardless of whether the investment is recorded using the cost method or the partial equity method.

51. When depreciable assets are sold to an affiliate:
- Whether the purchaser is upstream, downstream, or horizontal is the critical consideration in determining the impact to noncontrolling interest. Incorrect. The purchaser is not the party that will significantly impact the noncontrolling interest.
  - The length of the remaining useful life of the equipment is the critical consideration in determining the impact on consolidated income. Incorrect. The length of useful life will impact the calculations but the determining factor is whether the subsidiary recognizes intercompany gain or loss.
  - Whether the equipment is sold at a gain or loss is the critical consideration in determining the impact on consolidated income. Incorrect. Intercompany sales won't impact consolidated income because it is eliminated, although there will be a depreciation adjustment however, that is not the critical consideration.
  - Whether the seller is upstream, downstream, or horizontal is the critical consideration in determining the impact to noncontrolling interest. Correct. When the subsidiary sells equipment, whether at a gain or loss, the noncontrolling interest in consolidated income will be impacted.**
52. All of the following are accurate regarding intercompany transactions with the **EXCEPTION** of:
- Interest on intercompany loans offsets the interest income on the loan so the two income statement accounts are simply eliminated in consolidation. Incorrect. This is a common situation and just creates a simple elimination entry
  - When one affiliate charges rent to another within the group, the income statement accounts are simply eliminated in consolidation. Incorrect. This is an accurate statement.
  - When intercompany services are provided, it will always result in revenue and expense being recorded which are simply eliminated in consolidation. Incorrect. It is possible for a service provided by one entity to result in a capital expenditure on the books of the other (for example, construction services). This results in more complicated and long-lasting adjustments that have to be made as a result of the capitalization and depreciation/amortization on the receiving company's books.**
  - If intercompany notes have not been repaid at the balance sheet date, the notes and the related interest payable/receivable must be eliminated in consolidation. Incorrect. This is an accurate statement.

## Chapter 8

53. Under current accounting rules for incremental acquisitions:
- Acquisitions of additional shares should be handled in a step-by-step manner. Incorrect. This was the old approach.
  - Computation and allocation schedules should be prepared for each portion purchased. Incorrect. Under the old rules, each “piece” was handled as a unique unit.
  - Sales of shares are handled like a sale of any asset with gain or loss going to earnings. Incorrect. The old rules required this approach.
  - Remeasure the acquiree’s assets and liabilities at fair value on the date that the acquirer attains control. Correct. Current GAAP focuses on the economic unit and not on the perspective of the parent.**
54. One of the requirements under the current rules for acquisitions which occur in stages is:
- To recognize only the parent’s share of goodwill. Incorrect. Measure and record all of the goodwill not just the parent’s share.
  - Previously held noncontrolling interest should be remeasured to fair value and any adjustment are Additional Contributed Capital. Incorrect. The noncontrolling interest is remeasured to fair value; however, the adjustments are recognized in income.
  - If the parent loses control, the retained investment should be remeasured to fair value and any adjustments are recognized in income. Correct. The focus is on fair value accounting so a change in control would trigger remeasurement.**
  - After control is achieved, any additional adjustments due to increased ownership are recognized in income. Incorrect. Subsequent adjustments are shown as Additional Contributed Capital, not as income.
55. Which of the following statements is accurate when a parent sells some, but not all, of the subsidiary stock?
- The accounting treatment will be the same whether or not the parent retains control of the subsidiary. Incorrect. It will differ depending on whether they retain control or lose it.
  - If the parent retains control of the subsidiary in spite of the sale, no gain or loss is recognized and any adjustments flow through Additional Contributed Capital. Correct. As long as there is still control, there is no gain or loss recognized.**
  - If control of the subsidiary is lost upon sale, no gain or loss is recognized and any adjustments flow through Additional Contributed Capital. Incorrect. When control is lost, the investment must be revalued at fair value and the differences are recognized as gain or loss.
  - At the time of sale, the entire investment must be revalued to fair value and the difference is recognized in income. Incorrect. It depends on whether control is lost or maintained as to whether this treatment is appropriate.

56. Under the equity method of accounting for the investment in subsidiary, when the parent purchases the shares that create control, the parent will record all of the following entries on their books with the **EXCEPTION** of:
- The purchase based on the cash price of the shares acquired by increasing investment in subsidiary. Incorrect. This is an entry which will appear on the parent's book when using the complete equity method.
  - The increase (decrease) in the investment in subsidiary account for the amount of the revaluation gain (or loss). Incorrect. The adjustment for the revaluation gain is made to the investment in subsidiary account on the parent's books.
  - The increase in the investment in subsidiary account to retroactively record the earnings of the subsidiary at the original ownership percentage for the time between the first purchase and the second purchase. Incorrect. This adjustment to pick up the earnings (convert to equity method) is made on the parent's books. The credit goes to parent beginning retained earnings.
  - Goodwill for the difference between the implied value of the subsidiary and the fair market value of its assets after allocating the fair market value to the underlying assets and liabilities of the subsidiary. Correct. This is not an entry that would be made on the parent's books; it would be a consolidating entry.**
57. When a parent company sells subsidiary stock and loses control of the company, all of the following information is needed in order to correctly account for the sale with the **EXCEPTION** of:
- The book value of the subsidiary. Correct. The information used is the implied carrying value of the subsidiary.**
  - The fair value of the consideration received by the parent. Incorrect. The fair value of the consideration received is part of the calculation.
  - The fair value of the noncontrolling interest at the date of the sale. Incorrect. The fair value of the noncontrolling interest is part of the calculation.
  - The carrying value of the former noncontrolling interest as of the date of the sale. Incorrect. The carrying value of the former noncontrolling interest is part of the calculation.



58. P Company acquired an 80% interest in S Company and accounted for that investment using the cost method on the separate company books but prepared consolidated financial statements as required. Several years later, they sold 50% of their stock. As a result:
- They have a choice of switching to the equity method or continuing to use the cost method. Incorrect. It is not a choice; they must use the equity method.
  - They must now switch to the partial equity method. Incorrect. At this level of ownership, GAAP require use of the equity method.
  - They have a choice of using the partial equity method or the cost method. Incorrect. There is not a choice; they must use the equity method.
  - They must now switch to the equity method. Correct. GAAP requires use of the equity after deconsolidation since they still have a 30% ownership.**
59. Which of the following statements is accurate regarding consolidation entries after a purchase of additional shares by the parent when the cost method is used?
- In the year after the purchase of the additional shares, the reciprocity entry will be based on the new ownership percentage. Incorrect. Each ownership percentage would have to be applied to the activity of the period in question so the old percentage will be applied to the activity prior to the purchase of the new shares and the new percentage will apply thereafter.
  - In the year after the purchase of the additional shares, the entry to eliminate subsidiary equity will be based on the old ownership percentage up to the date of purchase of the new shares and the new percentage for the activity after the purchase. Incorrect. After the purchase of the new shares, the new percentage will be used to eliminate shareholder's equity so that it is fully eliminated.
  - In the year after the purchase of the additional shares, the reciprocity is established based on the old ownership percentage to the date of purchase of the new shares and the new ownership percentage thereafter. Correct. Reciprocity is converting to equity method so the activity is based on the percentage of ownership during the period that the activity was generated.**
  - In the year after the purchase of the additional shares, the reciprocity entry will be based on the old ownership percentage. Incorrect. Each percentage must be applied to the applicable activity.

60. Which of the following is an accurate statement regarding changes when the parent company purchases additional subsidiary shares from the subsidiary directly?
- a. **When the parent pays more than carrying value for the new shares, the noncontrolling interest carrying value will increase even though their ownership percentage decreases. Correct. “The noncontrolling interest will increase if the cost of the new shares is greater than the carrying value of the interest acquired.”**
  - b. When the parent pays book value for the new shares, the parent’s additional paid in capital will not change. Incorrect. “If the new shares are issued a price equal to their book value, the parent’s additional paid in capital will change only by difference implied and purchase price considered transferred.”
  - c. When the parent pays book value for the new shares, the noncontrolling interest carrying value will not change. Incorrect. The NCI will change if there is a difference in implied value and purchase which is transferred to the controlling interest.
  - d. When the parent pays less than carrying value for the new shares, their additional paid in capital decreases. Incorrect. It will increase as there will be an excess of book value over cost.

## Chapter 9

61. Which of the following statements is accurate regarding the intercompany holding of bonds?
- a. **Although the bonds will be shown as outstanding for each individual company, for purposes of the consolidated entity, they are shown as retired. Correct. This is known as constructive retirement.**
  - b. GAAP normally requires recognition of gain or loss on an early extinguishment of debt; however, on a constructive retirement of debt within the entity, no gain or loss would be recognized. Incorrect. This is a situation where the recognition of the gain or loss for the consolidated entity is accelerated over the recognition at the individual company level.
  - c. The calculation of a gain or loss on early extinguishment of debt for a consolidated entity is the subject of disagreement among accounting professionals. Incorrect. The calculation is not an issue; however, the allocation of the gain or loss between the affiliates involved and the NCI is the subject of some disagreement.
  - d. Any gain or loss calculated would be retained by the controlling interest. Incorrect. The allocation of the gain or loss is the subject of some disagreement so there is not a clear-cut rule on this.

62. Which of the following statements is accurate regarding stock dividends?
- A stock dividend by a subsidiary will alter the proportionate share of the parent's investment in the subsidiary. Incorrect. Since all of the investors will receive the stock at the same rate, there is no change to the proportionate share.
  - A large stock dividend will reduce the retained earnings of the issuer by the market value of the stock issued. Incorrect. A large stock dividend will reduce retained earnings by the par value of the stock.
  - A large stock dividend is one that is greater than 20-25% of the outstanding shares. Correct. Anything below this 20-25% threshold is considered small.**
  - A small stock dividend will reduce the retained earnings of the issuer by the par value of the stock issued. Incorrect. The small stock dividend will reduce retained earnings by the market value of the stock.
63. In the second year after a subsidiary issues a stock dividend:
- The reciprocity entry will change to account for the stock dividend. Correct. Since retained earnings of the subsidiary will change as a result of the stock dividend, the reciprocity entry will need to be adjusted to reflect this.**
  - The ownership percentage applied to earnings will change. Incorrect. There will not be a change in the percentage ownership as a result of a stock dividend.
  - The consolidating entry to eliminate the investment account will be unchanged from the years prior to the stock dividend. Incorrect. The equity accounts of the subsidiary will change as a result of the stock dividend so the eliminating entry must change as well.
  - The stock dividends declared account will need to be adjusted in consolidation. Incorrect. This only needs to happen in the year of the stock dividend.
64. Which of the following statements is accurate regarding a liquidating dividend?
- A liquidating dividend will eliminate the retained earnings of the issuing company. Incorrect. It is simply a dividend which is greater than the current year earnings so it liquidates capital (prior retained earnings).
  - A liquidating dividend declared by the subsidiary will impact the journal entries made on the subsidiary books but not on the parent's books. Incorrect. It does not impact the subsidiary but does impact the parent.
  - A liquidating dividend is another name for a stock dividend. Incorrect. It is another way of implying that the dividend is greater than current year earnings and thus is made from capital (prior retained earnings).
  - A liquidating dividend declared by the subsidiary will impact the books of the parent when the dividend comes from pre-acquisition earnings and will require adjusting the consolidating entries. Correct. The portion of the dividend which relates to pre-acquisition earnings is a return of investment so the recording of the dividend received and the consolidating entries must be adjusted as compared to accounting for a normal dividend.**

65. When a subsidiary has preferred stock as well as common:
- The preferred stock must be majority owned by the parent to justify consolidation. Incorrect. Control is determined by the majority ownership of the voting shares so ownership of the preferred class typically does not impact that.
  - The shares of preferred not owned by the parent are considered part of the noncontrolling interest. Correct. Any preferred shares not owned by the parent are part of NCI.**
  - The preferred stock cannot be eliminated in consolidation. Incorrect. The preferred stock must be eliminated in consolidation in order to present the consolidated statements of the parent.
  - The preferred shares are irrelevant to the consolidation. Incorrect. The entire balance sheet of the subsidiary must be accounted for in consolidation.
66. Which of the following preferred stock features would allocate none of the accumulated retained earnings balance to the preferred shareholders when determining the equity interest of each class of shareholders?
- Cumulative, nonparticipating. Incorrect. Cumulative, nonparticipating gets dividends in arrears.
  - Noncumulative, fully participating. Incorrect. Accumulated retained earnings are allocated between preferred stock and the common.
  - Cumulative, fully participating. Incorrect. Cumulative fully participating gets dividends in arrears and then the balance of retained earnings is allocated between preferred and common.
  - Noncumulative, nonparticipating. Correct. Noncumulative, nonparticipating gets no allocation of accumulated retained earnings.**

## Chapter 10

67. Which of the following statements is accurate?
- Insolvency means that a debtor has more current liabilities than current assets. Incorrect. Insolvency is the inability to pay obligations when they come due.
  - Deepening insolvency is when a company cannot pay its obligations when they become due. Incorrect. Deepening insolvency or cash flow insolvency is when the company incurs debt that it will be unable to pay in the future.
  - Only a debtor may file a petition for reorganization under Chapter 11 of the Reform Act. Incorrect. Either a debtor or creditor may file.
  - Either a debtor or its creditors may file a petition for reorganization under Chapter 7 of the Reform Act. Correct. Either the debtor or creditor can file the petition.**

68. Which of the following is accurate regarding an extension of payment periods?
- When the only concession from a creditor is an extension of the payment term, no specific disclosure is required. Incorrect. No accounting entries are generally required but disclosure is necessary.
  - A change in the term will require a change to the carrying value of the debt. Incorrect. Nothing would change on the balance sheet if the term is the only change to the terms of debt.
  - No accounting entries are typically needed to extend the payment periods although the nature of the new agreement should be disclosed in the notes to the financial statements. Correct. Disclosure is typically the only requirement when there is only an extension of the term.**
  - A change to the term will typically involve recognition of a gain or loss in the financial statements. Incorrect. A change in the term is accounted for prospectively with no gain or loss recognized.
69. The highest priority for payments of unsecured claims in a bankruptcy proceeding is:
- Wages up to \$4,650 earned within three months before petition. Incorrect. This is next after the administration expenses.
  - Unpaid federal income taxes. Incorrect. This is last on the priority list.
  - Administrative expenses of the bankruptcy. Correct. The highest claim is for the fees related to the bankruptcy proceeding.**
  - Wages owed to an insolvent employee. Incorrect. The solvency of an employee is not relevant.
70. Which of the following statements is accurate regarding Chapter 11 proceedings?
- The court will appoint a committee consisting of the 7 largest creditors. Correct. They will appoint a creditor committee and they may appoint a shareholder committee.**
  - The court will appoint a committee consisting of 5 creditors and 5 shareholders. Incorrect. There will be a creditor committee and there may or may not be a shareholder committee.
  - The court will appoint a committee of the seven largest shareholders. Incorrect. The court may or may not create a shareholder committee but if it does, they will appoint the seven largest shareholders.
  - The creditors will create a committee and appoint seven representatives to serve on the committee. Incorrect. The court creates the committee.

71. Assume that a debtor owes \$10,000 on a note payable with \$2,000 of accrued interest. Assume that land with a book value of \$8,000 and a fair value of \$9,000 is given in full payment of the amount owed. What is the gain/loss included in ordinary income and the amount of gain/loss from restructuring?
- a. (\$1,000), (\$3,000). Incorrect. The gain included in ordinary income is the difference in the carrying value and the market value of the assets transferred; in this case or \$1,000. Since the fair value is greater, it would be a gain.
  - b. (\$3,000), (\$1,000). Incorrect. Both are gains. The gain on restructuring is the difference between the carrying value of the debt, including accrued interest and the fair value of the asset. Since the debits to write of the debt exceed the credit to the fair value of the asset, the balancing entry is a credit or a gain.
  - c. \$3,000, \$1,000. Incorrect. The gain on restructure is the \$3,000 gain and the ordinary gain on the transfer of assets is \$1,000.
  - d. **\$1,000, \$3,000. Correct. Both are gains. ( $\$9,000 - \$8,000$ ) and ( $\$10,000 + \$2,000 - \$9,000$ )**
72. Which of the following statements is accurate regarding modification of debt terms?
- a. The debtor must adjust the carrying value of the payable whenever the terms are restructured. Incorrect. The debtor accounts for the change prospectively.
  - b. A creditor in a modification situation will account for the change prospectively. Incorrect. The creditor must discount the cash flows and adjust the carrying value of the receivable accordingly.
  - c. **In a bankruptcy case, the debtor assumes a new effective interest rate equal to the rate that equates the present value of the future cash payments specified by the new terms with the current carrying value of the payable. Correct. This is accounting for the change prospectively by adjusting the interest expense to the new effective rate.**
  - d. A non-bankruptcy modification of debt payment terms is treated the same as a bankruptcy modification for the debtor. Incorrect. In a non-bankruptcy modification of terms, the carrying value will need to be recalculated and a gain on restructuring recognized.

## Chapter 11

73. Which of the following statements is accurate regarding the history of the IFRS and the objective of convergence with U.S. GAAP?
- a. The Norwalk Agreement was the first communication from the SEC regarding their support of the convergence of IFRS and GAAP. Incorrect. The Norwalk Agreement was the initial agreement in 2002.
  - b. The FASB and the IASB signed their “memorandum of understanding” in 2008. Incorrect. The memorandum of understanding was part of the Norwalk Agreement in 2002.
  - c. The *Commission Statement in Support of Convergence and Global Accounting Standards* lays out the milestones which must occur in order for the SEC to require IFRS in the U.S. Incorrect. This was a 2010 paper indicating the SEC’s continued support of convergence and their belief that a single set of standards would benefit U.S. investors.
  - d. **In 2009, the FASB and IASB recommitted to convergence and indicated nine major joint projects that would be the focus of convergence. Correct. After meetings in 2002 and 2005, the 2009 meeting resulted in the identification of 9 joint projects that would help to bring together the conceptual frameworks.**
74. The SEC first got involved with international standards in \_\_\_\_\_ and then issued a staff paper discussing possible work plans in:
- a. 2002, 2011. Incorrect. 2002 was the year that FASB and IASB signed their Norwalk Agreement; 2011 was the year that the SEC issued the staff paper.
  - b. **2008, 2011. Correct. In 2008, the SEC issued their roadmap to adoption of IFRS by U.S. issuers.**
  - c. 2005, 2014. Incorrect. 2005 was the second meeting of FASB and IASB and 2014 was an initial targeted implementation date for adoption of IFRS in the U.S.
  - d. 2002, 2014. Incorrect. The SEC did not get involved until 2008 and they were somewhat silent as to IFRS in their strategic plan for 201-2015.

75. “Condonement” is:
- a. **The process of incorporating IFRS into the local standards pursuant to some established endorsement protocol. Correct. This is the focus of the SEC’s latest work plan for convergence.**
  - b. The approach where individual jurisdictions maintain their local standards but work to converge those standards with IFRS over time. Incorrect. This is the definition of convergence.
  - c. The approach where jurisdictions incorporate IFRS into the local standards. Incorrect. This is the endorsement approach.
  - d. The approach modeled by Australia and the People’s Republic of China. Incorrect. Australia is modeling the endorsement approach and the People’s Republic of China is using convergence.
76. After the codification of the FASB’s standards in 2009:
- a. The hierarchy of U.S. GAAP is defined as Accounting Standards Codification (ASC), SEC rules and interpretations, Emerging Issue Task Force abstracts, and AICPA Statements of Position. Incorrect. There are now only authoritative sources and non-authoritative sources.
  - b. **There are only authoritative sources (ASC), and non-authoritative sources which include everything else with the exception of the SEC. Correct. There are no longer EITFs, staff bulletins, or AICPA Statements of Position.**
  - c. The hierarchy of U.S. GAAP is defined as ASC, SEC rules and interpretations, and IFRS. Incorrect. The hierarchy is basically authoritative (ASC) and non-authoritative (with the exception of the SEC rules for registrants).
  - d. Authoritative sources include IFRS. Incorrect. IFRS is not part of U.S. GAAP authoritative sources.
77. One of the biggest differences between IFRS and GAAP is:
- a. The methodology and philosophy around provisions for liabilities. Incorrect. This is an area of similarities with just some minor differences between the two.
  - b. Disclosure on contingent liabilities. Incorrect. The disclosure is similar although not exactly the same and IFRS does allow a reduced disclosure in certain situations.
  - c. **IFRS does allow the LIFO inventory method. Correct. This is a big area of discrepancy.**
  - d. Related party disclosures. Incorrect. GAAP is very similar to IFRS.



78. On Form 20-F:
- a. The SEC requires firms who are not reporting under U.S. GAAP to reconcile their financial statements to U.S. GAAP. Incorrect. This has been changed but only if the firm is complying with IFRS.
  - b. If firms are using standards similar to IFRS, they simply disclose the differences between their financials and IFRS. Incorrect. If the firm is not reporting under IFRS, they must reconcile their financial statements to U.S. GAAP.
  - c. If firms are using standards similar to IFRS, they simply disclose the differences between their financials and U.S. GAAP. Incorrect. They must reconcile to U.S. GAAP.
  - d. **The SEC will accept IFRS compliant financial statements but anything other than will still require reconciliation to U.S. GAAP. Correct. The options are report under GAAP, report under IFRS, or reconcile the financial statements to GAAP.**

## Chapter 12

79. Which of the following is accurate regarding foreign exchange?
- a. The forward exchange rate is the rate that would be offered to someone today to exchange their currency. Incorrect. The spot rate is the current rate right now.
  - b. The offer rate is the quote for the trader to buy the seller's currency. Incorrect. The offer rate is the rate to sell currency; the bid is the offer to buy.
  - c. The floating rate is really the range of exchange rates listed in a forward exchange contract. Incorrect. A floating currency rate is one that is determined by market supply and demand factors as compared to an "official" rate which is set by the government.
  - d. **Forward exchange contracts are used to lock in a rate today for the exchange of currency at a future date. Correct. The forward exchange contract allows the parties to determine the rate today for a future exchange.**

80. Which of the following statements is accurate?
- a. Transactions must be measured and denominated in the same currency. Incorrect. The measurement is done in the company's reporting currency (U.S. dollars for a U.S. based company) while the denominating currency tells the parties which currency is used to make payment.
  - b. Transactions are denominated in the reporting currency. Incorrect. Transactions are measured in the reporting currency.
  - c. **The two parties to a transaction will generally negotiate which currency the transaction will be denominated in. Correct. The denominating currency is the currency which will be used to make payment and that can be either currency depending on the terms of their agreement.**
  - d. The two parties to a transaction will generally negotiate which currency the transaction will be measured in. Incorrect. Each company will measure the transaction in their reporting currency.
81. All of the following stages of a foreign currency transaction are of concern to an accountant with the **EXCEPTION** of:
- a. The original recognition date. Incorrect. The original recognition date is important to the accountant as that is when the transaction must be measured in the reporting currency.
  - b. At each balance sheet date between the transaction date and the settlement date. Incorrect. The interim dates between the transaction and its settlement require adjustment to the spot rate on the balance sheet date.
  - c. The settlement date. Incorrect. The settlement date is important because the firm will either pay or receive the foreign currency and must account for it.
  - d. **The balance sheet date immediately after settlement. Correct. After settlement, the subsequent balance sheet dates will not require any adjustments so that is not of concern.**

82. A change in the direct exchange rate:
- a. **Will create an exchange gain on an exporting transaction when the rate increases. Correct. An exporting transaction create a receivable so if the rate increases, the company will receive more dollars on the exchange than the balance in the receivable so will recognize a gain.**
  - b. Will create an exchange loss on an exporting transaction when the rate increases. Incorrect. An exporting transaction create a receivable so if the rate increases, the company will receive more dollars on the exchange than the balance in the receivable so will recognize a gain.
  - c. Will create an exchange gain on an exporting transaction when the rate decreases. Incorrect. An exporting transaction creates a receivable so if the rate decreases, the company will receive fewer dollars in settlement than the value of the receivable so will recognize a loss.
  - d. Will create an exchange loss on an importing transaction when the rate decreases. Incorrect. An importing transaction creates a payable so if the rate decreases, the company will need fewer dollars to settle the payable and will recognize a gain.
83. In a forward contract:
- a. The forward rate is usually greater than the spot rate. Incorrect. Market conditions will determine whether the forward rate is above or below the spot rate.
  - b. **One party to a forward contract will have a receivable and one party will have a payable. Correct. A forward contract for currency is an agreement for one party to pay the other party a set amount of currency at the forward rate on the specified date.**
  - c. When the spot rate is greater than the forward rate, the contract would be at a premium. Incorrect. This would be at a discount.
  - d. The forward rate is usually less than the spot rate. Incorrect. The market conditions determine the pricing spread so it depends on which currencies and the situation at the time of the contract.

84. Which of the following is accurate?
- a. Forward contracts are valued on a gross basis. Incorrect. They are valued at net.
  - b. The change in value of a forward contract is calculated as the difference between the original forward rate and the spot rate on the date of settlement. Correct. This represents your savings or penalty for entering into the contract since the spot rate on the settlement date is what you would have had to use for conversion if you had not entered into the forward contract.**
  - c. If a company is hedging an accounts receivable, it will use a forward contract to sell currency. Incorrect. It would need to enter into a contract to buy currency in order to make payment on the payable in the foreign currency.
  - d. The change in the spot rate of a forward contract from the inception date to settlement date is the time element of a forward contract. Incorrect. That is the change in intrinsic value whereas the premium or discount is the time element.
85. Which of the following statements regarding the reporting of a fair value hedge is accurate?
- a. No gain or loss on a fair value hedge contract will be recognized until realized. Incorrect. When the specific terms of the firm commitment such as price and quantity are known and it is probably the firm will execute on the commitment, the gain or loss must be recognized.
  - b. On a fair value hedge, only the gain or loss on the forward contract will be recognized in the financial statements on the balance sheet date. Incorrect. Both the gain/loss on the forward contract and the gain/loss on the firm commitment must be recognized.
  - c. On the balance sheet date, both the gain or loss on the firm commitment and the gain or loss on the forward contract must be recognized. Correct. As long as the commitment is both probably and the terms are identified, gain or loss would be recognized.**
  - d. On a fair value hedge, only the gain or loss on the firm commitment will be recognized in the financial statements even though the firm commitment has not been recognized. Incorrect. Both will be recognized when the fair value hedge requirements have been met.

## Chapter 13

86. Under the current method of translation:
- The income statement is translated at the rate in effect when the transaction took place. Correct. The current method applies the current rates to the balance sheet and to the income statement.**
  - Monetary assets and liabilities are translated at current exchange rates and assets and liabilities that are carried at historic cost are translated using the historical exchange rate. Incorrect. This is the temporal method.
  - Income statement accounts are translated using the rate in effect on the day that the transaction occurred with the exception of asset-based expense like depreciation which are translated using the historical rate. Incorrect. This is the temporal method.
  - Actual exchange rates on the day that the transaction occurred must be used and the use of averages is no longer allowed. Incorrect. Under both methods, averages are allowed.
87. The subsidiary would need to remeasure its financial statements when:
- The local environment is highly inflationary. Incorrect. In an inflationary environment, the company would use the U.S. dollar as their functional currency.
  - The foreign subsidiary maintains their books in the functional currency. Incorrect. This is just the normal translation process.
  - The functional currency is not the U.S. dollar. Incorrect. Remeasurement is needed when the foreign subsidiary does not maintain their books in the functional currency.
  - The foreign subsidiary does not maintain its records in their functional currency. Correct. In this case, the books are first remeasured from the currency used into the local currency and then translated.**
88. Translation adjustment would be recorded in stockholder's equity when:
- There is high inflation. Incorrect. The translation adjustment from remeasurement is included in current period income.
  - The functional currency is not the local currency and the functional currency is the U.S. dollar. Incorrect. The translation adjustment from remeasurement is included in current period income.
  - The functional currency is the local currency. Correct. In this situation, the gain or loss would be a component of stockholder's equity.**
  - The functional currency is not the local currency and the functional currency is not the U.S. dollar. Incorrect. The translation adjustment from remeasurement is included in current period income.

89. Which of the following is the appropriate treatment of intercompany payables and receivables when the subsidiary is a foreign company?
- a. **The company must distinguish between transactions that are long-term investment in nature and those that are not. Correct. The two different components will be handled differently.**
  - b. All intercompany receivables/payables are translated at current rates with the gain or loss being recognized in income. Incorrect. Only those that are not considered to be “indefinite” in the time period would be recognized in current income.
  - c. Whether short-term or longer term in nature, the receivables/payables are translated at the net balance on the balance sheet date. Incorrect. Transactions are translated at the current rate on the date of the transaction.
  - d. There is no impact since it is an intercompany transaction. Incorrect. These accounts do have to be translated.

## Chapter 14

90. Disaggregated financial information is:
- a. Not as useful as consolidated financial information. Incorrect. For some it is considered more useful, for example, when evaluating the risks facing the entity.
  - b. **A key component of investors’ evaluation of prospective investments. Correct. Multiple studies by different organizations have found that investors value the disaggregated information as an integral part of assessing risks.**
  - c. Less of an area of SEC focus than the other footnotes. Incorrect. The SEC has been displeased with some of the scant information disclosed.
  - d. Mainly useful to academics and researchers. Incorrect. While academics and researchers do find the information useful, so do potential investors.
91. Arguments against segment reporting include all of the following with the **EXCEPTION** of:
- a. Disclosures to competitors, suppliers and the like create a competitive disadvantage to the company and actually could create more risk. Incorrect. This is a valid argument against such disclosures.
  - b. There is already a significant reporting burden on companies. Incorrect. This is always a valid consideration when companies are asked to do more reporting.
  - c. **Segment data does not allow for better comparison with competitors due to the nature of conglomerates. Correct. This is not an argument in that providing the segment data actually helps to “dis-conglomerate” the conglomerate to allow for some more meaningful comparison.**
  - d. Segment data may be meaningless or misleading due to inherent classification and allocation strategies used by the consolidated entity. Incorrect. This is a risk of providing the segment data since the parent company may manage the segment in a nontraditional way which does not allow for a meaningful comparison.

92. Which of the following is accurate regarding an operating segment and a reportable segment?
- a. **A reportable segment must meet one of three 10% tests in order to be considered reportable. Correct. To be reportable, a segment must meet one of three tests.**
  - b. An operating segment is considered significant to the enterprise's operations. Incorrect. A reportable segment is significant.
  - c. A reportable segment may or may not be an operating segment. Incorrect. If the segment is large enough and important enough to be reportable it is an operating segment.
  - d. All operating segments are reportable segments. Incorrect. Only those that meet one of three tests are considered reportable.
93. Which of the following is accurate regarding segment disclosures?
- a. Revenues from external customers and from other segments must be disclosed. Incorrect. This is only required if the chief operating decision-maker uses this data in making decisions and assessing the segment.
  - b. Segment disclosures are not required for interim reports. Incorrect. They are now required.
  - c. Geographic area disclosures are required for each segment. Incorrect. Products and services, geographic information, and major customer disclosures are done on an enterprise-wide basis.
  - d. **There must be a reconciliation between segment amounts and consolidated amounts for revenue, profit and loss, assets, and other significant items. Correct. The reconciliation of these key items is required.**
94. Publically owned companies must:
- a. File Form 10-Q each quarter within 60 days unless they are an accelerated filer. Incorrect. Companies that are not accelerated filers have 45 days to file 10-Q.
  - b. File Form 10-Q each quarter and include the full content of the annual financial statements. Incorrect. The 10-Q is not the full annual financial statement.
  - c. **File Form 10-Q each quarter within 40 days if they are an accelerated filer. Correct. Accelerated filers file within 40 days of quarter-end.**
  - d. File Form 10-Q each quarter which only includes an income statement. Incorrect. It includes income statement, balance sheet, and statement of cash flows.

95. GAAP for interim financial reporting:
- a. Is based on the discrete approach to interim periods. Incorrect. It is based on the integral approach.
  - b. Mandates that inventory valuation for interim periods follow the same procedures as used at year-end. Incorrect. Use of estimated gross profit percentages is acceptable for interim reporting.
  - c. States that inventory losses from market declines should not be recognized until the year-end adjustments are made to avoid any opportunity for manipulation of interim reporting. Incorrect. It stipulates that the loss should be recognized when incurred.
  - d. **Concludes that each interim period is an integral part of an annual period. Correct. Each period is an integral part of the annual accounting period.**
96. All of the following disclosures are required for interim financial reports with the **EXCEPTION** of:
- a. Basic and dilute earnings-per-share data for each period presented. Incorrect. EPS is required in interim statements.
  - b. **Related party disclosures. Correct. This is not required for interim statements.**
  - c. Contingent items. Incorrect. Contingencies are required to be disclosed.
  - d. Changes in accounting principles or estimates. Incorrect. Changes to accounting principles or estimates are required disclosure in interim statements.

## Chapter 15

97. All of the following are attributes of a partnership with the **EXCEPTION** of:
- a. There is a partnership agreement. Incorrect. This is an attribute of a partnership. The agreement may be express or implied.
  - b. **The partnership charter is filed with the state. Correct. This is not a requirement for a partnership in general terms. Different states have different requirements for registration with the Secretary of State or other agency.**
  - c. There is a profit motive. Incorrect. One of the characteristics of a partnership is the profit motive.
  - d. Members are co-owners of the firm. Incorrect. This is an attribute of a partnership. The assumption is equal ownership unless the agreement states otherwise.



98. Which of the following is accurate regarding partnerships?
- a. Each partner has the right to dispose of his/her partnership interest without the consent of the other partners and the remaining partners must accept the new partner unconditionally. Incorrect. The partner has the right to dispose of his/her interest in the partnership and the buying partner is entitled to the allocation of profits but the new partner cannot participate in the management of the business without acceptance by all of the other partners.
  - b. Partnership agreements must specify the term of the partnership or it is assumed to be no more than 20 years. Incorrect. The partnership has an uncertain term as there is no specific term stipulated in the UPA.
  - c. The Uniform Partnership Act (UPA) is the federal law which governs partnerships. Incorrect. This is state law and most states have adopted it.
  - d. **The UPA stipulates that while a partner has the right to sell his/her partnership interest, the buyer partner does not have the right to manage the business without the acceptance of the other partners. Correct. The new partner would be entitled to the profit distributions and would assume the liability but cannot participate in management of the partnership without the consent of the other partners.**
99. All of the following are benefits of a limited partnership with the **EXCEPTION** of:
- a. **The general partner(s) are shielded from personal liability. Correct. The general partner(s) retain liability.**
  - b. The limited partners are only liable for the amount invested. Incorrect. This is accurate and is an advantage for the limited partners.
  - c. The partners benefit from the flow-through nature of the partnership tax structure. Incorrect. The partnership “flow-through” tax structure is in place for a limited partnership.
  - d. The general partners are able to manage the business without the interference from the limited partners. Incorrect. This is a benefit in that the limited partners are usually the investors and the general partners run the business.
100. Which statement is true regarding a joint venture?
- a. It must be formed as a corporation. Incorrect. It may be formed as a partnership or corporation.
  - b. **Major decisions within the joint venture require consent of the ownership group. Correct. “Each joint venture participates directly or indirectly in the overall management of the resources.”**
  - c. Joint venture partners are agents of the joint venture and one another. Incorrect. “...As a general rule, one party to the joint venture is not an agent of the other parties.”
  - d. The life of the joint venture is perpetual. Incorrect. The life of the joint venture is limited to that of the undertaking which may be short or long term.

101. When determining the allocation of profits and losses, the method which is the **LEAST** complex and **LEAST** subject to misinterpretation is:
- a. A fixed amount per partner. Incorrect. A fixed amount per partner creates complexity with respect to how to manage the overage or underage. Most agreements stipulating some kind of fixed allocation for salary must still address the excess which adds to the complexity.
  - b. A ratio based on capital balances. Incorrect. This creates complexity in terms of identifying which balance: beginning of year, end of year, weighted average, and the potential for manipulation by a partner with respect to managing their capital balance.
  - c. **A fixed ratio. Correct. This is the most straight-forward and least subject to misinterpretation as long as the agreement applies to both profits and losses of the partnership.**
  - d. Interest on capital investment. Incorrect. This creates complexity with respect to the interest rate used and what to do with any excess or shortage that occurs.
102. Which of the following is accurate regarding the necessary accounting when a new partner joins the partnership?
- a. The assets and liabilities must be adjusted to their fair values with the resulting adjustments of the existing partner's capital accounts prior to admittance of the new partner. Incorrect. This is one option which can be used but it is not required and many accountants dislike abandoning the historical cost principle despite the fact that technically a new partnership has been formed.
  - b. Changes in fair value of assets and liabilities cannot be adjusted on the books of the partnership but there should be an agreement put into place documenting the fair values and stipulating that the new partner will not participate in the eventual realization of these increases. Incorrect. They can be adjusted to fair value, but leaving them at cost is one option. If that is done, it is wise to create an agreement as to the realization of those increases in value and how the new partner would or would not participate.
  - c. **Under the bonus method, the assets being contributed by the new partner are recorded and make up his initial capital account. If that value differs from the agreed upon amount of his starting capital balance, the balances of the other partners' capital accounts are adjusted to bring it to the agreed-upon amount. Correct. This is the approach when using the bonus method which is in contrast to the goodwill method.**
  - d. Under the bonus method, the assets being contributed by the new partner are recorded and make up his initial capital account. If that value differs from the agreed upon amount of his starting capital balance, his capital account is adjusted as necessary with the offset being a receivable which is a priority payment from the partnership profits prior to allocation to the partners as a whole until the receivable is repaid. Incorrect. If this situation occurs and the partnership elects the goodwill method, the offset to the partner's increase in his capital account would be goodwill rather than a receivable.

103. When a partner withdraws from the partnership by mutual agreement of the partners and a settlement process is not specifically outlined in the partnership agreement:
- The partner will be paid out based on the value of his partnership account. Incorrect. The book value of his capital account is likely not the fair value of the partnership interest and may not result in an equitable withdrawal.
  - The partners may have to negotiate a settlement price at the withdrawal date. Correct. If the partnership agreement does not stipulate the settlement process, it may come down to a negotiation.**
  - The withdrawing partner must be paid out specific partnership assets as agreed-upon by the partners at the withdrawal date. Incorrect. Ultimately the withdrawing partner will have to be bought out but there are many options regarding the settlement of the buyout and it does not have to result in immediate draining of partnership assets.
  - The partnership will have to undergo a full business valuation to determine the fair value as of the date of withdrawal. Incorrect. The partners could do that and there may be situations which warrant that detailed of an analysis but they can also determine a value among the partners in a negotiated settlement.

## Chapter 16

104. Assuming the partnership agreement does not have explicit provisions for liquidation, when assets of the partnership are sold in liquidation:
- The resulting gain or loss must be immediately closed to the partner capital accounts. Incorrect. It can be but the accountant can also accumulate all such gains and losses and then close the final net gain/loss to capital.
  - The resulting gain or loss should be run through the normal allocation of salaries or interest and closed to the partner capital accounts. Incorrect. The closing of the gains or losses on liquidation should not include any provision for salary or interest as those components have nothing to do with changes in the fair market value of the assets.
  - The resulting gain or loss is part of the normal income statement preparation process so would follow the normal monthly close process. Incorrect. Normal operational income would typically have already been closed to capital at this point in the process.
  - The resulting gain or loss can be accumulated in one account and then closed to the partner capital accounts in the normal ratios for income distribution excluding any provisions for guaranteed payments, salary, or interest. Correct. Since the changes in fair value of the assets is not related to salaries or other provisions, the allocation to capital would typically be in the gain/loss ratio.**

105. If a partner has a negative capital balance:
- There is no “right of offset” if there is also a loan outstanding to that partner. Incorrect. There is a right of offset so “repayment” of the loan can be used to bring up the negative balance of the capital account.
  - The partner must contribute assets to the partnership in order to bring the capital account to zero prior to dissolution. Incorrect. While this is the preferred approach, there can be situations in which the partner is unable to contribute assets. The partnership can still be dissolved.
  - It is considered a liability of the partnership. Incorrect. A negative partnership account is an asset to the partnership.
  - And cannot contribute assets to offset it, the other partners will have to absorb the realization loss in their normal profit/loss ratio. Correct. In order to complete the dissolution, the other partners will have to absorb a loss if that partner cannot contribute assets. That would then be a claim between the partners.**
106. The trial balance for the ABC Partnership before bankruptcy is:  
Cash \$20,000, noncash assets \$200,000, liabilities \$30,000, A capital \$100,000, B capital \$60,000, C capital \$30,000. The partners share profits and losses 40:40:20 for A, B and C respectively. If the noncash assets are sold for \$100,000 cash, determine the amount of cash payout (if any) or balance owed to the partnership for partner A.
- (\$40,000). Incorrect. The total of the realized assets of \$120,000 exceed liabilities by \$90,000 so the partners will not have to pay into the partnership to cover liabilities.
  - \$0. Incorrect. The total of the realized assets of \$120,000 exceed liabilities by \$90,000 so the partners will get total distributions of \$90,000.
  - \$20,000. Incorrect. Partner B will get \$20,000. He had a \$60,000 credit balance in capital, absorbed 40% of the \$100,000 loss on the asset sale so gets his full capital balance paid out or \$20,000.
  - \$60,000. Correct. The asset sale of \$100,000 plus the cash was enough to pay the liabilities of \$30,000 and leave \$90,000 for the partners. Partner A had capital of \$100,000, absorbed 40% of the \$100,000 loss on the asset sale so has \$60,000 in capital.**

107. The trial balance for the ABC Partnership before bankruptcy is: Cash \$20,000, noncash assets \$200,000, liabilities \$30,000, A capital \$100,000, B capital \$60,000, C capital \$30,000. The partners share profits and losses 40:40:20 for A, B and C respectively. If the noncash assets are sold for \$50,000 cash and the no partner is able to contribute additional cash to cover deficit balances, determine the amount of cash payout (if any) or balance owed to the partnership for partner A.
- a. (\$40,000). Incorrect. The \$20,000 of cash plus the \$50,000 from the sale of assets will cover the liabilities of \$30,000.
  - b. \$0. Incorrect. Partners B and C will not get a distribution as absorbing the loss on the sale of assets eliminated both of their capital balances.
  - c. **\$40,000. Correct. After absorbing 40% of the \$150,000 loss on asset sale, A's capital balance will be \$40,000 and there is \$40,000 in assets remaining to pay her out. (\$70,000 of cash less \$30,000 of liabilities.)**
  - d. \$60,000. Incorrect. There is \$40,000 left after the liabilities are paid off. (\$70,000 of cash less \$30,000 of liabilities.)

## Chapter 17

108. All of the following statements about fund accounting are accurate with the **EXCEPTION** of:
- a. **Management seeks to create a positive fund flow for each fund in order to sustain the organization. Correct. This is not an accurate statement as that resources are typically provided to the organization (from taxes, tuition, grants, etc.). Management is responsible for the appropriate utilization of those assets in alignment with the purpose of the fund.**
  - b. A fund is organized for specific activities or objectives which is unique and distinct from other funds within the same organization. Incorrect. This is accurate in that each fund has a purpose and all assets of the funds and liabilities incurred must be related to the fund's purpose.
  - c. A fund is a self-balancing set of assets, liabilities, and equity. Incorrect. This is a true statement. Each fund is self-contained and its "books" must balance.
  - d. Fund equity is known as fund balance. Incorrect. This is true. Fund balance replaces any terminology related to "capital."

109. Which of the following statements is accurate?
- GASB regulates only federal, state, and local governments. Incorrect. GASB also applies to some other organizations such as state universities.
  - The accounting standards issued by GASB and FASB for nonbusiness entities are generally similar. Incorrect. There are significant differences between the two.
  - FASB governs all colleges and universities. Incorrect. FASB governs private universities but GASB govern state universities.
  - Users of financial statements must have a good understanding of the standard applicable to the financial statements that they are using. Correct. Because there are significant differences between the two, it is important for users of financial statements to understand those differences.**
110. Statement 36, *Reporting Comprehensive Long-Term Fiscal Projections for the U.S Government*:
- Has been termed “the disclosure project.” Incorrect. It has been termed the “sustainability project.”
  - Lays out the plan for repayment of federal debt. Incorrect. It shows projects of the receipts and spending and does projections of the impact to debt.
  - Presentation of prospective information about receipts and spending. Correct. The statement requires significant calculations projecting receipts and spending which is a departure from traditional historically-based statements.**
  - Requires presentation of information more in alignment with a “net income” approach to help users better understand the financial flows. Incorrect. It requires projections.
111. GASB Concepts Statement No. 2:
- Describes the objectives of financial reporting for governmental entities. Incorrect. Concept Statement No. 1 addresses objectives.
  - Introduces the “SEA concept” of Service Efforts and Accomplishments. Correct. The SEA concept is discussed.**
  - Outlines the required supplementary information which must be reported. Incorrect. This is accomplished in statement no. 3.
  - Provides the conceptual basis for determining the methods to present information within general-purpose external financial reports. Incorrect. This is part of statement no. 3.

112. Which of the following is accurate regarding the presentation of deferred inflows and outflows on the fund balance sheet?
- a. Deferred outflows are shown as a component of assets. Incorrect. They are shown in a separate section following assets.
  - b. Deferred inflows are shown in a separate section following liabilities. Correct. They present in a separate section following liabilities.**
  - c. Deferred outflows are shown as a component of liabilities. Incorrect. The deferred items are separate components apart from assets or liabilities.
  - d. Deferred inflows are shown as a component of assets. Incorrect. Deferred inflows are shown separately in their own section rather than as a component of either assets or liabilities.
113. All of the following are classifications of fund entities with the **EXCEPTION** of:
- a. Expendable fund entity. Incorrect. Expendable funds are “the funds most closely associated with basic fund accounting concepts.”
  - b. Fiduciary fund entity. Incorrect. Fiduciary funds are “used to follow the activities in which the government acts as an agent or trustee for resources that belong to others, such as employee pension plans.”
  - c. Proprietary fund entity. Incorrect. This type of fund is the most closely related to a business enterprise for a nonbusiness entity.
  - d. Reserved fund entity. Correct. There is no separate fund entity referred to as reserved.**
114. Which of the following is accurate regarding revenue recognition principles for governments?
- a. Property taxes are considered measurable and available in the period levied even if collected subsequently. Correct. Government recognition principles are based on measurable and available for current period expenditures and property taxes have both characteristics.**
  - b. Debt issue proceeds should be classified as revenue in a governmental entity. Incorrect. This is classified as other financing sources.
  - c. Tax return revenue is not recognized until collected. Incorrect. Tax return revenue is recognized when returns are filed.
  - d. Pledges and grants are not considered revenue until collected. Incorrect. They are recognized when pledged as long as the entity can reasonably account for uncollectible pledges.

115. The acquisition of capital assets:
- Is accounted for in a manner similar to that used by for-profit entities. Incorrect. They are not recorded in the financial statements in the same way although they do have to be tracked and accounted for over time.
  - Requires future recognition of depreciation in the expendable fund. Incorrect. Depreciation is not a use of financial resources of an expendable fund; the acquisition of the asset is the use of the financial resource.
  - Is another use of financial resources in the current period. Correct. The acquisition of capital assets is another use of financial resources so is accounted for as such by the government.**
  - Requires the elimination of capital asset reserves. Incorrect. The asset purchase is a use of financial resources in the current period.
116. All of the following are classifications of fund balances under GASB Statement No. 54 with the **EXCEPTION** of:
- Reserved. Correct. Reserved is no longer a classification of fund balance under GASB Statement No. 54.**
  - Nonspendable. Incorrect. Nonspendable is a current classification which includes assets not in a spendable form (inventory) and legally required to remain intact (principal of a permanent fund).
  - Assigned. Incorrect. This represents “amounts constrained for the intent to be used for a specific purpose by a governing board...”
  - Committed. Incorrect. These are amounts that “can only be used for a specific purpose....”

## Chapter 18

117. Which of the following is accurate regarding the minimum information required for fair presentation in conformity with GAAP for governments?
- Only government-wide financial statements require a balance sheet. Incorrect. Government-wide statements are required to show a statement of net position.
  - Proprietary funds can present either a balance sheet or a statement of net position. Correct. Proprietary funds have a choice of presentation.**
  - Only fiduciary funds are required to present a balance sheet. Incorrect. Fiduciary funds present a statement of fiduciary net position.
  - Government funds are not required to present a balance sheet. Incorrect. Government funds do present a balance sheet.



118. While GASB-issued statements and interpretations form the most authoritative source of accounting guidance for governmental entities:
- a. Implementation guides issued by GASB rate the next highest in the hierarchy. Incorrect. Implementation guides are the lowest level of authoritative literature in the hierarchy.
  - b. AICPA practice bulletins rate the next highest in the hierarchy. Incorrect. These rank third.
  - c. AICPA Industry Audit and Accounting Guides serve as the lowest level of authoritative source for governmental accounting. Incorrect. These rank next highest along with GASB Technical Bulletins.
  - d. **GASB Technical Bulletins rate the next highest in the hierarchy. Correct. GASB Technical Bulletins and AICPA Industry Audit and Accounting Guides, and AICPA Statements of Position are all ranked second behind the standards.**
119. Which of the following is accurate regarding fiduciary funds?
- a. Agency funds are used to report escheat property. Incorrect. Agency funds are “used to report resources held by the reporting government in a purely custodial capacity....”
  - b. Investment trust funds are used to report escheat property. Incorrect. These are “used to report the external portion of investment pools reported by the sponsoring government.”
  - c. **Private-purpose funds are used to report escheat property. Correct. One of the uses of a private-purpose fund is to account for escheat property.**
  - d. Internal service funds are used to report escheat property. Incorrect. Internal service funds are proprietary funds.
120. All of the following are governmental funds with the **EXCEPTION** of:
- a. **Restricted funds. Correct. A special revenue fund, capital projects fund, debt service fund, or permanent fund could all be used to account for financial resources which are restricted.**
  - b. Capital projects funds. Incorrect. Special projects funds are used to account for capital projects.
  - c. Special revenue funds. Incorrect. This is one of the governmental funds.
  - d. Permanent funds. Incorrect. Permanent funds are part of the governmental fund classification.

121. Which of the following statements is accurate regarding the steps taken in a special revenue fund?
- a. A budget is established, but is not recorded in the accounts. Incorrect. The budget is both established and recorded.
  - b. **Encumbrances are used to control budgeted expenditures. Correct. Encumbrances are used in the special revenue fund.**
  - c. Fixed assets of a special revenue fund are reported as assets of the fund. Incorrect. Fixed assets are recorded on a schedule of capital assets and reported on the government-wide statements.
  - d. Liabilities of the special revenue fund must be recorded on the fund statement of net position. Incorrect. Liabilities are reported as a liability on the government-wide statement of net position not within the special revenue fund.
122. Which of the following is true of debt service funds and their related liabilities?
- a. The liability will always be reported in the same fund used to service its debt. Incorrect. It depends on the type of debt. That is true for proprietary fund debt but not for general obligation debt.
  - b. General obligation debt is recorded in the same debt service fund as the liability while proprietary debt is not. Incorrect. It is the reverse in that debt of a proprietary fund stays in the same fund as the resources used to repay it.
  - c. Payments of principal and interest is both an expenditure and a reduction of debt. Incorrect. It will be only an expenditure for general obligation debt where the resources used to make payment are accounted for in the debt service fund.
  - d. **A proprietary fund issuing debt will account for the debt and the debt service within the proprietary fund. Correct. A proprietary fund is the closest fund to a business entity so the debt and the resources used to retire the debt are accounted for within the proprietary fund.**
123. General obligation bonds:
- a. Are serial bonds. Incorrect. They may be serial or term bonds.
  - b. Are repaid from the general revenues of the issuing government. Incorrect. The source of repayment may be the general revenues but they could have other sources as well.
  - c. Will accrue interest over the life of the bonds. Incorrect. The interest is paid throughout the life of the issue, usually semi-annually.
  - d. **Are not tied to the resources of a specific fund. Correct. They are secured by the general credit and revenue-raising powers of the governmental unit as a whole rather than the specific resources of a specific fund.**

124. All of the following statements are accurate regarding the financial disclosures for government-wide financials with the **EXCEPTION** of:
- Actuarial requirements must be disclosed for term bonds. Incorrect. Actuarially requirement for any term bonds is required to be disclosed.
  - Interest payable must be recorded and disclosed on all bond issues regardless of bond interest payment dates. Incorrect. For government-wide financial statements interest payable is recorded and presented.
  - Presentation of the bond fund balance must be shown as restricted. Correct. This is not accurate. Depending on the stipulations, the debt service fund balance may be restricted, committed, or assigned fund balance.**
  - Transfers from other funds to the debt service fund will be presented as Other Financing Sources on the Statement of Revenues, Expenditures, and Changes in Fund Balance.
125. Nonexpendable trust funds:
- Must be accounted for in accordance with the terms of the trust agreement or applicable provisions of statutory and common law. Correct. These trust funds are fiduciary funds which require the government to carry out the specific terms of the trust.**
  - Should be reported as special purpose funds. Incorrect. They are usually permanent funds.
  - Are only those in which both the principal and the interest must be retained intact. Incorrect. This is one type but there can also be permanent, nonexpendable trust funds which allow the interest to be expended.
  - May be required to transfer earnings to a permanent fund if they may be expended. Incorrect. If the earnings can be expended, such earnings are transferred to special revenue funds with restrictions as to use.

## Chapter 19

126. FASB's first attempt to incorporate NNOs into their standards came in:
- FASB Concepts Statement No. 2. Incorrect. FASB amended this statement in 1985; their first attempt came in 1980.
  - FASB Concepts Statement No. 3. Incorrect. Statement No. 3 specifically addresses business enterprises.
  - FASB Concepts Statement No. 4. Correct. Statement No. 4 is *Objectives of Financial Reporting by Nonbusiness Organizations* and was issued in 1980.**
  - FASB Concepts Statement No. 6. Incorrect. This statement came out after statement No. 4.

127. Which of the following organizations uses a Plant Replacement and Expansion fund?
- State and local government. Incorrect. State and local governments have a General Fixed Assets Account Group fund.
  - Colleges and universities. Incorrect. Colleges and universities have multiple different “Plant” funds to address various states of activity related to PP&E.
  - Hospitals. Correct. This is the accurate terminology for hospitals.**
  - Voluntary Health and Welfare Organizations. Incorrect. VHWOs use various “Plant” funds depending on whether it is land, building or equipment.
128. Board designated funds:
- May only be used in the manner designated because of a donor or other external restriction. Incorrect. Restricted funds have a legal or donor restriction which is a contractual or legal obligation to use the funds as restricted.
  - Are shown as current restricted funds. Incorrect. Current restricted funds are those which have a restriction due to an external requirement either legal, contractual or donor-based.
  - Are legally designated and such designation cannot be changed once enacted. Incorrect. The board has the ability to change the designation.
  - Are current, unrestricted resources to be used for a specific purpose, project, or investment. Correct. Board designations are tools used to direct the management of the resources but those designations can be changed by the board if circumstances warrant.**
129. Which of the following is accurate regarding revenue recognition for NNOs?
- Contributions, including unconditional promises to give, should be recognized when they are measurable and there is a reasonable probability of collection. Incorrect. They are recognized when received.
  - Revenue from fund-raising events for VHWOs should be recognized at the gross amount with expenses of fund-raising shown as expenditures and reported separately on the financial statements. Incorrect. They are presented net.
  - Donor-restricted contributions are reported as revenue when received and shown as restricted. Correct. A restriction can be recognized when received with the restriction indicated.**
  - Conditional gifts are recognized as revenue in the period received and are shown as restricted. Incorrect. They are recognized when they become unconditional.



# GLOSSARY

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**Accretive** Term applied to a business combination in which the acquirer's earnings per share increase as a result of the merger.

**Accrual accounting** The usual basis of accounting for profit-seeking enterprises under generally accepted accounting principles; revenues are recognized when earned, and expenses are matched against those revenues in the period of the benefit.

**Acquisition accounting** Method of accounting for business combinations in which the assets and liabilities of the acquired firm are valued at fair market values, including the recording of goodwill implied by any excess of purchase price over the net fair value. (Also called purchase method.)

**Adjusting entries** Journal entries needed to correct any accounts of the affiliates that may be incorrect at the financial statement date, or to recognize the effects of a transaction made by one party (such as the parent), but not recorded by another party (such as a subsidiary).

**Advance plan for the distribution of cash** A schedule that specifies the order in which each partner will participate in sharing profit and losses and the amount of cash each partner will receive as it becomes available for distribution.

**Affiliate** An entity that controls, is controlled by, or is under common control with, another entity, either directly or indirectly through one or more intermediaries.

**Agency funds** Funds used to report resources held by the reporting government in a purely custodial capacity (assets equal liabilities). Agency funds typically involve only the receipt, temporary investment, and remittance of fiduciary resources to individuals, private organizations, or other governments.

**Agency or custodial fund of an NNO** Funds used to account for the assets held by an NNO (nongovernment-nonbusiness organization) as a custodian for others.

**American depository receipt (ADR)** A depository receipt that is traded in the United States. ADRs may be sponsored or unsponsored.

**Amortization** The transfer of the cost of an asset over its useful life from the balance sheet to the income statement. Amortization

is required for intangible assets with a finite life.

**Annuity and life income fund of an NNO** An NNO may accept the contribution of assets to the organization on the condition that the organization make annuity payments to a specified recipient for a specified period of time (annuity fund) or that the organization pay the income earned on the contributed assets to a specified recipient during his or her lifetime (life income fund).

**Appropriations** The maximum expenditures that are authorized by the legislature when budgeted expenditures are enacted into law.

**Articles of partnership** See Partnership agreement.

**Asset acquisition** A business combination in which one corporation pays cash or issues stock or debt for the net assets of another company, and the acquired company no longer exists as a separate legal entity.

**Bargain purchase** A business combination in which the price paid to acquire another firm is lower than the fair value of identifiable net assets (assets minus liabilities).

**Bonus method** A method used when the composition of a partnership changes (such as admission of a new partner) to adjust the partners' capital accounts equitably to account for undervalued assets or the existence of implied goodwill. Under this method, the assets are not revalued (and goodwill is not recorded).

**Budgetary funds** Fund entities in which the budget is formally incorporated into the accounting records.

**Capital improvement special assessments** Assessments levied against property owners for capital improvements that benefit them.

**Capital maintenance approach** An approach under which some changes in net assets are excluded from the Statement of Activities, such as capital contributions and permanently restricted contributions of financial assets.

**Capital projects fund** A fund used to account for financial resources to be used for the acquisition or construction of major capital facilities.

**Change in net assets approach** An approach, required on all government wide financial

statements, under which all changes in net assets are reported on the Statement of Activities. There are no "balance sheet-only" transactions.

**Chief operating decision maker** A person whose general function (not specific title) is to allocate resources to, and assess the performance of, the segments of an enterprise.

**Codification** The FASB Codification is the single source of authoritative nongovernmental U.S. generally accepted accounting principles (U.S. GAAP).

**Common costs** Operating expenses incurred by the enterprise for the benefit of more than one segment.

**Complete equity method** A variation of the equity method, in which the reported income (loss) of the investee is adjusted for excess depreciation, goodwill amortization, and other differences implied by the investor's purchase price, in measuring the investor's income from investment.

**Component units of a government** Legally independent units that are within the government's control. (A school district is funded by the county, but is independent of the county; therefore, the county includes the school district as a component unit.)

**Comprehensive income** All changes in net assets (or equity) or an entity during the current period except those arising from investments by the owners and distributions to the owners.

**Computation and Allocation Schedule** A schedule used to show how the cost of an acquisition (the purchase price) is allocated to specific assets and liabilities of the subsidiary.

**Conglomerate** A business combination among firms in unrelated industries.

**Connecting affiliates** A type of indirect ownership where the parent and the parent's subsidiary both have ownership interests in a third company.

**Consolidated entity (affiliated group)** A group of firms consisting of a parent and all subsidiaries for which consolidated financial statements are prepared.

**Consolidated financial statements** The combined financial statements of a parent and its

subsidiaries as one economic entity, as though the separate companies were a single company with one or more divisions or branches.

**Consolidated net income** A number equal to the parent company's income from its independent operations plus (minus) reported subsidiary income (loss) plus or minus adjustments for the period relating to the amortization of the difference between implied and book value.

**Consolidated retained earnings** The retained earnings of the parent company, after reflecting any needed adjustments from the perspective of the consolidated entity. Under the complete equity method, the adjustments are already included in the books of the parent. Under the partial equity method, for example, the number is calculated as the parent company's recorded partial-equity basis retained earnings plus or minus the cumulative effect of the adjustments to date relating to the amortization of the difference between implied and book value.

**Constructive retirement (of bond obligation)** Extinguishment of debt from the perspective of the consolidated entity, occurring in situations such as when one affiliate purchases another affiliate's outstanding bonds from outsiders.

**Consumption method for inventory** Method of accounting for inventory in which the inventory is considered a financial resource (asset) and expenditures for inventory are reported on the operating statement in the period the inventory is used.

**Control (effective control)** The ability of an entity to direct the policies and management that guide the ongoing activities of another entity so as to increase its benefits and limit its losses from that other entity's activities. For purposes of consolidated financial statements, control involves decision-making ability not shared with others.

**Controlling interest** The interest of the parent company in a partially owned subsidiary. The term is also used to refer to the parent's interest in the combined profits of the parent and its subsidiary.

**Corporate assets** Assets maintained for general corporate purposes and not specifically used in the operations of any segment.

**Cost method** A method used to account for an investment in another company, in which the income from investment consists of dividends received. Under this method, the carrying value of the investment changes only when the percentage ownership changes, or when it is believed to be permanently impaired.

**Current exchange rate** The spot rate in effect at the end of the accounting period (i.e., the balance sheet date).

**Current fund of an NNO** (restricted and unrestricted). Current unrestricted funds include financial resources of an organization that may be expended at the discretion of the

governing board. Current restricted funds consist of financial resources that are currently available for use in current operations, but which may be expended only for purposes specified by the donor, grantor, or other external party.

**Current rate method** A method of converting accounts from a foreign currency into the parent's reporting currency, in which all assets and liabilities are translated using the current exchange rate. This method is appropriate when the accounts are already measured in the functional currency. (Also called translation.)

**Debt service fund** A fund used to account for the accumulation of resources for the payment of general long-term debt principal and interest.

**Deferred taxes** Taxes resulting from temporary differences between taxable income and income reported under generally accepted accounting principles; deferred tax liabilities represent an increase in taxes payable in future years as a result of these differences, while deferred tax assets represent a resulting decrease in taxes payable in future years.

**Depository receipt (DR)** A derivative instrument usually representing a certain fixed number of publicly traded shares of a non-U.S. corporation.

**Derivative** Financial product whose value depends on another *underlying* value of measure, but whose terms do not require the holder to own or deliver the underlying value of measure. Thus its value is *derived* from the underlying value of measure (examples include options, swaps, forwards, and futures).

**Dilutive** Term applied to an acquisition in which the acquirer's earnings per share decrease as a result of the combination.

**Direct exchange quotation** A quotation in which the exchange rate is quoted in terms of how many units of the domestic currency can be converted into one unit of foreign currency.

**Direct expenses** Expenses incurred in a business combination, such as accounting and consulting fees, that would not have been incurred in the absence of the combination. These types of expenses are capitalized (charged to an asset account) under purchase accounting rules.

**Dissolution** The change in the relation of the partners that occurs when a partner ceases to be associated with a partnership, as distinguished from the winding up of the business.

**Downstream sales** Sales by a parent company to one or more of its subsidiaries.

**Economic entity concept** A concept that emphasizes control of the whole by a single management, so that the consolidated financial statements are intended to provide information about a group of legal entities—a parent company and its subsidiaries—operating as a single unit.

**Eliminating entries** Journal entries that are made only on the consolidated workpaper (and not on the parent's or subsidiary's books) to cancel the effects of intercompany transactions and accounts.

**Encumbrance** Term applied to the financial resources of a fund when a transaction is entered into that requires the performance on the part of another party before the government becomes liable to perform its part of the transaction. (For example, placing a purchase order creates an encumbrance, but the government is not liable until the goods are received.)

**Endowment fund of an NNO** Category of funds that includes both pure endowment funds and term endowment funds. Pure endowment funds require that the principal be kept in perpetuity, while term endowment funds allow the principal to be spent after a particular date or event.

**Enterprise fund** A fund used to account for any activity for which a fee is charged to external users for goods and services.

**Equity allocation rule** When the par (or stated) value of the shares issued by the issuing firm in a pooling of interests exceeds the total par or stated value of the combining company's stock, the excess should be deducted first from the combined other contributed capital and then from combined retained earnings.

**Equity method** A method used to account for an investment in another company, in which the income from investment consists of the investor's share of the profits (losses) of the investee. Under this method, the carrying value of the investments is adjusted continually to reflect the investee's profits, losses, and dividends.

**Exchange rate** The ratio between a unit of one currency and the amount of another currency for which that unit can be exchanged at a particular time.

**Expendable fund entity** A fund entity established to account for net financial resources dedicated for specific use(s).

**Expenditure** Decrease in the financial resources of a fund or incurrence of a fund liability.

**Father-son-grandson affiliation** A type of indirect ownership where the parent has ownership interests in a subsidiary that owns a controlling interest in a third firm.

**Fiduciary funds** Funds that hold assets in a trustee or agency capacity for others and that cannot be used to support the government's own programs.

**Financial synergy** Financial advantages or benefits arising from a business combination; for example, the opportunity to file a consolidated tax return may allow profitable corporations' tax liability to be reduced by the losses of unprofitable affiliates. Also, when an acquisition is financed using debt, the interest payments are tax deductible, creating a financial synergy.

- Floating rates** The exchange rates between major currencies, largely determined by supply and demand factors.
- Flow of current financial resources** Concept under which each year is treated as a distinct event and the only measurement that is important is the source and use of funds (where funds are usually defined on a modified accrual basis). A charge to operations is generally made when goods and services are acquired rather than when the goods and services are consumed or used.
- Flow of economic resources** A concept or focus now required for government-wide financial statements, which requires the accrual basis and thus recognizes economic transactions and other events when they occur, rather than only when the related inflows and outflows of cash or other financial resources occur. A charge is made to operations in the period when goods and services are used or consumed rather than when goods and services are acquired.
- Forecasted transaction** Expected future transaction that does not bear severe penalties for nonperformance or that is not under contract.
- Foreign currency exposure** The loss potential that exists as a result of uncertainty about future changes in exchange rates.
- Foreign currency transaction** A transaction that requires settlement in a foreign currency.
- Forward exchange contract** An agreement to exchange currencies of two different countries at a specified rate (the forward rate) on a stipulated future date. At the inception of the contract, the forward rate normally differs from the spot rate.
- Forward rate** An exchange rate quoted for future delivery of currencies exchanged.
- Functional currency** The currency in which a company primarily conducts its operations and generates and expends cash.
- Fund accounting** A system of accounting for nonbusiness organizations where the entities' resources are accounted for by individual funds.
- GASB** See Government Accounting Standards Board.
- General corporate expense** Any expense incurred for the benefit of the corporation as a whole, which cannot be reasonably allocated to any segment.
- General fund** A fund used to account for unrestricted financial resources, especially those required to be accounted for in another fund.
- General partnership** A partnership in which all partners are general (rather than limited). Characteristics of general partnerships include mutual agency, unlimited liability, limited life, and the right to dispose of a partnership interest.
- Global depository receipt (GDR)** A depository receipt that is traded globally.
- Goodwill (or excess of implied over fair value)** The excess of the value implied by the acquisition cost over the fair value of the identifiable net assets of the subsidiary on the date of acquisition.
- Goodwill method** A method used when the composition of a partnership changes (such as admission of a new partner) to adjust the partners' capital accounts equitably to account for the existence of implied goodwill. Under this method, the goodwill is recorded, and the capital accounts of the partners responsible for creating the goodwill are credited.
- Government Accounting Standards Board (GASB)** The authoritative body responsible for establishing financial accounting standards for all state and local governmental bodies.
- Government-wide financial statements** The Statement of Activities and the Statement of Net Assets now required to be prepared on an accrual basis listing the total activities of the government.
- Hedge** A purchase or sale transaction entered into to counterbalance potential losses (profits) arising from price fluctuations; a way of transferring the risk of price fluctuations from one group to another (for example, from seller to purchaser).
- Historical exchange rate** The spot rate in effect on the date a transaction takes place.
- Horizontal combination (horizontal integration)** A business combination among companies within the same industry operating at the same basic level (competitors).
- Horizontal sales** Sales from one subsidiary to another subsidiary.
- Impairment** The decline in fair value of an asset below its recorded book value, resulting in a reported loss in the income statement. Goodwill and other intangible assets with indefinite lives must be reviewed at least annually for potential impairment.
- Implied value** The fair value of an acquired entity, as implied by its purchase (acquisition) price. Implied value may be calculated as the acquisition cost divided by the percentage acquired.
- Indirect expenses** Expenses related to business combinations that are ongoing in nature, such as those incurred to maintain a mergers and acquisitions department, and that would have continued in the absence of a specific acquisition. These expenses, which also include managerial or secretarial time and overhead allocated to the merger, are expensed as incurred.
- Indirect ownership** A relationship created when a parent owns a subsidiary that owns an interest in another firm; i.e., the parent indirectly owns an interest in the third firm.
- Infrastructure assets** Immovable assets of a government such as streets, sidewalks, bridges, drains, street lights, etc.
- Installment liquidation** A liquidation that extends over a period of time, in which partners receive cash in installments before the total liquidation losses and total cash available are known.
- Intercompany accounts (reciprocal accounts)** Accounts that are maintained in the separate books of a parent and its subsidiaries that reflect a single transaction and should be eliminated in preparing the consolidated reports; for example, an "account receivable from subsidiary" on the books of a parent is reciprocal to an "account payable to parent" on the books of the subsidiary.
- Interfund activity** Activity between funds that includes reciprocal and nonreciprocal transactions. Reciprocal interfund activities include interfund loans and interfund services provided and used. Nonreciprocal interfund activities include interfund transfers and interfund reimbursements.
- Interfund transfers** See Interfund activity.
- Internal service fund** A fund used to account for any activity that provides goods or services to other funds, departments, or agencies of the primary government on a cost-reimbursement basis.
- International Accounting Standards Board (IASB)** A committee whose missions are to formulate international accounting standards used in the presentation of financial statements and to promote their worldwide acceptance and observation.
- International Federation of Accountants (IFAC)** An organization of practicing international accountants that is responsible for appointing members to the IASC Board.
- International Financial Reporting Standards (IFRS)** Standards issued by the International Accounting Standards Board (IASB) as part of a drive toward the global harmonization of accounting practices.
- Investee** A corporation that issues (sells) voting stock held by an investor (buyer).
- Investment trust funds** Funds used to report the external portion of investment pools reported by the sponsoring government.
- Investor** A business entity that holds an investment in voting stock of another company.
- Joint and severally liable** Legal action may be brought against all the partners together or against any one or more of the partners in separate suits.
- Joint venture** An arrangement entered into by two or more parties to accomplish a single or limited purpose for the mutual benefit of the members of the group, often to earn a profit.
- Leveraged buyout (LBO)** The creation by a group of employees (generally a management group) and third-party investors of a new company to acquire all the outstanding common shares of their employer company. The management group contributes whatever stock they hold to the new corporation and borrows sufficient funds to acquire the remainder of the common stock.
- Limited partnership** A partnership in which one or more of the partners are general and

one or more are limited. Limited partners invest capital only and limit their liability for partnership obligations to the extent of the amount invested.

**Liquidating dividend** In the context of business combinations, dividends declared by a subsidiary in excess of its cumulative earnings since acquisition.

**Loan funds of an NNO** Funds used to account for loans to students and staff of colleges and universities, to hospitals, and to beneficiaries of the interests of certain ONNOs (e.g., loans to music students by symphony orchestra societies). Loan funds are generally revolving (repayments of loan balances and interest are in turn lent to other individuals).

**Local currency** The currency in which a foreign entity will generally measure and record its transactions, usually the currency of the country in which it is located.

**Major funds of a government** Funds of a government that are required to be displayed separately on the balance sheet and the statement of revenues, expenditures, and changes in fund balances. Size percentage cutoffs are used to determine the major funds.

**Majority-owned subsidiary** A subsidiary in which a parent or the parent's other majority-owned subsidiaries hold more than 50% of the outstanding voting stock.

**Modified accrual accounting** A variation of accrual accounting used by expendable fund entities. Revenues must be both measurable and available to liquidate liabilities of the current period before they are recognized. Expenditures are recognizable when an event is expected to use current spendable resources, rather than future resources.

**Monetary accounts** Cash and other assets and liability accounts that are to be settled in cash.

**Mutual agency** One of the characteristics of a general partnership; each general partner is an agent of both the partnership and every other partner. Thus a partner can bind the other partners to a contract.

**Net assets** An entity's assets minus liabilities.

**Net assets (not-for-profit)** Term replacing the label "fund balance" as historically used in not-for-profit organizations under the authority of the FASB. Net Assets are categorized into unrestricted, temporarily restricted, and permanently restricted categories.

**Net monetary position** Monetary assets minus monetary liabilities.

**Noncontrolling interest (minority interest)** The interest in the profits (losses) or net assets of a partially owned subsidiary of all shareholders other than the parent.

**Nongovernment nonbusiness organizations (NNOs)** NNOs include nonprofit institutions of higher education, hospitals and other healthcare providers, voluntary health and welfare organizations (VHWOs), and other nongovernment nonbusiness organizations (ONNOs).

**Operating segment** A component of an enterprise that may earn revenues and incur expenses, about which separate financial information is evaluated regularly by the chief operating decision maker in deciding how to allocate resources and in assessing performance.

**Option** A legal right to buy or sell something at a specified price, usually within a specified time period (for example, in a foreign currency option contract, the holder has the right to buy or sell a specified amount of currency according to stipulated terms).

**Other financing sources** Proceeds from debt issuances and transfers of financial resources to and from other funds.

**Other nongovernment nonbusiness organizations (ONNOs)** Wide variety of organizations taking assorted forms, ranging from cemetery organizations, civic organizations, and labor unions to performing arts organizations, political parties, private and community foundations, private elementary and secondary schools, and zoological and botanical societies.

**Parent** A company that controls another company, usually achieved by direct or indirect ownership of some or all of its voting stock.

**Parent company concept** A concept that emphasizes the interests of the parent's shareholders in such a way that the consolidated financial statements reflect those stockholder interests in the parent itself, plus their undivided interests in the net assets of the parent's subsidiaries.

**"Parent only" financial statements** The unconsolidated financial statements of a parent company, in which its subsidiaries are shown as investments.

**Partial equity method** A variation of the equity method, in which the reported income (loss) of the investee is used to measure the investor's income from investment, without adjustment.

**Partnership agreement** A contractual agreement between or among legally competent persons to form a voluntary partnership (may also be called a partnership contract or articles of partnership).

**Pension (and other employee benefit) trust funds** Funds used to report resources that are required to be held in trust for the members and beneficiaries of defined benefit pension plans, defined contribution plans, other postemployment benefit plans, or other employee benefit plans.

**Permanent fund** A fund used to account for resources that are legally restricted to the extent that the earnings, and not principal, can be used to support the activities of the government.

**Permanently restricted net assets** Endowments in which the interest may be spent but the principal must not be used.

**Plant fund of an NNO** Fund used to account for (1) the property and equipment owned by the

organization and the net investment, (2) the accumulation of financial resources for the acquisition or replacement of property and equipment, (3) the acquisition and disposal of property and equipment, (4) liabilities relating to the acquisition of property and equipment, and (5) depreciation expense and accumulated depreciation.

**Pooling of interests method** A method of accounting for business combinations, allowed prior to June 2001 in the U.S., in which the assets and liabilities of the combining firm are carried forward at their historical book values. This method, which requires the use of stock as the medium of exchange, is sometimes justified as the uniting of two or more groups of shareholders into a single "pooled" entity, with no group being dominant.

**Primary government** Part of the government including the government funds and the proprietary funds, but not including component units of the government.

**Private-purpose trust funds** Funds used to report escheat property. These funds should be used to report all other trust agreements under which principal and income benefits individuals, private organizations, or other governments.

**Pro forma statements** Financial statements prepared to show the effect of planned or contemplated transactions as if they had occurred during the period covered by the financial statements; sometimes called "as of" statements.

**Profit or loss agreement** An agreement that indicates how a partnership's profits or losses should be allocated. Common agreements are based on a fixed ratio, a ratio based on capital balances, interest on capital balances, an allocation based on time or managerial talent, or some combination of these.

**Proprietary (nonexpendable) fund entities** The activities of nonbusiness organizations that operate similar to those of business enterprises, such as water utilities. Proprietary funds include enterprise and internal service funds.

**Purchase method** See Acquisition accounting.

**Purchases method for inventory** Method of accounting for inventory in which the inventory is not considered a financial resource (asset), and all inventory purchases are recognized as expenditures whether the inventory is used or not.

**Push down accounting** The establishment of a new accounting and reporting basis for a subsidiary company in its separate financial statements based on the purchase price paid by the parent company to acquire a controlling interest in the outstanding voting stock of the subsidiary company.

**Reciprocal stockholdings** A relationship created when two or more affiliates have ownership interests in each other; for example, the parent owns shares in a subsidiary that also owns shares in the parent.



- Relevance** One of the primary qualities of accounting information identified in *SFAC No. 2*, referring to the characteristic of making a difference in a decision.
- Reliability** One of the primary qualities of accounting information identified in *SFAC No. 2*, incorporating the characteristics of verifiability, representational faithfulness, and reasonable freedom from error and bias.
- Remeasurement** The process of translating the accounts of a foreign entity into its functional currency when they are stated in another currency (often used to refer to the temporal method).
- Remeasurement gain or loss** Gain or loss arising from the application of the temporal method to convert accounts from a nonfunctional foreign currency into U.S. dollars.
- Reportable segment** A segment considered to be significant to an enterprise's operations; specifically one that has passed one of three 10% tests or has been identified as being reportable through other criteria (aggregation, for example).
- Reporting currency** The currency in which a company reporting entity prepares its financial statements, usually the domestic currency of the country in which the company is domiciled.
- Reserve for inventory** A fund balance account sometimes used under the purchases method for inventory to offset a debit to inventory.
- Restricted fund entities** An expendable fund whose current financial resources are limited as to use because of externally imposed restrictions.
- Safe payment approach** A schedule used in an installment liquidation that guarantees that before any cash is distributed to partners, the partners' remaining capital balances are sufficient to absorb any potential loss.
- Segment assets** Those tangible and intangible assets directly associated with, or used by, a segment, including any allocated portion of assets used jointly by more than one segment. If portions of assets are allocated internally and used by a chief operating decision maker, then those amounts should be allocated on a reasonable basis and disclosed for external reporting purposes as well.
- Segment operating profit or loss** All of a segment's revenue minus all operating expenses, including any allocated revenues or expenses (e.g., common costs).
- Segment revenue** The revenue from sales to unaffiliated customers and from intersegment sales or transfers.
- Service-type special assessment** An assessment levied against property owners for services that benefit them.
- Settlement date** Date at which a payable is paid or a receivable is collected.
- Simple liquidation** A procedure in which all noncash assets are converted into cash before any assets are distributed to creditors and partners.
- Sound value** The fair value of used assets in appraisal reports.
- Special items** Significant fund accounting transactions within the control of management that are either unusual or infrequent.
- Special revenue fund** A fund used to account for the proceeds of specific revenue sources that are legally restricted to expenditures for specified purposes.
- Spot rate** An exchange rate quoted for immediate delivery of a currency.
- Statutory consolidation** A consolidation resulting when a new corporation is formed to acquire two or more other corporations through an exchange of voting stock; the acquired corporations then cease to exist as separate legal entities.
- Statutory merger** A legal term referring to the loss of a subsidiary's corporate legal entity status by canceling its corporate charter. The parent takes title to the newly acquired subsidiary's assets and assumes responsibility for its liabilities, and the subsidiary ceases to exist as a separate legal entity, although it may be continued as a separate division of the acquiring company.
- Stock acquisition** A business combination in which one corporation pays cash or issues stock or debt for all or part of the voting stock of another company, and the acquired company remains intact as a separate legal entity.
- Stock exchange ratio** A ratio generally defined as the number of shares of the acquiring company to be exchanged for each share of the acquired company, thus constituting a negotiated price.
- Subsidiary** A company that is controlled by another company through direct or indirect ownership of some or all of its voting stock.
- 20-F statement** A form filed annually with the Securities and Exchange Commission (SEC) by foreign firms that list in the U.S. stock exchanges.
- Takeover premium** The excess of the amount offered, or agreed upon, in an acquisition over the prior stock price of the acquired firm.
- Temporal method** A method of converting accounts from a foreign currency into the functional currency, in which monetary assets and liabilities are translated at the current exchange rate; assets and liabilities carried at historical cost are translated at historical exchange rates; and assets and liabilities carried at current values are translated at the current exchange rate (also called remeasurement).
- Temporarily restricted net assets** Resources that must be used for a specific purpose or in a specific time period where the restriction is donor imposed (rather than imposed by the governing board).
- Tender offer** An offer made directly to the shareholders of a company targeted by another company in a potential business combination. Usually published in a newspaper, a tender offer typically provides a price higher than the current market price for shares made available by a certain date.
- Totally held subsidiary** A subsidiary in which a parent or the parent's other majority-owned subsidiaries hold substantially all the subsidiary's outstanding equity securities and where the subsidiary is not materially indebted to any party other than the parent and/or the parent's other totally held subsidiaries.
- Transaction gain or loss** The gain or loss that arises from holding foreign currency receivables or payables and resulting from changes in exchange rates between the transaction date and the settlement date.
- Transfer pricing** The pricing of products or services between operating segments or geographic areas.
- Translation** Term is used in the two following ways: (1) as a generic term to apply to any restatement of foreign currency units into the reporting currency and (2) more specifically, to apply to the restatement of foreign currency units that are already measured in the functional currency into dollars (current rate method).
- Translation adjustments** Dual-meaning term referring either to: (1) any gains or losses resulting from the effects of converting financial statements from foreign currency into the parent's reporting currency; or (2) those gains and losses arising from the application of the current method to convert from the functional currency into U.S. dollars.
- Treasury stock method** An accounting method under which a reciprocal stockholding is presented as treasury stock on the consolidated balance sheet from the perspective of the parent firm, and the noncontrolling shareholders' interest in the parent is essentially ignored.
- Undistributed subsidiary income** The difference between the parent's share of the subsidiary's income, which is included in consolidated net income, and the amount of dividends received from the subsidiary, which is included in its taxable income if the affiliates file separate tax returns.
- Unlimited liability** A feature of a general partnership, establishing that each partner is jointly and severally liable for the debts and obligations of the partnership. Thus creditors, in a liquidation, can proceed against the personal assets for recovery of claims.
- Unrealized intercompany profit (loss)** Profit (loss) that has not been realized from the point of view of the consolidated entity through subsequent sales to third parties and must be eliminated in the preparation of consolidated financial statements.
- Unrestricted net assets** Net assets that do not meet the definition of temporarily or permanently restricted net assets and are designated to indicate their availability for general operations.

**Upstream sales** Sales by subsidiary companies to the parent company.

**Variable interest entity (VIE)** A legal entity subject to consolidation (generally, the investor has obtained less than a majority-owned interest). VIEs are entities whose equity investors do not have sufficient equity at risk such that the entity cannot finance its own activities. VIEs often are

created for a single specified purpose, for example, to facilitate securitization, leasing, hedging, research and development, reinsurance, or other transactions or arrangements.

**Vertical combination (vertical integration)** A business combination among companies within the same industry operating at different levels (supplier and customer).

**Voluntary health and welfare organizations (VHWOs)** Organizations that derive their revenues from voluntary contributions of the general public to be used for purposes connected with health, welfare, or community services.

**Wholly owned subsidiary** A subsidiary in which all of the subsidiary's outstanding voting stock is owned by the parent and/or the parent's other wholly owned subsidiaries.

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1. Business combinations are attractive to upper management of companies because of their desire to:
  - a. Reduce competition.
  - b. Grow.
  - c. Improve profitability.
  - d. Take on different product lines/service segments.
  
2. The preferred means of acquiring a company is:
  - a. To make a tender offer.
  - b. To negotiate a friendly combination between the two boards of directors.
  - c. To quietly acquire shares on the open market.
  - d. To bring an above-market offer for shares to strategic insiders.
  
3. Which of the following defensive moves will result in the firm going private?
  - a. White knight defense.
  - b. Pac-man defense.
  - c. Leveraged buyout.
  - d. Greenmail.
  
4. Horizontal integration combinations were the hallmark of which period of time in the U.S.?
  - a. 1880 - 1904.
  - b. 1905 - 1930.
  - c. 1945 - 2000.
  - d. 2000 - present.

5. Which of the following will result in a parent-subsidary relationship after the corporate acquisition event?
  - a. A statutory merger.
  - b. A statutory consolidation.
  - c. A statutory acquisition.
  - d. A stock acquisition.
  
6. On average, takeover premiums hovered around \_\_\_\_\_ in the late 1990s.
  - a. 20-30%.
  - b. 30-40%.
  - c. 40-50%.
  - d. 50-60%.
  
7. Which of the following modes of payment will result in the most days to completion?
  - a. Earnouts.
  - b. Cash only.
  - c. Common stock.
  - d. Mixed mode.
  
8. The calculation of goodwill to be included in an offering price is:
  - a. A fairly objective calculation which is industry-specific.
  - b. Subjective.
  - c. Negotiated.
  - d. Based on the company's underlying assets.
  
9. Under the new standards for consolidations:
  - a. Non-controlling interest in income is viewed as an allocation of consolidated net income on the income statement.
  - b. Non-controlling interest in net assets is shown as a liability on the balance sheet.
  - c. Companies may elect the total or partial elimination of unrealized intercompany profit in assets acquired from affiliates.
  - d. Non-controlling equity is eliminated in consolidation.

10. The approach to convergence of FASB and IASB standards is:
  - a. To approach broad issues first, develop a consensus opinion about the fundamental goals of recognition in this area, and then jointly issue the resulting standard.
  - b. To start with the requirements for public companies and work back to allow for exceptions that may apply to smaller entities.
  - c. To identify the standards which are currently similar and fine tune the methodology for communicating the standards, providing FAQs and examples, etc.
  - d. To develop a common conceptual framework that provides a foundation for developing future standards.
  
11. The primary qualities laid out in SFAC No. 8 are:
  - a. Conservatism and comparability.
  - b. Timeliness and understandability.
  - c. Relevance and faithful representation.
  - d. Relevance and conservatism.
  
12. Which of the following reflects the hierarchy of the Codification?
  - a. Statements, topics, section, paragraph.
  - b. Topic, sub-topic, section, paragraph.
  - c. Area, statement, topic, section.
  - d. Topic, statement, section, subsection.
  
13. Goodwill must be tested for impairment:
  - a. At the balance sheet date.
  - b. Quarterly.
  - c. Annually.
  - d. Periodically.
  
14. The first step in determining if there has been an impairment to goodwill is:
  - a. Assess qualitative factors to determine if it is more likely than not that the fair value of the reporting unit is below its book value.
  - b. Determine the fair value of the reporting unit.
  - c. Compare the fair value of the reporting unit to the fair value of the identified assets.
  - d. Determine the fair value of the identified assets within the reporting unit.

15. Pro forma accounting statements serve two purposes in relation to business combinations:
  - a. Calculation of the purchase price and disclosure.
  - b. Goodwill justification and planning.
  - c. Planning and tax return preparation.
  - d. Planning and disclosure.
  
16. How many steps are required in accounting for a business combination under the acquisition method?
  - a. 2.
  - b. 3.
  - c. 4.
  - d. 5.
  
17. Under the acquisition method, if there is a bargain acquisition, the first thing that GAAP requires is:
  - a. The most long-lived assets be written down on a pro rata basis to “absorb” the resulting gain.
  - b. Intangible assets be written down on a pro rata basis to “absorb” the resulting gain.
  - c. The acquirer reassess all assets and liabilities, review the procedures and estimates used to determine the fair value, and if there is still a gain, to recognize such in income.
  - d. Establish a deferred revenue account and amortize it over a 10 year period.
  
18. The measurement period shall not exceed:
  - a. 2 quarters.
  - b. 9 months.
  - c. 1 year.
  - d. 18 months.
  
19. The primary role of earnouts is:
  - a. Enhancing revenue of the combined entity.
  - b. In the acquisition of private companies in order to retain management or other key personnel.
  - c. Achieving benchmarks or milestones in the acquired company.
  - d. Getting past negotiating roadblocks.

20. Which of the following is accurate regarding leverage buy outs (LBOs)?
- FASB Statement No. 141R explicitly provided an exception for LBOs.
  - FASB Statement No. 141R changed to an “economic entity” concept for LBOs which requires them to be viewed as business combinations.
  - LBO’s now fall under the EIFT *Consensus Position No. 88-16*.
  - LBO’s should be accounted for using book values of the original company because there has been no change to the economic substance of the company.
21. Which of the following components of accounting for business combinations is accounted for the same under IFRS as under U.S. GAAP?
- Negative goodwill.
  - Goodwill.
  - Qualified Special Purpose Entities (QSPEs).
  - Requirement to conform parent and subsidiary accounting policies.
22. Under both IFRS and GAAP, reporting dates for the parent and the subsidiary can be different by up to:
- 1 month.
  - 3 months.
  - 4 months.
  - 6 months.
23. A controlling interest in another company is:
- Required to be at least 50% of the voting stock to constitute financial control.
  - Relates only to an incorporated entity under FASB ASC paragraph 810-10-15-8.
  - Focuses on the application of the majority voting interest.
  - Defined as the portion of equity attributable to the parent and the parent’s owners.
24. All of the following are valid reasons for acquiring a company as a subsidiary with the **EXCEPTION** of:
- If the deal is structured correctly, the company will have the influence it needs without having to consolidate.
  - Stock acquisition is relatively simple.
  - Control can be accomplished without buying 100% of the stock so there is a much smaller investment needed.
  - The separate legal company can provide liability protection for the parent.

25. Which of the following parties would be more interested in the consolidated financial statements of the controlled group than in the financial statements of the individual legal entity?
- Creditors of the subsidiary company.
  - Regulators of the subsidiary company.
  - Creditors of the parent entity.
  - Non-controlling shareholders.
26. Which of the following is accurate regarding the proper way to record a parent company's initial purchase of stock in the subsidiary?
- It should be recorded as Investment in Company X for the fair value of the consideration given.
  - If the stock is purchased for cash, the investment cost should include the broker's fees and other direct costs of acquisition.
  - It should be recorded as Investment in Company X for the fair value of the consideration received.
  - Both direct and indirect costs of acquisition should be excluded from the fair value recorded as Investment in Company X.
27. If a company issues stock to acquire stock of the subsidiary and incurs registration costs associated with the stock issuance, they are accounted for by:
- Expensing the cost in the year of acquisition.
  - Including it as part of the total investment in the subsidiary.
  - Debiting Deferred Acquisition Cost and amortizing it over a period not to exceed 5 years.
  - Debiting Other Contributed Capital.
28. On the date of acquisition, the consolidated balance sheet will reflect:
- The sum of all of the assets of the parent and subsidiary and all of the liabilities of both if the parent acquired 100% of the subsidiary.
  - The full value of the assets and liabilities of the subsidiary included with the assets and liabilities of the parent with the non-controlling interest reflected as a component of owner's equity.
  - The value of the non-controlling interest in assets and liabilities will be reflected as a reduction to total assets and to total liabilities respectively.
  - The parent's pro rata share of the subsidiary's assets and liabilities with disclosure indicating the full value of the subsidiary and the percentage ownership by the parent.



29. Which of the following are used to get the implied value of the subsidiary's stock?
- Purchase price of the subsidiary.
  - Fair value of the subsidiary's assets and liabilities.
  - Dollar value of minority interest.
  - Value of the stock given up at purchase.
30. Which of the following will be posted to the general ledger of the impacted company during consolidation?
- Work paper entries.
  - Eliminating entries.
  - Adjusting entries.
  - Consolidating entries.
31. When the implied value of the subsidiary is greater than the book value of the subsidiary:
- The difference is reflected as goodwill.
  - The difference is allocated pro rata to all of the assets of the subsidiary.
  - The difference is first used to adjust each asset to its fair value and then any excess is applied to goodwill.
  - The difference is allocated pro rata to the tangible assets of the subsidiary.
32. How many levels of control does GAAP recognize and address with respect to investor's influence over an investee company?
- 3.
  - 4.
  - 5.
  - 6.
33. When an investor has significant influence but no control, the only acceptable method of accounting of the investment is:
- Cost with a valuation allowance account to adjust for market losses.
  - The partial equity method.
  - The fair value method.
  - The full equity method.

34. The \_\_\_\_\_ is the approach most commonly used in practice among parent companies.
- Cost method.
  - Partial equity method.
  - Full equity method.
  - Fair value method.
35. Under the partial equity method, the investor will only make adjustments to the investment account for:
- Changes in market value that indicate impairment.
  - Its share of earnings and dividends.
  - Changes in market value at each balance sheet date.
  - Additional investments in the company.
36. On the income statement of a consolidated entity which needs to reflect minority interest, the total net income of the affiliated entities after elimination of the intercompany activity is referred to as:
- Entity net income.
  - Comprehensive income before allocation.
  - Affiliated income.
  - Consolidated net income.
37. On a consolidated balance sheet workpaper, the second elimination entry is a(n):
- Investment entry.
  - Intercompany balances entry.
  - Differential entry.
  - Intercompany profit entry.
38. There is one number on the workpaper that is calculated and then inserted directly into the workpaper. That number is:
- The difference between implied value and book value.
  - The value of the investment in subsidiary.
  - Subsidiary retained earnings.
  - Noncontrolling interest in consolidated net income.

39. It is recommended to use t-accounts to calculate:
- Both noncontrolling interest in consolidated net income and controlling interest in consolidated net income.
  - Consolidated retained earnings.
  - Subsidiary retained earnings.
  - Noncontrolling interest in retained earnings.
40. The SEC allows a subsidiary and a parent to have different year-ends as long as the data from the subsidiary is not more than \_\_\_\_\_ old.
- 3 months.
  - 93 days.
  - 1 month.
  - 31 days.
41. When the investment in subsidiary is carried under the equity method, the first elimination entry made must:
- Eliminate the equity in subsidiary income recorded during the period.
  - Eliminate the intercompany dividends recognized during the period.
  - Return the investment account to the balance at acquisition.
  - Allocate the difference between implied value and book value at acquisition.
42. In the years after acquisition, which of the following will need to be adjusted in the consolidated statement of cash flows which relate to the subsidiary?
- Dividends paid when the subsidiary is wholly owned by the parent.
  - The difference in implied value of the subsidiary's assets and book value.
  - The total value of the investment in subsidiary.
  - Noncontrolling interest in consolidated net income when the starting point of the statement is controlling interest in consolidated net income.
43. In the year of acquisition when preparing a statement of consolidated cash flows:
- Cash spent on the acquisition itself will be eliminated out since it is intercompany.
  - The assets and liabilities of the subsidiary as of the date of the acquisition will need to be added to those of the parent from the beginning of the year.
  - The assets and liabilities of the subsidiary will have to flow into the consolidated statement of cash flows as part of the investing activities.
  - The issuance of stock or debt to finance the acquisition will have to be reflected as cash in for financing and cash out for investing.

44. On January 1, ABC Company had a cash balance of \$500,000. On July 1, it paid \$200,000 to acquire PQR Company who had a cash balance of \$40,000 on July 1 but had \$80,000 as of January 1. The beginning balance that should be used on the consolidated statement of cash flows is:
- a. \$340,000.
  - b. \$500,000.
  - c. \$540,000.
  - d. \$580,000.
45. On 3/1, Company A acquired 70% of Company B. On 10/1, Company B paid a dividend of \$10,000. On 12/1 Company A paid a dividend of \$30,000. How much would be reflected in the consolidated statement of cash flows as a financing activity related to the dividends?
- a. \$10,000.
  - b. \$30,000.
  - c. \$33,000.
  - d. \$40,000.
46. IFRS uses the term \_\_\_\_\_ to refer to equity investments.
- a. Affiliate accounting.
  - b. Investment in affiliates.
  - c. Accounting for associates.
  - d. Associated company investments.
47. In the past, when companies wanted to avoid depressing future earnings after an acquisition was to charge large amounts to:
- a. Acquisition expense.
  - b. Restructuring expense.
  - c. In-process research and development expense.
  - d. Goodwill.
48. In an acquisition, the implied value of the acquired company is equal to the:
- a. Fair value of its assets.
  - b. Book value of its assets.
  - c. Value of its equity.
  - d. Acquisition price.

49. Measuring goodwill is a \_\_\_\_\_ step process.
- 2.
  - 3.
  - 4.
  - 5.
50. The difference between the elimination entries when the acquiring company buys 100% of the company versus a smaller percentage of the company is:
- Recording the subsidiary assets and liabilities at the percentage ownership multiplied by market value.
  - Recording minority interest in equity.
  - There will not be any difference between implied value and market value to account for.
  - The assets and liabilities of the subsidiary will be recorded at book value.
51. A control premium:
- Is always inherent in an acquisition of more than 50% of the outstanding stock but less than 100%.
  - Is not recognized by the acquiring company.
  - Is best evidenced by publically traded shares of the acquired company which trade at more than the per price share of the acquired shares.
  - Is best evidenced by publically traded shares of the acquired company which trade at less than the per price share of the acquired shares.
52. If the price paid by the acquiring company for a subsidiary is less than the fair value of the net assets and the book value of the net assets:
- The acquiring company will recognize goodwill.
  - The acquiring company will write down the assets on a pro rata basis.
  - The acquiring company will recognize a gain for the excess of fair value over implied value.
  - The acquiring company will recognize a loss.
53. If P Company bought 80% of S Company for \$2.2 million, the implied value of S Company is:
- \$1.76 million.
  - \$2.2 million.
  - \$2.5 million.
  - \$2.75 million.

54. At acquisition, if the fair value of inventory is greater than the book value of inventory:
- In consolidation, cost of goods sold must be adjusted in the year that the inventory is sold.
  - In consolidation, cost of goods sold will be adjusted only in the acquisition year for the full difference between fair value and book value.
  - In consolidation, cost of goods sold will only be adjusted in the year after acquisition for the full difference between fair value and book value.
  - Inventory is the one asset that does not get adjusted to fair value.
55. Which of the following entries would appear on the acquiring company's books if they are using the cost method?
- Debit to cash and a credit to dividend income.
  - Debit to dividend income and a credit to dividends declared.
  - Debit to goodwill and a credit to difference between implied and book value.
  - Debit to retained earnings and a credit to investment in subsidiary.
56. If the fair value of property, plant or equipment of the acquired company exceeds the book value:
- The difference will be depreciated over 5 years.
  - The difference will be depreciated over 10 years.
  - The difference will be depreciated over the remaining useful life of each depreciable asset.
  - The asset values will be permanently reflected in the subsidiary's books so depreciation will adjust accordingly.
57. When setting up the consolidation workpapers, the preferred method is to show the statements in which order?
- Balance sheet, income statement, retained earnings statement.
  - Income statement, retained earnings statement, balance sheet.
  - Retained earnings statement, income statement, balance sheet.
  - Income statement, balance sheet, retained earnings statement.

58. Assume that P Company acquired 80% S Company. In year one, S Company had \$100,000 of income, there was a \$10,000 adjustment to account for additional depreciation expense and a \$20,000 adjustment related to the difference between the book value and fair value of inventory at acquisition, all of which was sold during the period. The value of noncontrolling interest in income is:
- \$20,000.
  - \$18,000.
  - \$16,000.
  - \$14,000.
59. Under the cost method, which accounts must be reduced annually for the cumulative amount of depreciation and amortization for the difference in book value and implied value of depreciable assets?
- Ending consolidated retained earnings.
  - Beginning consolidated retained earnings.
  - Ending parent retained earnings.
  - Beginning subsidiary retained earnings.
60. Which of the following entries would appear on the acquiring company's books if they are using the partial equity method?
- Debit to cash and a credit to dividend income.
  - Debit to dividend income and a credit to dividends declared.
  - Debit to cash and a credit to investment in subsidiary for dividends.
  - Debit to retained earnings and a credit to investment in subsidiary.
61. Under the complete equity method, dividends paid by the subsidiary:
- Are recorded to the investment in subsidiary account.
  - Are not recorded by the parent company.
  - Are recorded as dividend income.
  - Are recorded as dividends declared.
62. If the fair value of debt is greater than the book value at acquisition:
- The subsidiary would need to permanently adjust the debt to fair value and recognize the valuation adjustment.
  - The difference needs to be recorded to unamortized bond premium and amortized over the life of the debt as a reduction in interest expense in consolidation.
  - The adjustment in consolidation would go against goodwill.
  - The difference will be reflected in the investment in subsidiary account.

63. Sales from a subsidiary to another subsidiary within the same affiliated group which uses the part as a component of a product they produce are referred to as:
- Downstream sales.
  - Horizontal sales.
  - Integrated sales.
  - Upstream sales.
64. When all of the intercompany downstream sales have not been sold to third parties by year-end, in the consolidation workpapers:
- Inventory needs to be debited for the portion that was unsold.
  - Cost of goods sold needs to be debited to defer the intercompany cost of the unsold goods.
  - Sales needs to be credited.
  - Cost of goods sold needs to be credited to eliminate the profit on the intercompany sales.
65. When using the cost or partial equity method and having downstream sales, in year 2, what will need to occur?
- An elimination entry to decrease the parent company's retained earnings will need to be made for the amount of intercompany profits in prior year ending inventory.
  - An elimination entry to decrease the subsidiary company's retained earnings will need to be made for the amount of intercompany profits in prior year ending inventory.
  - An elimination entry debit to cost of sales will need to be recorded in the consolidation workpapers.
  - An elimination entry with a debit to inventory will need to be recorded in the consolidation workpapers.
66. If ending inventory obtained from an affiliate of \$12,000 reflects a markup of 20% of cost of sales, the gross profit to be eliminated would be:
- \$10,000.
  - \$2,400.
  - \$2,000.
  - \$0.



67. Assume that the parent company has downstream sales of \$200,000 (cost of \$150,000) to the subsidiary which are still in ending inventory at the end of year one. At the end of year two, the subsidiary writes down the inventory from \$200,000 to its market value of \$175,000. How much intercompany profit is subject to elimination in year 2?
- \$175,000.
  - \$150,000.
  - \$50,000.
  - \$25,000.
68. When there are intercompany downstream sales and the subsidiary is not wholly owned by the parent:
- The calculation becomes more complex because inventory can reflect the minority interest's share of intercompany profit.
  - GAAP requires 100% elimination of intercompany profit on the consolidated financial statements.
  - IFRS allows both 100% elimination of intercompany profit and partial elimination.
  - GAAP requires that the partial elimination method be used if minority interest exceeds 20%.
69. The 80% owned subsidiary has net income of \$200,000 and sold inventory to the parent company of \$700,000 of which \$400,000 is still in their ending inventory at year-end with a cost of 25% of the inventory value. What is the noncontrolling interest in consolidated net income?
- (\$40,000).
  - \$12,000.
  - \$20,000.
  - \$40,000.
70. The parent company acquired 80% of a subsidiary on January 1 for \$1.2 million. During the year the subsidiary had income of \$100,000 and paid dividends of \$40,000. The fair value of the subsidiary's net assets exceeded its book value by \$20,000 due to land values. Using the partial equity method, what is the value of the investment in subsidiary account at year-end?
- \$1,200,000.
  - \$1,248,000.
  - \$1,300,000.
  - \$1,312,000.

71. The parent company acquired 80% of a subsidiary on January 1 for \$1.2 million. During the year, the subsidiary had income of \$100,000 and paid dividends of \$40,000. Under the partial equity methods one of the first elimination entries would be:
- Debit equity in subsidiary income for \$80,000, credit dividends declared for \$32,000 and credit investment in subsidiary for \$48,000.
  - Debit dividend income and credit dividends declared for \$32,000.
  - Debit subsidiary equity accounts for \$1.2 million and credit investment in subsidiary for \$1.2 million.
  - Debit dividend income and credit dividends declared for \$40,000.
72. Comparing the partial equity method and the complete equity, which of the following entries will appear on the parent's books only under the complete equity method?
- Recording the initial investment in the subsidiary.
  - Recording dividends received.
  - Recording equity in subsidiary income.
  - Adjusting the investment in subsidiary account for the parent's share of unrealized intercompany profit in ending inventory.
73. In comparing the cost method and the complete equity method, which of the following entries will be different depending on which method you use?
- The entry to eliminate intercompany sales.
  - The entry to eliminate intercompany profit in ending inventory.
  - The entry to recognize intercompany profit in beginning inventory realized during the year.
  - The entry to create the noncontrolling interest in equity.
74. Which of the following is accurate regarding the tax consequences of intercompany sales?
- When the consolidated entity files a consolidated tax return, there are no deferred tax issues to consider.
  - An intercompany sale will create a permanent difference on the tax return of the selling entity.
  - The intercompany profit creates a temporary difference that will result in future year deductions for the selling affiliate.
  - Under GAAP, the temporary differences resulting from intercompany profits is subject to the basic principles that apply to other temporary differences.

75. If an 80% owned subsidiary sells land to the parent company which is valued at \$500,000 and has a cost of \$300,000, the parent company will need to record which of the following additional entries on its books if it accounts for the subsidiary under the complete equity method?
- Record land in the amount of \$300,000.
  - Reduce the value of investment in subsidiary by \$160,000.
  - Recognize a gain in the amount of \$160,000.
  - Reduce the value of investment in subsidiary by \$200,000.
76. An 80% owned subsidiary sells land to the parent company which is valued at \$500,000 and has a cost of \$300,000, and recognized \$1,000,000 in income for the year. The consolidated entity had \$3,200,000 in consolidated income. The noncontrolling interest in consolidated income equals:
- \$160,000.
  - \$200,000.
  - \$600,000.
  - \$640,000.
77. In year 1, an 80% owned subsidiary sells land to the parent company which is valued at \$600,000 and has a cost of \$400,000. Which of the following is accurate regarding the consolidation entries in year 2?
- Under the partial equity method, an eliminating entry debiting investment in subsidiary will need to be made for \$160,000.
  - Under the cost method, an eliminating entry debiting investment in subsidiary will need to be made for \$200,000.
  - Under the complete equity method, an eliminating entry debiting beginning retained earnings of the parent company will need to be made for \$200,000.
  - Under the complete equity method, an eliminating entry debiting investment in subsidiary will need to be made for \$160,000.
78. In year 1, an 80% owned subsidiary sells land to the parent company which is valued at \$600,000 and has a cost of \$400,000. In year 4, the parent company sold the land to a third party for \$550,000. The amount that will be reported in the consolidated financial statements at the end of year 4 is:
- (\$50,000).
  - \$0.
  - \$150,000.
  - \$200,000.

79. When there is an intercompany sale of depreciable equipment at a gain to the selling entity, the resulting downward adjustment in depreciation expense of the consolidated entity is referred to as:
- Gain deferral.
  - Intercompany reciprocity.
  - Realization through usage.
  - Depreciation disposal.
80. In year 1, a wholly-owned subsidiary buys equipment from the parent company which is valued at \$60,000 and has a cost of \$40,000. In subsequent year's consolidations:
- Under the partial equity method, an eliminating entry debiting investment in subsidiary will need to be made for \$16,000.
  - Under the cost method, an eliminating entry debiting parent company beginning retained earnings will need to be made for \$16,000.
  - Under the complete equity method, an eliminating entry debiting beginning retained earnings of the parent company will need to be made for \$16,000.
  - Under the cost method, an eliminating entry debiting investment in subsidiary will need to be made for \$16,000.
81. When there has been intercompany sales of depreciable equipment and the subsidiary is the seller, the starting point for calculating noncontrolling interest in consolidated income is:
- Consolidated income.
  - Noncontrolling interest in net assets.
  - Subsidiary income.
  - Beginning of year noncontrolling interest.
82. In year one, the 80% owned subsidiary sells equipment to the parent with a cost of \$50,000 for \$80,000 and a useful life of 3 years. The subsidiary has income of \$100,000 and the consolidated entity has income of \$500,000. Which of the following is accurate regarding the calculation of noncontrolling interest in consolidated income?
- Noncontrolling interest in consolidated income starts with the \$100,000 of income and adjusts for both the intercompany gain and the depreciation adjustment.
  - Noncontrolling interest in consolidated income starts with the \$500,000 of consolidated income and adds back 20% of the intercompany gain.
  - Noncontrolling interest in consolidated income starts with the \$100,000 of income and adjusts for 80% of the intercompany gain.
  - Noncontrolling interest in consolidated income starts with the \$500,000 of consolidated income and adjusts for both the intercompany gain and the depreciation adjustment.

83. In year one, the 80% owned subsidiary buys equipment from the parent with a cost of \$150,000 for \$180,000 and a useful life of 3 years. The subsidiary has income of \$300,000 and the consolidated entity has income of \$800,000. Assuming no other adjustments, what is the amount of noncontrolling interest in consolidated income?
- a. \$50,000
  - b. \$54,000
  - c. \$56,000.
  - d. \$60,000.
84. In year 1, a 70% owned subsidiary sells equipment with a book value of \$50,000 to its parent for \$80,000. The original cost was \$100,000 and accumulated depreciation is \$50,000. It has a useful life of 5 years and is depreciated straight-line by the parent. The subsidiary had \$130,000 of income and the parent had \$300,000. Under the complete equity method, which of the following entries would be appropriate eliminating entries during consolidation?
- a. Debit investment in subsidiary for \$130,000 and credit equity in subsidiary income for \$130,000.
  - b. Debit equity in subsidiary income for \$30,000 and credit investment in subsidiary for \$30,000.
  - c. Debit gain on sale of equipment for \$30,000 and credit investment in subsidiary for \$30,000.
  - d. Debit gain on sale of equipment for \$30,000, debit equipment for \$20,000, and credit accumulated depreciation for \$50,000.
85. The 70% owned subsidiary sells the parent company equipment with a book value of \$100,000 for \$130,000. The original cost was \$140,000 and accumulated depreciation is \$40,000 and the equipment has a 5 year estimated useful life. Both the subsidiary and the parent have marginal tax rates of 40% and they file separate tax returns. What is the appropriate entry for taxes related to this transaction?
- a. Record a deferred tax liability of \$9,600.
  - b. Record a deferred tax asset of \$9,600.
  - c. Increase income tax expense by \$9,600.
  - d. No adjustment for taxes is required.

86. When calculating the noncontrolling interest in consolidated net income:
- The calculation should tax-effect the subsidiary income after applying the minority interest percentage.
  - The calculation should use the before-tax amount of gain recorded by the subsidiary on an upstream intercompany sale as well as the before-tax amount of the gain realized through depreciation prior to applying the minority interest percentage.
  - The calculation should use the after-tax amount of gain recorded by the subsidiary on an upstream intercompany sale as well as the after-tax amount of the gain realized through depreciation prior to applying the minority interest percentage.
  - The calculation should use the after-tax amount of gain recorded by the subsidiary on an upstream intercompany sale but the before-tax amount of the gain realized through depreciation prior to applying the minority interest percentage.
87. In order to calculate undistributed income of the subsidiary which has been included in consolidated income:
- Account for the change in retained earnings of the subsidiary from acquisition forward.
  - Analyze the P&L of the subsidiary from acquisition to the balance sheet date.
  - Use t-accounts to track the income and distributions of the subsidiary.
  - Analyze the activity in the investment in subsidiary account.
88. Undistributed income of the subsidiary:
- Reduces income tax expense in consolidation.
  - Creates a deferred tax liability on the parent company's books.
  - Creates a deferred tax liability on the subsidiary's books.
  - Creates a deferred income tax liability in consolidation.
89. The acquisition date is technically:
- The date that the ownership percentage of the parent exceeds 20%.
  - The date that the parent achieves control.
  - The date of the first purchase of subsidiary shares.
  - The date that the parent ownership percentage exceeds 40% and no other single or affiliated group of shareholders has a greater ownership percentage.
90. One of the first things which must be completed when the acquisition of shares creates control for the parent company is:
- Adjust the recorded value of the investment in subsidiary to market value.
  - Prepare a computation and allocation schedule.
  - Compute the carrying value of the initial investment.
  - Calculate the gain on the revaluation.

91. P Company bought 1,500 shares (15%) of S Company in year 1 for \$16 per share. In year 3, they bought an additional 75% of the company for \$187,500 which was \$25 per share. S Company's retained earnings at the first purchase date were \$40,000 and at the date of the second purchase, they were \$120,000. P is using the cost method to account for the investment in S. P company should:
- Increase the value of investment in subsidiary on its books by \$12,000 to revalue the initial purchase.
  - Recognize a gain in income of \$12,000 to adjust the initial investment to its implied value.
  - Increase the value of investment in subsidiary by \$1,500 to adjust from the implied value to the fair value of the initial purchased shares.
  - Recognize a gain in income of \$13,500 on the remeasurement.
92. When using the cost method to account for the investment in subsidiary (assuming no subsidiary dividends) and there are multiple acquisition prior to establishing control, the reciprocity entry each year going forward which is needed for consolidation is calculated by:
- Adding the change in subsidiary retained earnings from the control date to the end of the current year multiplied by the ownership percentage plus the initial reciprocity adjustment required at the control date.
  - Adding the balance in the investment in subsidiary account to the change in subsidiary retained earnings from the control date to the end of the current year multiplied by the ownership percentage.
  - Applying the ownership percentage to the change in subsidiary retained earnings over the current year.
  - Adding the total implied carrying value of the initial investment to the change in subsidiary retained earnings from the control date to the end of the current year multiplied by the ownership percentage.
93. If the parent company sells a small percentage of their ownership in the subsidiary and retains control, under the cost method, they will record the sale of the shares as a debit to cash and a credit (credits) to:
- Investment in subsidiary for the same amount.
  - Investment in subsidiary for the cost basis of the shares and additional contributed capital for the balance.
  - Investment in subsidiary for the cost basis of the shares and gain/loss on sale for the balance.
  - Investment in subsidiary for the difference between fair value and the cost basis of the shares and additional contributed capital for the balance.

94. Under the cost method, the cost of the shares sold:
- Must be adjusted for undistributed income from the date of acquisition to the beginning of the current year which was sold.
  - Must be adjusted for current year earnings of the subsidiary which were sold.
  - Must be adjusted for both undistributed income from the date of acquisition to the beginning of the current and the current year earnings which were sold.
  - Do not require adjustment.
95. P Company accounts for its 90% investment in S Company using the complete equity method. On January 1, the value of that account is \$400,000. On March 31, S Company pays a dividend to its shareholders totaling \$20,000 and on June 30, it reports 6 months of net income of \$100,000. On July 1, the parent company sells 10% of its stock for \$60,000. The parent will recognize a gain of \_\_\_\_\_ on this sale.
- \$0.
  - \$12,800.
  - \$18,000.
  - \$20,000.
96. P Company accounts for its 90% investment in S Company using the complete equity method. On January 1, the value of that account is \$400,000. On March 31, S Company pays a dividend to its shareholders totaling \$20,000 and on June 30, it reports 6 months of net income of \$100,000. On July 1, the parent company sells 10% of its stock for \$60,000. The parent will reduce its investment in subsidiary account by \_\_\_\_\_ as a result of this sale.
- \$18,000.
  - \$40,000.
  - \$47,200.
  - \$60,000.
97. P Company bought 9,000 shares of S Company on 1/1/01 for \$30/share. This represented a 90% interest in the company. During year 1, S Company reported \$60,000 of income but did not declare any dividends. On 1/1/02, P Company sold 6,000 shares for \$35/share. What is the noncontrolling carrying value of S Company at the date of the sale?
- \$30,000.
  - \$32,400.
  - \$36,000.
  - \$38,200.



98. P Company originally held 8,000 shares of S Company (an 80% interest) but sold 6,000 shares. They calculated an \$8,000 loss attributable to them at the sale date. They will realize a loss of \_\_\_\_\_ on their income statement in the current year.
- \$0.
  - \$2,000.
  - \$6,000.
  - \$8,000.
99. When the parent owns less than 100% of the stock of the subsidiary and then buys 100% of the new stock issued by the subsidiary, the change in ownership percentage will be calculated by:
- Comparing the owned shares to the total outstanding shares.
  - Book to market value.
  - Implied value.
  - Comparing the parent's share of subsidiary equity immediately before and after the purchase of the new shares.
100. There are \_\_\_\_\_ methods available for allocating the constructive gain or loss between the parent and subsidiary.
- 2.
  - 3.
  - 4.
  - 5.
101. Bonds with a par value of \$100,000 are acquired by an affiliate of the issuing company for \$85,000 which have a book value to the issuer of \$110,000. What is the gain or loss to the issuing company?
- (\$10,000).
  - \$10,000.
  - (\$15,000).
  - \$15,000.
102. Bonds with a par value of \$300,000 are acquired by an affiliate of the issuing company for \$310,000 which have a book value to the issuer of \$280,000. What is the amount of gain or loss that would be reported in the consolidated financial statements?
- \$0.
  - \$10,000.
  - (\$10,000).
  - (\$30,000).

103. Issuance of a stock dividend is:
- Assumed to be distributed from the earliest earnings accumulated in the retained earnings balance.
  - Assumed to be evenly distributed from past earnings and current profits.
  - Assumed to be distributed from the most recent profits (i.e., current period income).
  - Distributed from retained earnings and management has discretion to determine if it comes from past earnings or current profits.
104. When the subsidiary issues a stock dividend, the parent:
- Records income (which will be eliminated in consolidation).
  - Increases the value of the investment in subsidiary account.
  - Records a memorandum entry for the receipt of additional shares.
  - Does not need to make any adjustments until the consolidating entries.
105. A wholly-owned subsidiary declared and paid a dividend of \$250,000 of which \$50,000 was a liquidating dividend. Which of the following eliminating entries will need to be made?
- Debit to cash for \$250,000, credit to dividend income for \$200,000, credit to investment in subsidiary for \$50,000.
  - Debit to dividend income for \$250,000, credit to dividends declared for \$250,000.
  - Debit to dividend income for \$250,000, credit to dividends declared for \$200,000, credit to investment in subsidiary for \$50,000.
  - Debit to investment in subsidiary for \$50,000, credit to dividends declared for \$50,000.
106. One aspect of a liquidating dividend which pays out the post-acquisition earnings is that for consolidation in the year following that dividend:
- There is no retained earnings – subsidiary beginning balance to establish.
  - No reciprocity entry is needed in consolidation.
  - The capital stock – subsidiary balance will need to be recalculated.
  - The investment in subsidiary account will no longer have a balance.
107. One of the key considerations when determining the equity interest of each class of shareholders is:
- The number of preferred shares outstanding versus common.
  - The market price of the common shares.
  - The provisions of the preferred stock issue particularly the call price and the dividend provision.
  - The market price of the preferred shares.

108. Most preferred stock agreements are:
- Cumulative, nonparticipating.
  - Noncumulative, fully participating.
  - Cumulative, fully participating.
  - Noncumulative, nonparticipating.
109. Which feature of preferred stock allows the shareholder to get dividends whether declared or not?
- Fully participating.
  - Nonparticipating.
  - Cumulative.
  - Noncumulative.
110. When either accumulated retained earnings or net income is allocated between the share classes such allocation is made on the basis of:
- Relative market price of each class of shares.
  - The ratio of the outstanding shares of each class.
  - The ratio of the market values of each class of stock.
  - The ratio of the par values of each class of stock.
111. For cumulative nonparticipating preferred stock, the allocation of retained earnings will be:
- The par value of the preferred shares multiplied by the number of preferred shares.
  - The call premium per share plus the dividend in arrears per shares multiplied by the number of preferred shares.
  - The call price multiplied by the number of preferred shares.
  - The dividend in arrears per share multiplied by the number of preferred shares.
112. When there are two classes of stock, the first step in computing the noncontrolling interest in consolidated net income is to:
- Calculate the noncontrolling interest in consolidated net assets.
  - Calculate the amount of accumulated dividends in arrears.
  - Calculate the amount of call premium plus accumulated dividends in arrears.
  - Allocate the subsidiary's contribution to consolidated income between the 2 classes of stock.

113. A Statement of Affairs includes:
- All liabilities of the debtor.
  - All assets of the debtor at cost and market value.
  - All property considered exempt.
  - Answers to questions about its financial condition and operations.
114. An involuntary petition under Chapter 7 will result in:
- A determination by the bankruptcy court whether to accept or dismiss the petition.
  - A trial to determine whether the petition should be dismissed or accepted.
  - Immediate relief to the debtor.
  - The court calling a creditor's meeting.
115. Under a Chapter 11 petition, the exclusivity period is \_\_\_\_\_ but can be extended to not more than:
- 120 days, 6 months.
  - 6 months, 18 months.
  - 120 days, 18 months.
  - 6 months, 1 year.
116. Once a plan of reorganization is filed with the court, it must be accepted by \_\_\_\_\_ in amount and \_\_\_\_\_ in number of the allowed claims of each class of creditors.
- 51%, 51%.
  - 60%, 51%.
  - Two-thirds, one-half.
  - One-half, two-thirds.
117. One of the two requirements in order to qualify for "fresh start" accounting under ASC Topic 852 is:
- The original owners must not own any of the voting stock after reorganization.
  - The fair value of the assets must be less than the post liabilities and allowed claims.
  - The original owners must own less than 75% of the voting stock after reorganization.
  - The fair value of the assets must exceed the fair value of the liabilities post reorganization.

118. Under a quasi-reorganization, retained earnings:
- Is dated on the balance sheet based on the quasi-reorganization date for at least 20 years.
  - Is eliminated by charging paid-in capital.
  - Retains a deficit until wiped out by future earnings.
  - Reduces paid-in capital if it is a debit balance but retains its balance if it is a credit.
119. Which of the following is accurate regarding trustee accounting?
- The trustee must create a new set of books when taking over the business.
  - When the trustee takes over, s/he creates a new set of books by recording the assets at their fair value.
  - The trustee may continue to use the debtor's set of books which is the approach typically used when they plan to liquidate the assets and repay the liabilities.
  - Opening a new set of books by the trustee makes it easier to distinguish between the assets and liabilities of the debtor that existed before appointment of the trustee and those that arose after.
120. The realization and liquidation account is the legal form used to report the trustee's activities and consists of \_\_\_\_\_ main sections.
- 3.
  - 4.
  - 5.
  - 6.
121. The International Accounting Standards Board (IASB) includes \_\_\_\_\_ full-time and \_\_\_\_\_ part-time members.
- 9, 2.
  - 10, 3.
  - 12, 2.
  - 14, 4.
122. The SEC issued a paper laying out certain milestones for considering the use of IFRS for U.S. issuers. One of those milestones was:
- Education and training in IFRS.
  - The issuance of the 9 joint convergence projects by IASB/FASB.
  - The IASB's agreement for a U.S. standard setter to oversee the convergence process.
  - Agreement on a staged integration of IFRS.

123. The major roadblock to convergence that the SEC cited is:
- a. The lack of a U.S.-based standard setter.
  - b. The lack of progress issuing IFRS's.
  - c. Funding for IASC.
  - d. The IASB's reluctance to adjust to a principles-based framework.
124. One basic difference between U.S. GAAP and IFRS financial statements is:
- a. IFRS does not require a statement of cash flows.
  - b. The IFRS income statement must present expenses by nature rather than function.
  - c. The IFRS statement of cash flows has significantly different sections.
  - d. The IFRS balance sheet has items listed in order of increasing liquidity whereas the U.S. balance sheet is in order of decreasing liquidity.
125. As of February 2013, \_\_\_\_\_ convergence projects had major issues and \_\_\_\_\_ were significantly converged.
- a. 10, 22
  - b. 20, 15.
  - c. 16, 16.
  - d. 24, 7.
126. Which of the following projects will likely achieve convergence?
- a. Leases.
  - b. Revenue recognition.
  - c. Insurance contracts.
  - d. Financial instruments.
127. Foreign firms seeking to offer securities in the U.S. for the first time must complete Form:
- a. F-1.
  - b. F-2.
  - c. F-3.
  - d. F-20.

128. ADRs:
- Are only traded on the New York Stock Exchange.
  - Can only be traded on NASDAQ.
  - Trade like U.S. stocks but their settlement and transfer is a more time-consuming process.
  - Represent the foreign shares which are held by the Depository Bank and are denominated in U.S. dollars.
129. Level I ADRs trade:
- On the New York Exchange.
  - On NASDAQ.
  - On the American Exchange.
  - Only over-the-counter (OTC).
130. Rule 144A ADRs:
- Require full registration with the SEC.
  - Will ultimately be traded on one of the U.S. exchanges.
  - Can be exchanged only among qualified institutional buyers..
  - Are the most common way for a foreign company to access the U.S. markets.
131. Which of the following is a direct exchange rate for a U.S. dollar?
- .80570 pounds per dollar.
  - 1.30935 Canadian dollars per U.S. dollars.
  - \$1.24115 per pound.
  - One dollar can be converted into 1.0615 Euros.
132. A U.S. firm buys goods from an English firm for 10,000 euros and the payable is denominated in euros due in 2 months. At the first balance sheet date, the exchange rate has gone from \$1.20/euro on the transaction date to \$1.23/euro. At the balance sheet date, the firm will:
- Increase the payable by \$300 and recognize an exchange loss.
  - Decrease the payable by 300 and recognize an exchange gain.
  - Increase the payable by \$300 and adjust a component of stockholder's equity.
  - Not be required to do anything.

133. On December 15, a U.S. firm buys goods from an English firm for 10,000 euros and the payable is denominated in euros due in 1 month. At the first balance sheet date, the exchange rate has gone from \$1.20/euro on the transaction date to \$1.23/euro. At the settlement date, the exchange rate is \$1.18. At settlement, the firm will:
- Recognize a current year gain of \$500.
  - Reduce accounts payable by \$11,800.
  - Reduce accounts payable by \$12,000.
  - Recognize a current year gain of \$200.
134. Which of the following statements is accurate regarding derivatives?
- GAAP requires derivatives to be accounted for using hedge accounting.
  - Fair value is the only relevant measure of derivatives.
  - Cash payments for derivatives occur at the inception.
  - Derivatives are off-balance sheet transactions.
135. Which of the following is a forward-based derivative?
- Option contracts.
  - Swaps.
  - Interest rate caps.
  - Interest rate floors.
136. A firm entered into a forward contract to buy \$1,000 Canadian dollars on 1/1 when the forward rate was \$0.90 and the spot rate was \$0.80. On the settlement date the spot rate was \$0.84. The total time value of the contract was:
- \$0.
  - \$40.
  - \$60.
  - \$100.
137. A fair-value hedge:
- Could be used to hedge an unrecognized firm commitment to purchase an asset in the future.
  - Could be used to hedge a foreign-currency-denominated forecasted transaction.
  - Is speculative in nature.
  - Is used to hedge a net investment in foreign operations.



138. A cash flow hedge:
- Must involve a business combination.
  - Is only used in related party transactions.
  - Requires recognition of gain or loss in the current period.
  - Hedges a specifically-identifiable forecasted transaction (or group of transactions) that is probable, and presents exposure for the company to price changes that would impact earnings and cash flows in the future.
139. FASB took the position that a foreign subsidiary should measure its earnings based on:
- Their local currency.
  - Their functional currency.
  - Their reporting currency.
  - The functional currency of the parent company.
140. Which of the following would point to the subsidiary's use of the local currency as their functional currency?
- Cash flows of the subsidiary directly affect the parent's cash flows on a current basis.
  - Sales contracts are frequently in the U.S. or are denominated in U.S. dollars.
  - Production costs and operating expenses are primarily determined by local conditions.
  - There is a high volume of intercompany transactions.
141. When would a company use a currency other than the functional currency for translation?
- When the functional currency is not the local currency.
  - When the functional currency is regulated.
  - When the functional currency is highly inflationary.
  - When the parent company demands use of an alternate currency.
142. Translation of the financial statements would use the current rate method when:
- When there is high inflation.
  - When the functional currency is not the local currency and the functional currency is the U.S. dollar.
  - When the functional currency is the local currency.
  - When the functional currency is not the local currency and the functional currency is not the U.S. dollar.

143. FASB defines a highly inflationary economy as with a cumulative inflation of approximately \_\_\_\_\_ over a \_\_\_\_\_ period.
- 100%, 2-year.
  - 100%, 3-year.
  - 50%, 3-year.
  - 75%, 2-year.
144. When the foreign entity's environment is not considered highly inflationary, there are \_\_\_\_\_ possibilities for translation:
- 2.
  - 3.
  - 4.
  - 5.
145. To translate under the current rate method:
- Components of retained earnings are translated separately.
  - The cumulative translation adjustment flows through current income.
  - Depreciation will be translated using the historic rates associated with the underlying assets.
  - Paid-in capital accounts for a purchase transaction are translated using the historical rates that existed on the date(s) that the foreign entity's capital transaction(s) occurred.
146. Comprehensive income is:
- A measure of the change in stockholder's equity over the period.
  - Related solely to revenues and expenses of the company over the period.
  - Synonymous with net income.
  - The change in equity during the period from transactions with non-owners.
147. Under the temporal method, all of the following would be translated at historical exchange rates with the **EXCEPTION** of:
- Prepaid expenses.
  - Patents.
  - Cost of goods sold.
  - Bonds payable.

148. When a portion of a foreign subsidiary is liquidated:
- The entire amount of the accumulated translation adjustment equity account associated with the foreign subsidiary is removed and reported as part of the gain or loss on disposition.
  - A pro rata amount of the accumulated translation adjustment equity account associated with the foreign subsidiary is removed and reported as part of the gain or loss on disposition.
  - The investment would be revalued and translated with the difference in the cumulative translation adjustment showing in current income.
  - Deconsolidation accounting will be implemented.
149. FASB, in promulgating ASC 280 (formerly SFAS 131) chose \_\_\_\_\_ over \_\_\_\_\_ when focusing on the way in which management organizes segments internally as the basis for segment disclosure.
- Comparability, relevance.
  - Usefulness, relevance.
  - Relevance, usefulness.
  - Relevance, comparability.
150. The Chief Operating Decision-Maker is:
- Always the CEO.
  - Typically the COO.
  - The person who runs the segment.
  - The person who allocates resources to the segment and assesses its performance regardless of title.
151. Two of the most difficult tasks in segment reporting are:
- Allocating common costs and eliminating intercompany revenues.
  - Allocating common costs and determining appropriate operating segments.
  - Determining appropriate operating segments and identifying reportable segments.
  - Identifying reportable segments and eliminating intercompany revenues.

152. Which of the following is accurate regarding the criteria for aggregating operating segments?
- In order to qualify for aggregation, the segments must have similar economic characteristics and must also be similar in all of the other characteristics.
  - An entity is required to aggregate if they meet the criteria.
  - In order to qualify for aggregation, the segments must be similar in the majority of the other characteristics.
  - It is completely up to management's discretion if they aggregate segments however, their basis for doing so must be disclosed.
153. With respect to defining reportable segments:
- Once a segment is reportable, it stays reportable unless its operations change drastically.
  - The quantitative threshold tests are applied separately for each fiscal year for which financial statements are prepared.
  - Operating segments falling below the quantitative threshold are not to be reported.
  - All other operating segments which do not meet the quantitative thresholds do not have to be reported.
154. Once the analysis of the segment threshold tests has been completed:
- The results should be evaluated from the standpoint of comparability to prior years.
  - The results should be evaluated to see if they meet the 80% of combined revenue test.
  - The results should be assessed in terms of availability of data for each segment.
  - It should be determined if any of the segments can be aggregated.
155. The reportable segments taken together must represent \_\_\_\_\_ of total combined unaffiliated sales.
- 65%.
  - 70%.
  - 75%.
  - 80%.
156. Disclosure about major customers is required if \_\_\_\_\_ or more of the revenue of the firm is to one customer or to a federal, state, or local government.
- 5%.
  - 10%.
  - 12%.
  - 15%.

157. Comparing U.S.GAAP for segment reporting with IFRS:
- They differ significantly as IFRS has no segment disclosure requirement.
  - IFRS requires more extensive disclosure than GAAP.
  - They adopted the same standards so there are no differences.
  - They are very similar except for a couple of points where IFRS requires a bit more disclosure than GAAP does.
158. For purposes of filing interim financial statements, the SEC has different requirements for accelerated filers which are those firms with:
- Annual revenues of more than \$75 million.
  - Assets of more than \$75 million.
  - Market value of greater than \$75 million.
  - Quarterly revenues of more than \$75 million.
159. Which of the following is accurate about the comparison of interim reporting under GAAP and IFRS?
- They differ conceptually, but require the same basic set of financial statements.
  - IFRS does not require issuance of interim statements, but if they are issued, it requires a full “annual” report.
  - The required disclosures are essentially the same between the two.
  - They have very different requirements.
160. Mutual agency refers to:
- Each partner’s liability for the debts of the partnership.
  - Each partner’s ability to contractually bind the partnership when acting within the apparent scope of the business.
  - Each partner’s liability for the acts of the other partners.
  - The ability of each partner to dispose of their shares as they wish.
161. Which of the following is accurate regarding an LLP?
- An LLP eliminates personal liability for the partners.
  - An LLP insulates the partners from personal liability for his/her own acts within the partnership.
  - An LLP grants personal protection from partnership obligations arising from the actions of other partners.
  - An LLP limits liability for all partners to the resources of the partnership.

162. A partner's capital interest in a partnership:
- Will determine the percentage of profits received by that partner.
  - Is typically equal to that of the other partners.
  - Is equal to the percentage of assets contributed.
  - Should be specified in the partnership agreement and represents his/her claim on the net assets of the partnership.
163. In a partnership, salaries to the partners or interest on the capital investment is treated as:
- A draw by the partner which is reflected as an expense of the partnership.
  - As salary or interest expense of the partnership.
  - As a capital transaction.
  - Partners are not paid salaries or interest and must rely on the net income of the business.
164. Alice and Bob are forming a partnership. They are contributing assets as follows: Alice contributes cash of \$10,000, land with a cost basis of \$10,000 and a market value of \$36,000 and equipment with a cost basis of \$10,000 and a market value of \$8,000. Bob is contributing \$20,000 cash. The partnership agreement calls for the partnership equity to be equal. In this situation, which of the following is accurate?
- Alice and Bob will have capital accounts of \$37,000 each when they establish the accounting records.
  - Alice and Bob will have capital accounts of \$25,000 each when they establish the accounting records.
  - Under the bonus method, the partnership will record an intangible asset of \$34,000.
  - Under the partnership rules, since the contribution of capital is unequal but the partnership capital accounts are equal, there will be a receivable from Bob established, and his share of the profits will go first to reduce that receivable.
165. Alice and Bob enter into a partnership with the agreement stipulating that Alice is entitled to a salary allocation of \$12,000 per year and Bob is entitled to \$3,000. Profits and losses are to be split evenly after the salary allocation. In year 1, the partnership has net income of \$5,000. The allocation of profit and loss would be:
- \$4,000 to Alice and \$1,000 to Bob.
  - \$2,500 to Alice and \$2,500 to Bob.
  - \$5,000 to Alice and \$0 to Bob.
  - \$7,000 to Alice and (\$2,000) to Bob.

166. Alice and Bob are partners. Bob agrees to sell Cindy 50% of his partnership interest, assign her all of his salary allocation and split his profit/loss allocation 50/50 with her. She will take on his partnership duties and Alice agrees to this. Bob's partnership account is \$35,000 at the time of this transaction and Cindy buys the 50% interest for \$20,000. Which of the following statements is correct regarding the accounting for this transaction?
- a. Bob's capital account will be reduced by \$7,500.
  - b. Cindy's capital account will be \$20,000.
  - c. Bob and Cindy's capital accounts will each be \$17,500.
  - d. The partnership will record the additional \$20,000 of cash.
167. Alice and Bob are partners. Bob agrees to sell Cindy 50% of his partnership interest, assign her all of his salary allocation and split his profit/loss allocation 50/50 with her. She will take on his partnership duties and Alice agrees to this. Bob's partnership account is \$35,000 at the time of this transaction and Cindy buys the 50% interest for \$20,000. What is the implied value of the partnership?
- a. \$70,000.
  - b. \$75,000.
  - c. \$80,000.
  - d. \$82,500.
168. Alice and Bob are partners. They decide to admit Cindy to the partnership as a 25% partner. Alice's partner account is \$42,000 and Bob's partnership account is \$35,000 at the time of this transaction and their profit/loss allocation ratio is 50:50. Cindy pays \$31,000 in cash for her partnership interest. Which of the following is accurate with respect to this transaction?
- a. Cindy's capital account will be \$31,000.
  - b. Using the bonus method, Alice's capital account will be \$44,000 after the transaction.
  - c. Using the bonus method, Bob's capital account will be \$35,000 after the transaction.
  - d. The partnership must record goodwill of \$4,000.
169. Alice and Bob are partners. They decide to admit Cindy to the partnership as a 25% partner. Alice's partner account is \$42,000 and Bob's partnership account is \$35,000 at the time of this transaction and their profit/loss allocation ratio is 50:50. Cindy pays \$20,000 in cash for her partnership interest. Which of the following is accurate with respect to this transaction?
- a. Cindy's capital account will be \$24,250 after the transaction.
  - b. Using the bonus method, Alice's capital account will be \$40,000 after the transaction.
  - c. Using the bonus method, Bob's capital account will be \$32,000 after the transaction.
  - d. The partnership's assets are undervalued and must be increased.

170. Under the UPA, when the partnership agreement fails to specific address the process, the death of a partner:
- Results in the immediate dissolution of the partnership.
  - Results in a requirement for immediate payout of the partner's capital account to his/her estate.
  - Results in the partner's heirs inherited the partnership interest and stepping into the deceased partner's role.
  - Mandates a buyout of the deceased partner's interest but allows the partnership operation to continue.
171. The first step in the process of liquidating a partnership is:
- Determining the fair value of the assets.
  - Calculating income of loss up to the date of dissolution and allocating it to the partners.
  - Determining the settlement cost of liabilities.
  - Coming to an agreement among the partners as to the priorities during liquidation.
172. In the liquidation of a partnership, \_\_\_\_\_ is the first priority after the creditors are paid.
- Partners in respect of capital.
  - Partners in respect of unpaid salary.
  - Partners for liabilities other than for capital and profits (loans).
  - Partners in respect of profits.
173. When a noncash asset is distributed to a partner in settlement of her capital account:
- The book value is used to offset the capital account.
  - Any difference between book value and fair value accrues to the partner receiving the asset.
  - The asset is adjusted to fair value with the gain or loss distributed to all capital accounts and then the asset is closed out against the partner's capital account.
  - Since all assets of a partnership will be marked to their fair values prior to starting the liquidation process, the book value and fair value will be the same and will be closed to her capital account.



174. Marshaling of assets refers to:
- The determination of the fair value of all partnership assets and the comparison of that valuation to the determination of “fire sale” value of all assets.
  - Recognition of the rights of a partner’s personal creditors and partnership creditors and the classification of assets into personal and partnership categories.
  - The assignment of all personal and partnership asset to each personal and partnership creditor.
  - The determination of the fair value of all personal assets and the comparison of that valuation to the determination of “fire sale” value of all assets.
175. One of the assumptions in a partnership installment liquidation using the safe payment approach is that remaining noncash assets:
- Will not provide any additional cash.
  - Will be valued at 10% of book value.
  - Will assume to be sold for 10% of their fair market value.
  - Will assume to be sold for 25% of their fair market value.
176. An advance plan for the distribution of cash:
- Replaces the safe payment schedules.
  - Is required prior to the sale of any assets or the payment of any creditors.
  - Determines the order of priority of payment to the partnership’s creditors.
  - Specifies the order in which each partner will participate in any cash payouts and the amount of cash they will get as it becomes available.
177. When preparing an advance plan for distribution of assets, the first step is to:
- Determine the order in which partners are to participate in cash distributions.
  - Determine the amounts needed to bring the partner’s capital balances into alignment with their profit and loss ratio.
  - Determine the net capital balance of each partner by combining their capital balance with any loans payable or receivable from the partner.
  - Determine the fair value of all assets and liabilities.
178. Partner A has a capital balance of \$120,000, partner B’s is \$90,000, partner C’s is \$97,000 and partner D’s is \$140,000. Their profit and loss ratio is 20:30:30:20. What is partner D’s loss absorption potential?
- \$140,000.
  - \$300,000.
  - \$700,000.
  - \$750,000.

179. When a partnership is incorporated:
- The only needed journal entry is to convert the partner's capital accounts into the stock account.
  - All assets and liabilities will be adjusted to their fair values.
  - Partners must be given the option to increase their capital accounts to gain more stock in the new corporation.
  - The partnership must completely close out their books and start new books for the corporation.
180. Which of the following is considered an "other nonbusiness organization" in the classification of operating organizations organized for social good rather than economic profit?
- A college.
  - A trade association.
  - A hospital.
  - Voluntary health and welfare organization.
181. How many classifications of nonbusiness organizations are there?
- 5.
  - 6.
  - 8.
  - 10.
182. FASAB issues standard relevant to:
- Municipalities.
  - State governments.
  - School districts.
  - The federal government.
183. GASB has issued \_\_\_\_\_ concepts statements to lay out the foundations of governmental accounting.
- 3.
  - 4.
  - 6.
  - 8.

184. Which GASB concepts statement identifies and defines the elements of *Statements of Financial Position*?
- Concept Statement No. 1.
  - Concept Statement No. 2.
  - Concept Statement No. 3.
  - Concept Statement No. 4.
185. Which Concept Statement addresses the measurement attributes?
- Concept Statement No. 2.
  - Concept Statement No. 4.
  - Concept Statement No. 6.
  - Concept Statement No. 8.
186. Which of the following is the description for an expendable fund operating statement?
- Revenue by activity.
  - Financial inflows by source.
  - Revenue by function.
  - Financial inflows by designation.
187. Which of the following is the primary user of budgetary fund accounting?
- Governments.
  - Pensions.
  - Agency funds.
  - Internal service funds.
188. Which of the following funds is likely to account for expenditures by character?
- Public safety.
  - Drug control.
  - Fire department.
  - Current operating.
189. What is the expenditure classification normally recommended for publication of government financial statements?
- Object class.
  - Organizational unit and function.
  - Functional and activity classification.
  - Function and sub-function.

190. Which of the following expenditure classifications is most useful for internal management reporting?
- Organizational level.
  - Object class.
  - Sub-function.
  - Activities.
191. There are \_\_\_\_\_ critical events in the use of the financial resources of an expendable fund entity.
- 3.
  - 4.
  - 5.
  - 6.
192. What creates an encumbrance?
- An appropriation.
  - A deferred inflow.
  - A deferred outflow.
  - A purchase order.
193. The journal entry to remove an encumbrance is:
- A debit to fund balance and a credit to encumbrances.
  - A debit to encumbrances and a credit to fund balance.
  - A debit to expenditures and a credit to encumbrances.
  - A debit to encumbrances and a credit to vouchers payable.
194. The general fund of a municipality:
- Is used and re-established annually.
  - Is one of many general funds with the entity.
  - Is used to account for most of the current operations of the entity.
  - Would account for the debt service of the municipality.
195. The purchase method of accounting for inventory:
- Is consistent with the government-wide approach.
  - Is not acceptable for use in governments.
  - Assumes that inventory is a financial resource in the current period.
  - Recognizes expenditures in the period the inventory is purchased whether it is used or not.

196. GASB Statement No. 34 requires:
- Accrual accounting for the general fund of all government entities.
  - Full accrual accounting for all government-wide financial statements.
  - Accrual accounting for debt service funds of the government.
  - Accrual accounting for all governmental agency statements.
197. There are \_\_\_\_\_ broad categories of fund entities and \_\_\_\_\_ sub-headings that these fall under.
- 11, 3.
  - 8, 4.
  - 6, 3.
  - 13, 5.
198. There are \_\_\_\_\_ types of governmental funds including the general fund.
- 3.
  - 5.
  - 7.
  - 8.
199. In which fund are outstanding encumbrances reported as assigned fund balances?
- Pension funds.
  - Debt service funds.
  - General fund.
  - Internal service funds.
200. Special revenue funds require:
- Funds to be actually received prior to opening the fund.
  - That there is at least legislative intent to create the fund even if the source of funds has not been determined.
  - A commitment from the government's general fund.
  - That a specific source of revenue must at least be committed.
201. When a capital projects fund is closed out:
- The remaining fund balance becomes part of the general fund inflows.
  - The remaining fund balance must be transferred to the debt service fund.
  - The remaining fund balance should be distributed to the contributors of project resources in proportion to their contributions.
  - The remaining fund balance must be allocated to another capital project.

202. Which of the following is recorded for term bonds?
- Required earnings.
  - Appropriations.
  - Interests income.
  - Interest receivable.
203. A premium on a bond issue:
- Is recorded as other financing use in the debt service fund.
  - Is amortized over the life of the bond issue in the debt service fund.
  - Will never occur because the bonds must be issued at face value.
  - Is not recognized in the government-wide financial statements.
204. Which of the following is accurate regarding proprietary funds?
- GASB Statement No. 34 changed from the net position approach to the capital maintenance approach.
  - There can be “direct to equity” transactions.
  - The cash flow statement can be prepared on the indirect basis.
  - Proprietary fund reporting focuses on the determination of operating income.
205. The government-wide statement of net position, is divided into:
- Government activities and business activities.
  - The primary government and the discretely presented component units.
  - Government funds and non-government funds.
  - Government funds and fiduciary funds.
206. Inter-fund activity:
- Is always reported as revenue and expenditure.
  - Is always shown as “other financing sources” or “other financing uses.”
  - Will either be reciprocal or non-reciprocal.
  - Should be reported as inter-fund loans receivable or inter-fund loans payable.
207. Which of the following represents the required statements for NNOs under FASB ASC topic 958?
- Statement of net assets, statement of operations, and statement of cash flows.
  - Statement of financial position, statement of activities, and statement of cash flows.
  - Statement of net assets, statement of activities, and statement of changes in cash.
  - Statement of financial position, statement of operations, and statement of changes in cash.

208. Net assets must be presented in three categories. They are:
- Unrestricted net assets, temporarily restricted net assets, and permanently restricted net assets
  - Unreserved net assets, temporarily reserved net assets, and permanently reserved net assets
  - Uncommitted net assets, temporarily committed net assets, and permanently committed net assets
  - Spendable net assets, temporarily reserved net assets, and permanently reserved net assets
209. Which of the following entities is required to include a management's discussion and analysis section in the separately issued financial statements under GASB Statement No. 35?
- Hospitals.
  - Private colleges and universities.
  - Other health and welfare organizations.
  - Public colleges and universities.
210. For NNOs, revenues are classified by \_\_\_\_\_ and expenditures are classified by \_\_\_\_\_.
- Type, object.
  - Source, purpose.
  - Activity, function.
  - Source, function or activity.
211. In a hospital, "assets whose use is limited" refers to:
- Donor-restricted funds.
  - Legally-restricted funds.
  - Board-designated funds.
  - Contractually-restricted funds.
212. The terminology mandatory and non-mandatory transfers relates to:
- Hospitals.
  - Colleges and universities.
  - Voluntary health and welfare organizations.
  - State and local governments.

213. Which of the following contributions of services would be recognized by an NNO?
- a. An architect designing a building.
  - b. A volunteer at a fund-raiser.
  - c. Volunteers at the church nursery.
  - d. Candy strippers at a hospital.
214. Loan funds:
- a. Must be used to account for all debt of a hospital.
  - b. Is used to account for loans to students and staff of colleges and universities.
  - c. Is used to account for debt at a VHWO.
  - d. Is outdated terminology for the debt service fund of a government.
215. An annuity fund:
- a. Is the same as an endowment fund.
  - b. Is a type of restricted fund.
  - c. Is used to pay the donor either for a specified period of time or to pay the earnings on the contributed assets during his or her lifetime.
  - d. Must be either a fixed or variable annuity for the benefit of one person.





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2. \_\_\_ 24. \_\_\_ 46. \_\_\_ 68. \_\_\_ 90. \_\_\_ 112. \_\_\_ 134. \_\_\_ 156. \_\_\_ 178. \_\_\_ 200. \_\_\_
3. \_\_\_ 25. \_\_\_ 47. \_\_\_ 69. \_\_\_ 91. \_\_\_ 113. \_\_\_ 135. \_\_\_ 157. \_\_\_ 179. \_\_\_ 201. \_\_\_
4. \_\_\_ 26. \_\_\_ 48. \_\_\_ 70. \_\_\_ 92. \_\_\_ 114. \_\_\_ 136. \_\_\_ 158. \_\_\_ 180. \_\_\_ 202. \_\_\_
5. \_\_\_ 27. \_\_\_ 49. \_\_\_ 71. \_\_\_ 93. \_\_\_ 115. \_\_\_ 137. \_\_\_ 159. \_\_\_ 181. \_\_\_ 203. \_\_\_
6. \_\_\_ 28. \_\_\_ 50. \_\_\_ 72. \_\_\_ 94. \_\_\_ 116. \_\_\_ 138. \_\_\_ 160. \_\_\_ 182. \_\_\_ 204. \_\_\_
7. \_\_\_ 29. \_\_\_ 51. \_\_\_ 73. \_\_\_ 95. \_\_\_ 117. \_\_\_ 139. \_\_\_ 161. \_\_\_ 183. \_\_\_ 205. \_\_\_
8. \_\_\_ 30. \_\_\_ 52. \_\_\_ 74. \_\_\_ 96. \_\_\_ 118. \_\_\_ 140. \_\_\_ 162. \_\_\_ 184. \_\_\_ 206. \_\_\_
9. \_\_\_ 31. \_\_\_ 53. \_\_\_ 75. \_\_\_ 97. \_\_\_ 119. \_\_\_ 141. \_\_\_ 163. \_\_\_ 185. \_\_\_ 207. \_\_\_
10. \_\_\_ 32. \_\_\_ 54. \_\_\_ 76. \_\_\_ 98. \_\_\_ 120. \_\_\_ 142. \_\_\_ 164. \_\_\_ 186. \_\_\_ 208. \_\_\_
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13. \_\_\_ 35. \_\_\_ 57. \_\_\_ 79. \_\_\_ 101. \_\_\_ 123. \_\_\_ 145. \_\_\_ 167. \_\_\_ 189. \_\_\_ 211. \_\_\_
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17. \_\_\_ 39. \_\_\_ 61. \_\_\_ 83. \_\_\_ 105. \_\_\_ 127. \_\_\_ 149. \_\_\_ 171. \_\_\_ 193. \_\_\_ 215. \_\_\_
18. \_\_\_ 40. \_\_\_ 62. \_\_\_ 84. \_\_\_ 106. \_\_\_ 128. \_\_\_ 150. \_\_\_ 172. \_\_\_ 194. \_\_\_
19. \_\_\_ 41. \_\_\_ 63. \_\_\_ 85. \_\_\_ 107. \_\_\_ 129. \_\_\_ 151. \_\_\_ 173. \_\_\_ 195. \_\_\_
20. \_\_\_ 42. \_\_\_ 64. \_\_\_ 86. \_\_\_ 108. \_\_\_ 130. \_\_\_ 152. \_\_\_ 174. \_\_\_ 196. \_\_\_
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22. \_\_\_ 44. \_\_\_ 66. \_\_\_ 88. \_\_\_ 110. \_\_\_ 132. \_\_\_ 154. \_\_\_ 176. \_\_\_ 198. \_\_\_



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