

## CHAPTER 8

# Investments in Equity Securities

### KEY POINTS

The following key points are emphasized in this chapter:

- **Criteria that must be met before a security can be listed in the current assets section of the balance sheet.**
- **Trading and available-for-sale securities and how the mark-to-market rule is used to account for them.**
- **Why companies make long-term investments in equity securities.**
- **The mark-to-market method, the cost method, and the equity method of accounting for long-term equity investments, and the conditions under which each method is used.**
- **Consolidated financial statements, when they are prepared, and how they differ from financial statements that account for equity investments using the equity method.**

In early 2000, Cisco Systems boasted the greatest market value in the history of Wall Street—nearly half a trillion dollars, with almost all of that wealth created since 1995. While its market value has since declined significantly, Cisco is still a great engineering company, well-managed and technically astute, and almost all of its growth has come from acquiring other companies. How it chose those companies has defined its corporate strategy; how it integrated them into its empire has defined its corporate politics; and how it retained the people acquired with the companies has defined its corporate culture. These acquisitions and others like it, where ownership is transferred, involve the purchase and sale of equity securities, the subject of this chapter.

An **equity investment** occurs when one company purchases another company's outstanding common stock. Recall from Chapter 1 that equity holders have the right to receive dividends, if declared, and to vote for the board of directors at the annual meeting of the shareholders. Companies make investments in equity securities for two basic reasons: (1) to earn investment income in the form of dividends and stock price appreciation and (2) to exert influence or control over the board of directors and management of the investee company. Relatively small equity investments are normally made to earn income over a short period of time, while larger, long-term equity investments often signal an attempt by the investing company to influence the operations of the target company.

To illustrate, as of its fiscal year-end 2009, Microsoft Corporation disclosed over \$25.3 billion in marketable securities—debt and equity investments in a wide variety of companies. At the same time, the company held investments in companies in which between 20 and 50 percent of the equity securities had been purchased. These holdings were carried on the balance sheet at about \$4.9 billion. During fiscal 2009, Microsoft purchased 100 percent of the outstanding stock of nine companies for a total price of \$925 million.

The next section covers equity investments classified as current because they are readily marketable and intended to be sold within the time period of current assets. The chapter then discusses long-term equity investments and divides the coverage into three categories, based on the proportion of the common share holdings: (1) equity holdings of less than 20 percent, (2) equity holdings from 20 to 50 percent, and (3) equity holdings of greater than 50 percent. As we note later, these three situations are accounted for differently. Appendix 8A is devoted to consolidated financial statements, which are prepared when a company holds more than 50 percent of the outstanding common stock in another company.

## EQUITY SECURITIES CLASSIFIED AS CURRENT

Idle cash held by a company earns no return and during inflation actually declines in purchasing power. Nevertheless, proper cash management must ensure that enough cash is available to meet a company's day-to-day cash needs. Such cash needs tend to fluctuate, sometimes unexpectedly, making it difficult for management to consistently strike an appropriate balance between available cash and return-producing investments. In an effort to both earn a return and be able to produce cash on short notice, companies often purchase readily marketable securities. Companies also use these investments to offset the risks of changing interest rates associated with certain liabilities. The annual report of Intel, for example, notes, "The company maintains its short-term investment portfolio to offset change in certain liabilities." Such investments, which include stocks and bonds traded on public security exchanges, provide income

through dividends, interest, or price appreciation and can be readily converted to cash when needed to meet current cash requirements.<sup>1</sup>

The relative size of short-term investments on the balance sheet varies significantly across companies in different industries. Retailers such as hardware, department, clothing, and sporting goods stores typically maintain dollar amounts of less than 3 percent of total assets. Financial institutions, insurance companies, and some services, on the other hand, which have greater needs for ready cash, often carry short-term investment portfolios that represent a larger percentage of total assets. Recent annual reports of Honeywell International and Goodrich Corporation show no holdings of short-term investments. JPMorgan Chase carries short-term investments of almost 34 percent of total assets. Starbucks holds short-term equity investments of over 3 percent of total assets.

Short-term investments are listed in the current assets section of the balance sheet. It is important to realize that they are distinct from long-term investments in equity and debt securities, which are included in the long-term investments section. Two criteria must be met for an investment in a security to be considered current and thus warrant inclusion as a current asset:

1. The investment must be *readily marketable*.
2. Management must *intend to convert* the investment into cash within the time period of current assets (one year or the operating cycle, whichever is longer).

If either criterion is not met, the investment must be included in the long-term investments section.



The 2008 annual report of Intel, a building block supplier to the world Internet economy, discloses short-term investments of \$5.3 billion, representing about 10 percent of total assets. Describe the characteristics of these investments.

### The Existence of a Ready Market

**Readily marketable** means that the security can be sold and converted into cash on demand. Stocks and bonds traded actively on the public stock exchanges (e.g., New York Stock Exchange, American Stock Exchange) usually meet this criterion. Objective market prices exist for such securities, which ensure that they can be sold on very short notice. In most cases, all a company must do is request that its stockbroker sell the security.

Some securities, on the other hand, are not publicly traded, often because there are restrictions on their sale. Common stocks of privately held corporations, for example, may have very limited markets because restrictions exist on who can own them (e.g., ownership is sometimes limited to family members). Objective market prices do not exist for such securities, and they cannot be readily converted into cash. Accordingly, they fail to meet the readily marketable criterion and should be listed in the long-term investments section of the balance sheet.

1. Short-term investments can also consist of certificates of deposit, money market accounts, and commercial paper. Certificates of deposit are usually purchased from banks in denominations of at least \$5,000. They provide a fixed rate of return over a specified period of time. Money market accounts are similar to savings or checking accounts but provide a slightly higher rate of interest, and there are usually restrictions on the withdrawal of funds. Commercial paper is a short-term note issued by corporations with good credit ratings. They are usually issued in denominations of \$5,000 and \$10,000 and provide returns that exceed those of money market accounts.



The 2008 annual report of Intel discloses: “We account for non-marketable . . . investments . . . in other long-term assets.” Why would Intel list its nonmarketable investments in the non-current section of its balance sheet?

### The Intention to Convert: Another Area of Subjectivity

The second criterion, **intention to convert** the investment to cash, is much more difficult to determine objectively. Consequently, it can be a very difficult area for the auditor, who must determine whether a company’s financial statements conform with generally accepted accounting principles. Simply asking managers whether they intend to sell securities within the time period of current assets does not provide sufficiently objective evidence. Recall that managers have incentives to window dress, which in this case might consist of including what would appropriately be a long-term investment in the current assets section. Such a decision might be made to increase a company’s quick ratio, current ratio, or working capital number—an issue that users should consider when they analyze financial statements.



When PepsiCo acquired two Canadian soft-drink bottling operations for \$246 million, the company listed these investments as current assets on its balance sheet because “it was management’s intention to resell these operations.” The following year PepsiCo sold only one of the investments and continued to include the remaining investment in the current assets section. In your opinion, did PepsiCo violate an accounting standard? Discuss.

## TRADING AND AVAILABLE-FOR-SALE SECURITIES

Investments in readily marketable equity securities are classified into one of two categories: (1) trading securities or (2) available-for-sale securities. **Trading securities** are bought and held principally for the purpose of selling them in the near future with the objective of generating profit on short-term price changes. Investments not classified as trading securities are considered **available-for-sale securities**. Trading securities are always listed in the current section of the balance sheet, while available-for-sale securities are listed as current or long-term, depending on management’s intention.<sup>2</sup>



Trading and available-for-sale are terms used under IFRS, and the accounting methods used for these securities are very similar to U.S. GAAP.

2. This chapter considers investments in equity securities, and this particular section is based on Statement of Financial Accounting Standards No. 115, “Accounting for Certain Investments in Debt and Equity Securities.” Investments in debt securities are classified into one of three categories: (1) trading, (2) available-for-sale, or (3) held-to-maturity. The methods used to account for trading and available-for-sale debt securities are the same as those used for trading and available-for-sale equity securities. Accounting for debt securities held to maturity is covered in Appendix 11B of this text.

Both trading and available-for-sale securities are accounted for using the **mark-to-market rule**, which states that readily marketable securities be carried on the balance sheet at current market value. The following example considers four separate events: (1) the purchase of the securities, (2) the declaration and receipt of related cash dividends, (3) the sale of the securities (at either a gain or a loss), and (4) changes in the prices of the securities on hand at the end of the accounting period. The first three events use the same methods to account for trading and available-for-sale securities. The fourth event, however, applies the mark-to-market rule differently.

### Purchasing Trading and Available-for-Sale Securities

When trading and available-for-sale securities are purchased, they are capitalized and recorded on the balance sheet at cost. As with other capitalized assets (inventory, long-term investments, fixed assets, and intangible assets), cost includes the purchase price as well as any *incidental acquisition costs*, such as brokerage commissions and taxes.<sup>3</sup> For example, assume that Goodyear Tire & Rubber Company purchased three different kinds of securities (Dow Chemical, Abbott Laboratories, and Eli Lilly) on December 1, 2011. Each security is readily marketable, and the company intends to sell the Dow and Abbott investments in the near future. Thus, the investments in Dow and Abbott are classified as trading securities, and the investment in Lilly is classified as available-for-sale. The following prices were paid:<sup>4</sup>

|   |                     |
|---|---------------------|
| <b>10 shares of Dow Chemical at \$10/share</b>        | <b>\$100</b>        |
| <b>20 shares of Abbott Laboratories at \$12/share</b> | <b>240</b>          |
| <b>15 shares of Eli Lilly at \$20/share</b>           | <b><u>300</u></b>   |
| <b>Total cost</b>                                     | <b><u>\$640</u></b> |

Assuming that all prices *include* brokerage commissions, the following journal entry reflects the purchase of the three sets of securities:

|  |             |            |
|--|-------------|------------|
| <b>Trading Securities (+A)</b>                             | <b>340*</b> |            |
| <b>Available-for-Sale Securities (+A)</b>                  | <b>300</b>  |            |
| <b>Cash (−A)</b>   |             | <b>640</b> |
| <i>Purchased trading and available-for-sale securities</i> |             |            |

\*\$100 (Dow) + \$240 (Abbott)

### Declaration and Receipt of Cash Dividends

Cash dividends declared on trading and available-for-sale securities, to which Goodyear has a legal right, are initially recognized as a receivable and a revenue. When the cash dividend is received, the receivable is exchanged for cash. Continuing the example, suppose that on December 15, 2011, the board of directors of Abbott declared dividends of \$1 per share, to be paid to the holders of its common stock on January 15, 2012. The following journal entries would be recorded in Goodyear's books:

**December 15—at declaration of dividend:**

|   |            |           |
|---|------------|-----------|
| <b>Dividend Receivable (+A)</b>           | <b>20*</b> |           |
| <b>Dividend Income (R, +RE)</b>           |            | <b>20</b> |
| <i>Recognized declaration of dividend</i> |            |           |

\*(\$1/share × 20 shares)

3. Actual brokerage commissions range from 1 to 5 percent.

4. For computational ease, the dollar amounts used in this example are unrealistically small. Multiplying the totals by 1,000 will produce numbers of a more realistic magnitude.

January 15—at receipt of dividend:

|                               |    |    |
|-------------------------------|----|----|
| Cash (+A)                     | 20 |    |
| Dividend Receivable (−A)      |    | 20 |
| <i>Received cash dividend</i> |    |    |

## Sale of Securities

When trading and available-for-sale securities are sold, the balance sheet value is removed from the books, and the difference between the balance sheet value and the proceeds from the sale is recognized as a realized gain or loss. If the proceeds exceed the balance sheet value, a **realized gain** is recognized; if they are less than the balance sheet value, a **realized loss** is recognized.

Continuing the example, assume that on December 4, Goodyear sold all ten shares of Dow Chemical stock for \$13/share and ten of the fifteen shares of Eli Lilly stock for \$10/share. Assuming that brokerage commissions have already been deducted from the sales price, these sales would give rise to the following journal entries:

|   |     |      |
|---|-----|------|
| Cash (+A)   | 130 |      |
| Trading Securities (Dow) (−A)                         |     | 100* |
| Realized Gain on Sale of Trading Securities (Ga, +RE) |     | 30   |
| <i>Sold Dow Chemical stock</i>                        |     |      |

\*(\$10/share × 10 shares)

|  |     |      |
|--|-----|------|
| Cash (+A)  | 100 |      |
| Realized Loss on Sale of Available-for-Sale Sec. (Lo, −RE) | 100 |      |
| Available-for-Sale Securities (Lilly) (−A)                 |     | 200* |
| <i>Sold Lilly stock</i>                                    |     |      |

\*(\$20/share × 10 shares)

The realized gain and loss accounts represent the difference between the sale proceeds and the balance sheet value of the sold securities and, therefore, provide a measure of management's performance with respect to the buying and selling of these securities. These accounts appear on the income statement and thus figure in the determination of net income. Chapter 13 points out that these book gains and losses, and others like them, appear in a special section of the income statement, titled "Other Revenues and Expenses."



Biomet, which designs, manufactures, and markets orthopedic products, reported dividend income and realized gains from short-term investments in the amounts of \$0.3 million and \$0.8 million, respectively, for 2009. Describe the transactions that gave rise to these two sources of income.

## Price Changes of Securities on Hand at the End of the Accounting Period

At the end of each accounting period the current market values of all trading and available-for-sale securities held by the company are determined. Adjusting journal entries restate the balance sheet values of the securities to reflect their current market values. These adjustments give rise to **unrealized gains and losses**, often called **holding gains or losses**. In the case of trading securities, these gains or losses are considered temporary accounts, appear on the income statement, and are reflected in retained earnings. *In the case of available-for-sale securities, the unrealized price changes*

are considered permanent accounts and are carried in the shareholders' equity section of the balance sheet.

### END-OF-PERIOD ADJUSTMENTS: TRADING SECURITIES

Continuing the example, assume that Goodyear held all twenty shares of Abbott on December 31, 2011, the end of the accounting period. The shares were purchased for \$12 each and are currently trading for \$15 each. To mark the investment to market value, an adjusting journal entry of the following form would be recorded on December 31:

|  |            |           |
|--|------------|-----------|
| <b>Trading Securities (Abbott) (+A)</b>                | <b>60*</b> |           |
| <b>Unrealized Gain on Trading Securities (Ga, +RE)</b> |            | <b>60</b> |
| <i>Revalued Abbott securities to market</i>            |            |           |
| *[( $\$15 - \$12$ ) $\times$ 20 shares]                |            |           |

If instead of \$15/share, the Abbott shares were trading for \$10 each on December 31, the following adjusting journal entry would have been recorded:

|  |            |           |
|--|------------|-----------|
| <b>Unrealized Loss on Trading Securities (Lo, -RE)</b> | <b>40*</b> |           |
| <b>Trading Securities (Abbott) (-A)</b>                |            | <b>40</b> |
| <i>Revalued Abbott securities to market</i>            |            |           |
| *[( $\$12 - \$10$ ) $\times$ 20 shares]                |            |           |

The unrealized holding gain (loss) represents the extent to which Goodyear's wealth increased (decreased) due to holding Abbott securities from December 1 to December 31. Because the investment in these securities is classified as trading and therefore is expected to be sold in the near future, the unrealized holding gain (loss) is considered part of Goodyear's income for the accounting period. Note also that the balance sheet value of the investment in Abbott on December 31, 2011, reflects the current market price of the securities, which is carried into the next period and used in the determination of future realized and unrealized gains and losses.

### END-OF-PERIOD ADJUSTMENTS: AVAILABLE-FOR-SALE SECURITIES

Assume that Goodyear held five shares of Eli Lilly stock on December 31, 2011, with a current market value of \$22 each. (Recall that fifteen shares were originally purchased on December 1 at \$20 each, and ten shares were sold on December 4 for \$10 each.) To mark the investment to market value, the following adjusting journal entry would be recorded on December 31:

|   |            |           |
|---|------------|-----------|
| <b>Available-for-Sale Securities (Lilly) (+A)</b>                 | <b>10*</b> |           |
| <b>Unrealized Price Increase on Available-for-Sale Sec. (+SE)</b> |            | <b>10</b> |
| <i>Revalued Lilly securities to market</i>                        |            |           |
| *[( $\$22 - \$20$ ) $\times$ 5 shares]                            |            |           |

If instead of \$22/share, the Lilly shares were trading for \$14 each on December 31, the following adjusting journal entry would have been recorded:

|   |            |           |
|---|------------|-----------|
| <b>Unrealized Price Decrease on Available-for-Sale Sec. (-SE)</b> | <b>30*</b> |           |
| <b>Available-for-Sale Securities (Lilly) (-A)</b>                 |            | <b>30</b> |
| <i>Revalued Lilly securities to market</i>                        |            |           |
| *[( $\$20 - \$14$ ) $\times$ 5 shares]                            |            |           |

Again, the unrealized price increase (decrease) represents the extent to which Goodyear's wealth increased (decreased) due to holding Lilly securities from December 1 to December 31. However, because the investment in these securities is classified as

available-for-sale and therefore is not expected to be sold in the near future, the unrealized price change is not considered part of Goodyear's income for the accounting period. Therefore, it *affects only the shareholders' equity section of the balance sheet, and not the income statement*. Unrealized price increases (credits) increase shareholders' equity, while unrealized price decreases (debits) decrease shareholders' equity. Both the market value of the investment and the dollar amount of the unrealized price change in the shareholders' equity account are carried into the next accounting period and adjusted if the securities are sold or the market value of the securities changes. We illustrate below how the balance sheet values of the investment and unrealized price change accounts are adjusted under two separate conditions: (1) if the securities are sold in the next period and (2) if the market value of the securities changes in the next period.



Apple, Inc.'s success with its Macintosh computer, iPod, and iPhone products can be seen in the growth of its short-term marketable securities. As of 9/26/2009, Apple owned \$18.2 billion of these investments, up from \$10.2 billion on 9/27/2008. This growth in marketable securities has come at a time of extreme stock market volatility. What effect would a strong bull or bear stock market have on Apple's financial statements? What management decision can radically affect how much an up or down market changes Apple's profitability?

**(1) IF THE AVAILABLE-FOR-SALE SECURITIES ARE SOLD.** Assume as in the most recent example above that Eli Lilly shares were trading at \$14 each as of December 31, 2008, and a \$30 unrealized price decrease (debit) was disclosed in the shareholders' equity section of the December 31 balance sheet. If Goodyear sold all five Lilly shares for \$16 each on April 5, 2012, the following journal entry would be recorded:

|  |     |      |
|--|-----|------|
| Cash (+A)  | 80* |      |
| Realized Loss on Available-for-Sale Sec. (Lo, -RE)         | 20  |      |
| Available-for-Sale Securities (Lilly) (-A)                 |     | 70** |
| Unrealized Price Decrease on Available-for-Sale Sec. (+SE) |     | 30   |

**Sold Lilly securities**

\*(\$16/share × 5 shares)

\*\*(\$14/share × 5 shares)

Note first that cash is debited for the proceeds of the sale (\$16/share × 5 shares). The \$30 unrealized price decrease and the balance sheet value of the available-for-sale securities account, which reflects the market value of the securities as of December 31 (\$14/share × 5 shares), are both written off the books because Goodyear no longer holds the securities. The realized loss of \$20 is the "plug" that brings the entry into balance, but more importantly, it represents the difference between the original cost (\$100 = \$20/share × 5 shares) of the securities and the proceeds from the sale (\$80).



Most U.S. companies prefer to classify investments as available-for-sale instead of trading securities. This choice offers these firms a method of managing reported earnings by carefully choosing when to sell certain securities in their portfolio. Explain how this might work.



**(2) IF THE MARKET VALUE OF THE AVAILABLE-FOR-SALE SECURITIES CHANGES.** Assume once again that Eli Lilly shares were trading at \$14 each as of December 31, 2011, and a \$30 unrealized price decrease was disclosed in the shareholders' equity section of the December 31 balance sheet. If on December 31, 2012, the securities are still held by Goodyear and the price has changed to \$16, the following journal entry would be recorded:

|  |     |    |
|--|-----|----|
| Available-for-Sale Securities (Lilly) (+A)                 | 10* |    |
| Unrealized Price Decrease on Available-for-Sale Sec. (+SE) |     | 10 |
| <i>Revalued Lilly securities to market</i>                 |     |    |
| *[( $\$16 - \$14$ ) $\times$ 5 shares]                     |     |    |

In this case, the available-for-sale account is adjusted to reflect its current market value and the unrealized price decrease account is reduced because the market price has increased since the previous balance sheet date. The December 31, 2012, balance in the unrealized price decrease account in the shareholders' equity section of Goodyear's balance sheet would be \$20 ( $\$30 - \$10$ ).



In its 2009 annual report, Biomet reported net unrealized losses on available-for-sale equity securities of \$0.6 million. Where on the financial statements would this amount be reflected? Had the equity investments been considered trading securities, where on the financial statements would the amount be reflected?

### Reclassifications and Permanent Market Value Declines

Companies sometimes choose to change the classifications of security investments from trading to available-for-sale, or vice versa. In such cases, unrealized holding gains or losses should be recognized immediately as income. When transferring securities from the trading to the available-for-sale classification, unrealized holding gains and losses that accrued since the most recent financial statement date should be recognized as income on the date of the transfer. When transferring securities from the available-for-sale to the trading classification, unrealized holding gains and losses from two sources should be recognized as income on the date of the transfer: (1) those that accrued since the most recent financial statement date and (2) the unrealized price change disclosed in the shareholders' equity section of the most recent balance sheet.

Investments sometimes suffer a permanent market value decline; the price declines and is not expected to recover. In such cases, the security should be written down to its market value, and a *realized loss* that reduces net income should be recognized immediately whether the security is classified as trading or available-for-sale. Determining a permanent decline is very subjective, and GAAP provide very few guidelines. Perhaps the best way to assess such a decline is to consider the financial condition of the firm that issued the security. We return to this issue in Chapter 9, where we discuss permanent write-downs of fixed assets and how management can use its discretion in this area to manage reported financial numbers.

### Mark-to-Market Accounting and Comprehensive Income

For years, accounting theorists have argued for a pure form of mark-to-market accounting, where assets are reported on the balance sheet at market value and changes

in asset prices are included on the income statement. The methods used to account for trading securities are completely consistent with this approach, while the methods used to account for available-for-sale securities report market values on the balance sheet but do not reflect changes in market prices on the income statement.

In a move toward pure mark-to-market accounting, the FASB now requires companies to provide a statement of comprehensive income. No specific format is required for this statement, but it must be displayed with the same prominence as the other financial statements.



Under IFRS, a similar statement is required, most often referred to as the **Statement of Recognized Income and Expense (SORIE)**.

The statement of comprehensive income must disclose total **comprehensive income**, which includes all nonowner-related changes in shareholders' equity that do not appear on the income statement and are not reflected in the balance of retained earnings. Several items fall into this category, including adjustments to shareholders' equity for the holding gains and losses associated with available-for-sale securities. Thus, while unrealized price increases and decreases of available-for-sale securities are not reflected on the income statement, they are reported on the statement of comprehensive income. When combined with net income, which is reported on the income statement, comprehensive income provides investors, analysts, and others with an estimate of the overall change in a company's wealth during the period.



Major firms use a number of different methods to disclose comprehensive income on their annual reports. AT&T includes a statement of comprehensive income immediately after the statement of shareholders' equity; PepsiCo includes a line item called comprehensive income within the statement of shareholders' equity; Wendy's discloses a special financial statement devoted only to comprehensive income along with the other financial statements; and Johnson & Johnson includes a statement of comprehensive income in the footnotes to the financial statements. As an analyst, would you consider comprehensive income an important number, and how would you feel about the wide variety of disclosure options used by major companies?

## LONG-TERM EQUITY INVESTMENTS

As indicated earlier in this chapter, companies make investments in the equity securities of other companies primarily for two reasons: (1) investment income in the form of dividends and stock price appreciation, and (2) management influence, where the voting power of the purchased shares allows the investor company to exert some control over the board of directors and management of the investee company. The primary motivation behind the long-term equity investments for most major U.S. companies is reason (2), influence over the investee company's operations and management.

Most large, well-known U.S. companies are constantly involved in acquisitions, whereby they purchase all, or a majority of, the outstanding common stock of another

company and then change the investee company's operations and/or management. Several years ago, for example, General Electric (GE) purchased for \$6.4 billion all outstanding common stock of RCA Corporation, which at the time owned National Broadcasting Company (NBC). As reported in GE's financial report, "subsequent to the acquisition, GE sold . . . a number of RCA and NBC operations whose activities were not compatible with GE's long-range strategic plans."

In another example, Cisco Systems stated in its 2006 financial report that its February 24, 2006, acquisition of Scientific Atlanta Inc. cost \$7.1 billion. Cisco made significant changes to the operations and management of the acquired company.



In 2004 FedEx Corporation acquired Kinko's copy center chain in a transaction valued at \$2.4 billion. FedEx acquired Kinko's to better compete against UPS, which had previously acquired Mail Boxes Etc. Did FedEx and UPS make these investments to generate income in the form of dividends and stock appreciation or to exert influence over the investee company's operations and management? Discuss.

It is also common to exert influence over the operations and management of a company by purchasing a significant portion, but less than a majority (51%), of the company's outstanding common stock. *Accounting Trends and Techniques* (New York: AICPA, 2009) reports that, of the major U.S. companies surveyed, well over half reported such investments. For example, as of the end of 2006, Walt Disney held a 38 percent ownership in A & E Television Networks and a 40 percent ownership in E! Entertainment Television.

### Accounting for Long-Term Equity Investments

Since long-term investments in equity securities are commonly made to exert influence over the operations and management of the investee company, financial accounting standards define the appropriate accounting method in terms of the potential for such influence—specifically, in terms of the percentage of outstanding voting stock owned by the investor company.

If the investor company owns less than 20 percent of the outstanding voting stock of the investee company, the potential for influence is relatively small, and the two entities can be viewed as independent. The equity investment, therefore, is accounted for using either the mark-to-market method or the cost method. When the percentage of ownership is between 20 and 50 percent, the investor company has the potential to exert "significant influence" over the investee company, and the two entities cannot be viewed as completely independent. The investor company uses the equity method to account for the equity investment. When the percentage of ownership is greater than 50 percent, the investor company has "control" over the investee company, and for accounting purposes, the two entities are viewed as one, and consolidated financial statements are prepared. Figure 8–1 summarizes the conditions that define the methods used to account for long-term equity investments.

The following discussion presents the mechanics involved in applying the cost and equity methods and the conditions under which each method is used.

**FIGURE 8-1**  
Accounting for  
long-term  
investments in  
equity securities

| Percentage of Stock Ownership | Potential to Influence | Accounting Method                 |
|-------------------------------|------------------------|-----------------------------------|
| Less than 20%                 | Small                  | Mark-to-market or cost method     |
| 20%–50%                       | Significant            | Equity method                     |
| Greater than 50%              | Control                | Consolidated financial statements |

### The Cost Method

Some equity securities have no readily determinable market values. Equity securities in corporations whose securities are not publicly traded (i.e., closely held corporations or private companies), for example, may have restrictions on trading and therefore have no public market values. Relatively small investments (less than 20% of the outstanding voting stock) in such securities, which by definition cannot easily be liquidated, are accounted for using the **cost method**. It is impossible to apply the mark-to-market method to such securities because their market values cannot be determined.

Applying the cost method is very straightforward. Purchases of equity securities are recorded at cost, including incidental costs of acquisition; dividends are recorded as income when declared; and sales, when they eventually occur, give rise to realized gains or losses reflected on the income statement.

To illustrate, suppose that on January 15, 2011, Beldon Inc. purchased 100 equity securities in a closely held corporation for \$10 per share. On December 15 Beldon received a \$50 dividend that had been declared on November 29. No other activity occurred in the account until May 5, 2012, when Beldon sold the securities privately for \$7 each. The journal entries contained in Figure 8-2 would reflect these transactions.


**FIGURE 8-2**  
The cost method  
of accounting for  
long-term equity  
investments

|              |   |       |
|--------------|---|-------|
| <b>2011:</b> |   |       |
| Jan. 15      | Long-Term Investment in Equity Securities (+A)                                      | 1,000 |
|              | Cash (-A)   | 1,000 |
|              | <i>Purchased 100 equity shares at \$10 per share</i>                                |       |
| Nov. 29      | Dividend Receivable (+A)  | 50    |
|              | Dividend Income (R +RE)   | 50    |
|              | <i>Recognized a declared dividend to be received</i>                                |       |
| Dec. 15      | Cash (+A)   | 50    |
|              | Dividend Receivable (-A)  | 50    |
|              | <i>Received previously declared \$50 dividend</i>                                   |       |
| <b>2012:</b> |   |       |
| May 5        | Cash (+A)   | 700   |
|              | Loss on Sale of Long-Term Equity Securities (Lo, -RE)                               | 300   |
|              | Long-Term Investment in Equity Securities (-A)                                      | 1,000 |
|              | <i>Sold 100 equity shares, originally purchased at \$10 each, for \$7 per share</i> |       |

### The Equity Method

Some companies have the ability to significantly influence the operating decisions and management policies of other companies. Such influence indicates a substantive economic relationship between the two companies and may be evidenced, for example, by

representation on the board of directors, the interchange of management personnel between companies, frequent or significant transactions between companies, or the technical dependency of one company on the other. Significant investments in the equity securities (voting stock) of another company may also indicate significant influence and a substantive economic relationship. To achieve a reasonable degree of uniformity, the accounting profession concluded that an investment of 20 percent or more in the voting stock of another company represents a “significant influence” and that equity investments from 20 to 50 percent of the voting stock should be accounted for using the **equity method**.



As of 12/31/2008, Intel Corporation listed over \$3 billion of long-term investments accounted for under the equity method. The company disclosed that its equity ownership of four of these companies consisted of the following percentages: 49 percent, 49 percent, 45 percent, and 8 percent. The first three ownership levels clearly fall into the category for equity method accounting. Under what conditions might a company use the equity for an investment that only constituted 8 percent of the affiliate company’s outstanding common shares?

The accounting procedures used to apply the equity method reflect a substantive economic relationship between the investor and the investee companies. The equity investment is originally recorded on the investor’s books at cost but is adjusted each subsequent period for changes in the net assets of the investee. As the balance sheet value of the investee increases or decreases, so does the long-term equity investment account of the investor.

Specifically, the carrying value of the long-term investment on the investor’s balance sheet is (1) periodically increased (decreased) by the investor’s proportionate share of the net income (loss) of the investee and (2) decreased by all dividends transferred to the investor from the investee. In other words, the equity method of accounting acknowledges a close economic link between the two companies. Investee earnings, which indicate net asset growth, and investee dividends, which represent net asset reductions, are reflected proportionately on the balance sheet of the investor.

To illustrate, assume that on January 1, 2011, American Electric Company purchased 40 percent of the outstanding voting stock of Masley Corporation for \$40,000. During 2011, Masley recognized net income of \$10,000 and declared (Dec. 1) and paid (Dec. 20) dividends of \$1,500 to American Electric. During 2012, Masley recognized a net loss of \$5,000 and declared (Dec. 1) and paid (Dec. 20) only a \$500 dividend to American Electric. Under the equity method, the journal entries contained in Figure 8–3 would be recorded on the books of American Electric.

It is important to understand how the equity method reflects a significant economic relationship between the investor and investee companies. The net income (loss) of the investee serves to proportionately increase (decrease) the investment account of the investor. Thus, the investee’s net asset growth or decline is reflected on the investor’s balance sheet and income statement. Note also that dividends transferred from the investee to the investor are not treated as revenue on the investor’s books.

FIGURE 8-3

The equity method of accounting for long-term equity investments

|         |  |        |
|---------|--|--------|
| 2011:   |  |        |
| Jan. 1  | Long-Term Investment in Equity Securities (+A)                     | 40,000 |
|         | Cash (-A)  | 40,000 |
|         | <i>Purchased 40% of Masley's outstanding shares</i>                |        |
| Dec. 1  | Dividend Receivable (+A)   | 1,500  |
|         | Long-Term Investment in Equity Securities (-A)                     | 1,500  |
|         | <i>Recognized \$1,500 dividend declared by Masley</i>              |        |
| Dec. 20 | Cash (+A)  | 1,500  |
|         | Dividend Receivable (-A)   | 1,500  |
|         | <i>Received dividend declared on December 1</i>                    |        |
| Dec. 31 | Long-Term Investment in Equity Securities (+A)                     | 4,000  |
|         | Income from Long-Term Equity Investments (R, +RE)                  | 4,000  |
|         | <i>Recognized 40% of Masley's 2008 net income (\$10,000 × 40%)</i> |        |
| 2012:   |  |        |
| Dec. 1  | Dividend Receivable (+A)   | 500    |
|         | Long-Term Investment in Equity Securities (-A)                     | 500    |
|         | <i>Recognized dividend declared by Masley</i>                      |        |
| Dec. 20 | Cash (+A)  | 500    |
|         | Dividend Receivable (-A)   | 500    |
|         | <i>Received dividend declared on December 1</i>                    |        |
| Dec. 31 | Loss on Long-Term Equity Investment (Lo, -RE)                      | 2,000  |
|         | Long-Term Investment in Equity Securities (-A)                     | 2,000  |
|         | <i>Recognized 40% of Masley's 2009 net loss (\$5,000 × 40%)</i>    |        |



In December 2007 Boeing and Lockheed Martin Corp. entered into a 50/50 joint venture to create United Launch Alliance, which launches rockets for the U.S. government. Each company made an initial investment of about \$500 million. What method of accounting did each company use, and how was the \$500 million investment reflected in each company's financial statements?

Revenue is recognized when the investor's proportionate share of the investee's net income is recorded, not when the dividends are declared or transferred. Dividends are simply treated as an exchange of assets on the investor's books. The long-term investment account is decreased, dividends receivable is increased on the date of declaration, and the receivable is exchanged for cash on the date of payment.



Eli Lilly, the well-known pharmaceutical, carries long-term investments in equity securities using the equity method on its balance sheet. From the end of 2007 to the end of 2008, the investment account increased from \$98.8 million to \$127.8 million. Discuss the events that could have accounted for this change.

Figure 8-4 indicates the importance of investments accounted for under the equity method, relative to total assets, to several major U.S. corporations at fiscal year end, 2008. Investee companies that are 20 to 50 percent owned by investor companies are often referred to as **affiliate companies**.

**FIGURE 8-4**

The relative importance of investments in affiliate companies (selected U.S. companies)

| Company   | Amount of Investment (millions of dollars) | Percentage of Total Assets |
|-----------|--|----------------------------|
| Microsoft | \$4,933                                    | 6%                         |
| Coca-Cola | 5,316                                      | 13                         |
| DuPont    | 844  | 2                          |
| Intel     | 3,032                                      | 6                          |

Source: 2008 financial reports.



Under IFRS, affiliate companies are normally called associate companies.

Income from equity investments can also represent a material percentage of net income. In recent annual reports, for example, Starbucks, PepsiCo, and Bristol-Myers Squibb reported income from affiliate companies (as a percentage of total net income) of 31 percent, 7 percent, and 12 percent, respectively. The following excerpt, taken from the 2008, financial report of Goodyear Tire & Rubber Co., describes how the company accounts for equity investments in affiliate companies:

*Investments in companies in which we do not own a majority and we have the ability to exercise significant influence over operating and financial policies are accounted for using the equity method.*



At the end of 2008, Coca-Cola reported investments under the equity method totaling over \$5.3 billion (13 percent of total assets) primarily in bottling companies, the largest of which was a 35 percent investment in Coca-Cola Enterprises, the largest soft-drink bottler in the world. During 2008 Coca-Cola Enterprises reported a net loss of \$4.4 billion, while Coca-Cola reported an overall loss on its equity method investments of \$874 million. How much loss did Coca-Cola report from its investment in Coca-Cola Enterprises? How well did all the other bottling operations perform during 2008?

### Some Cautions to Financial Statement Users about the Equity Method

Several features about the equity method should cause financial report users to view it carefully. First, the equity method provides another reason why a company's net income (loss) differs from its cash flow from operations. The income recognized from the investee company rarely equals the cash dividends received by the investor. *Forbes* magazine once described the equity method as "misleading" because "the investor company never really sees any nondividend cash from the investee company" on which it often recognizes substantial income. For example, in 2008 Chevron recognized \$5,366 million in income from affiliate companies, which represented 22 percent of its 2008 earnings. However, Chevron received only \$4,926 million in cash dividends from the affiliates. An astute user can learn how much cash was received from affiliate investments by examining the operating section of the statement of cash flows. In

Chevron's case, the \$440 million difference between reported equity income (\$5,366 million) and cash received (\$4,926 million) was subtracted from net income in the calculation of net cash from operations and described as "distributions less than income from equity affiliates."



In the operating section of its 2008 statement of cash flows, AT&T reported a line item entitled "undistributed earnings from investments in equity affiliates" in the amount of \$654 million, which is subtracted from net income in the calculation of net cash provided by operating activities. Explain the meaning of this item.

In addition, the equity method ignores price (market value) changes in the affiliate's equity securities. For example, price decreases, even if substantial, are not recognized on the investor's books and, in fact, may even be accompanied by the recognition of income and the receipt of dividends if the affiliate reports positive income and declares dividends during the period of the price decline. Informed users should keep track of the price changes of the affiliate's equity shares, if they are publicly available.

Third, the percentage of ownership (20 percent to 50 percent) is not always a valid indication of "significant influence." Influence comes in many different forms. Time Warner, for example, was able to block a bid by Turner Broadcasting Systems (TBS) to acquire CBS even though Time Warner owned less than 20 percent of TBS stock. Time Warner did, however, have two members on the TBS board of directors. Similarly, it is possible to exert a controlling influence with less than 51 percent of the stock, especially when the remaining stock is owned by shareholders who represent a wide variety of interests.

Finally, as we discuss later in this chapter, using the equity method can be considered a method of off-balance-sheet financing because it fails to reflect the liabilities of the affiliate on the balance sheet of the investor company. Financial accounting standards require that a summary of the financial statements of all affiliate companies be included in the footnotes of the investor's financial statements. Users should review these summaries to see if including the affiliate's assets and liabilities on the investor's balance sheet would affect solvency and liquidity ratios.



On its 2008 balance sheet, Exxon Mobil reported investments in affiliates of over \$2.2 billion. The income statement reported equity income of \$11.1 billion, and the statement of cash flows (operating section) contained a line item "dividends received greater than (less than) equity in current earnings of equity companies" of (\$921) million. How much cash in the form of dividends did Exxon Mobil receive from its affiliates during 2008?

### THE FAIR MARKET VALUE OPTION

In 2007 the FASB passed a financial reporting standard that allows companies to account for certain financial instruments (including investments in equity securities) at fair market value. This means that the equity investments we have covered thus far in this chapter (e.g., trading securities, available-for-sale securities, and equity method investments) can—at the option of the company—be accounted for using mark-to-market



accounting.<sup>5</sup> As we have already described, equity investments classified as trading securities must be accounted for in this manner, but this new standard allows companies, if they wish, to use mark-to-market for available-for-sale securities as well as equity investments designed to exert a “significant influence” over an affiliate company.



IFRS has a similar standard that gives companies the option to carry assets on the balance sheet at market value. As we discuss later, the IFRS standard applies to a much larger group of assets, including real estate and property, plant, and equipment.

Because fair market values can be very subjective, an important disclosure required when a company uses market values on its balance sheet relates to the basis for the market value estimate. Market values based on quoted prices in active markets for identical securities are called **Level 1 measurements**; market values based on less reliable, observable, indirect inputs are called **Level 2 measurements**; and market values based on much less reliable, unobservable inputs are called **Level 3 measurements**. These disclosures help the reader to better assess the uncertainties inherent in the market value estimates.

The **fair market value option** standard represents a major and important shift in U.S. GAAP toward the use of market values in the financial statements—a shift in the direction of IFRS, which already relies significantly on mark-to-market accounting. For the most part, mark-to-market accounting is still optional, but gradually more companies appear to be exercising the option. *Accounting Trends and Techniques* (2009) reported that over 20 percent of the major corporations surveyed in 2008 used fair market value as the basis for certain non-current balance sheet assets. By far the most common basis for the market value measurements was Level 1 (quoted prices for identical securities in active markets).

## Business Acquisitions, Mergers, and Consolidated Financial Statements

A **business acquisition** occurs when an investor company acquires a **controlling interest** (more than 50 percent of the voting stock) in another company. If the two companies continue as separate legal entities, the investor company is referred to as the **parent company**, and the investee company is called the **subsidiary**. Several years ago, for example, Benetton Group paid \$330 million to acquire Benetton Sportssystem, which carries Rollerblade, Prince tennis racquets, and Nordica ski boots. Sportssystem now operates as a Benetton subsidiary. In such cases, the parent prepares **consolidated financial statements** (including the income statement, balance sheet, statement of cash flows, and statement of shareholders’ equity). Consolidated statements ignore the fact that the parent and the subsidiary are actually separate legal entities and, for reporting purposes, treat the two companies as a single operating unit.



Under IFRS, the definition of control for purposes of consolidation is often broader than the U.S. GAAP definition, including factors beyond ownership percent.

Consolidated statements are prepared for financial accounting purposes only. The parent and the subsidiary maintain separate legal status. In many respects they may

5. Recall that under mark-to-market accounting, the investment is carried on the balance sheet at its current market value, and changes in market value from one period to the next are reflected in earnings on the income statement.

continue to operate as relatively independent entities, and the subsidiary maintains a separate set of financial statements. Only because the parent has a controlling interest over the subsidiary do professional accounting standards require that the financial condition of the two companies be represented to the public as one.

A **merger**, or **business combination**, occurs when two or more companies combine to form a single legal entity. In most cases, the assets and liabilities of the smaller company are merged into those of the larger, surviving company. The stock of at least one company, usually the smaller one, is often retired, and it ceases to exist as a separate entity. When Chemical Bank was merged into Chase Manhattan, for example, the surviving entity was named Chase Manhattan. Chase Manhattan subsequently merged with J.P. Morgan, creating the new entity JPMorgan Chase. Technically speaking, consolidated financial statements are not prepared after a merger because no parent/subsidiary relationship exists. At least one of the companies involved in the combination no longer exists. However, the financial statements of the surviving company do reflect the assets and liabilities of the merged entities.



The financial statements of Target Corporation are all referred to as “consolidated.” Explain what this means.

Most business acquisitions and combinations consummate when cash and/or other assets (often stock) of the parent are paid to the shareholders of the subsidiary in exchange for the assets and liabilities of the subsidiary.<sup>6</sup> Such transactions are commonly accounted for under the purchase method, when the assets and liabilities of the subsidiary are recorded on the balance sheet of the parent at fair market value (FMV), and the difference between the purchase price and the net FMV of the subsidiary’s assets and liabilities is recorded as goodwill.

For example, when Delta Air Lines, Inc. purchased all the outstanding shares of Western Airlines, Inc. for \$787 million, the purchase price consisted of \$383 million in cash and Delta common stock valued at \$404 million. Delta received the assets and liabilities of Western, which at the time of the transaction had fair market values as described in Figure 8–5.

**FIGURE 8–5**  
Computation of  
goodwill

|   |              | Fair Market Value<br>(in millions) |
|---|--------------|------------------------------------|
| <b>Current assets</b>   |              | <b>\$349</b>                       |
| <b>Property, plant, and equipment</b>                                 |              | <b>748</b>                         |
| <b>Other assets</b>   |              | <b>24</b>                          |
| <b>Less: Current liabilities</b>                                      | <b>\$310</b> |                                    |
| <b>Long-term debt</b>   | <b>431</b>   | <b>(741)</b>                       |
| <b>Net FMV of Western’s<br/>assets and liabilities</b>                |              | <b>\$380</b>                       |
| <b>Less: Purchase price</b>   |              | <b>787</b>                         |
| <b>Goodwill (excess of purchase price over<br/>FMV of net assets)</b> |              | <b>\$407</b>                       |

6. In the following discussion we use the terms *parent* and *subsidiary* to denote the investor and investee companies. In the case of business combinations, however, the term *parent* should be interpreted as the survivor company and the term *subsidiary* as the merged company.

In the preparation of its consolidated statements, Delta recorded the purchase by making an adjustment similar to the following entry. Western's assets and liabilities were then included on Delta's consolidated balance sheet.

|  |            |            |
|--|------------|------------|
| <b>Current assets (+A)</b>                 | <b>349</b> |            |
| <b>Property, plant, and equipment (+A)</b> | <b>748</b> |            |
| <b>Other assets (+A)</b>                   | <b>24</b>  |            |
| <b>Goodwill (+A)</b>                       | <b>407</b> |            |
| <b>Current liabilities (+L)</b>            |            | <b>310</b> |
| <b>Long-term liabilities (+L)</b>          |            | <b>431</b> |
| <b>Cash (-A)</b>                           |            | <b>383</b> |
| <b>Common stock (+SE)</b>                  |            | <b>404</b> |
| <i>Purchased Western Airlines</i>          |            |            |

## Goodwill

Goodwill is an asset listed in the noncurrent section of the balance sheet. As illustrated in the example above, it arises when a company (parent) pays an amount to acquire a controlling interest in a subsidiary that exceeds the fair market value of the subsidiary's net assets (total assets less liabilities). Acquiring companies are willing to pay this "premium" presumably because they believe that the value to them of owning the controlling interest exceeds the fair market value of the subsidiary's individual net assets. Companies that grow through acquisitions often carry huge goodwill balances on their balance sheets. Hewlett-Packard, for example, reported goodwill of over \$32 billion on its 2008 balance sheet, an amount that increased by more than \$10 billion over the previous year.

Up until 2002, each year a portion of the goodwill balance was amortized, reducing reported income in that year. However, a new accounting standard, effective January 1, 2002, ruled that goodwill should not be amortized. Rather, each year the balance in the goodwill account should be subjected to an impairment test to see if the balance sheet amount of the goodwill exceeds its estimated fair market value. If the balance sheet amount is judged to exceed the fair market value of the goodwill, the goodwill account should be written down to its fair market value.

To illustrate, if Company A's balance sheet amount of goodwill is \$10,000 and the fair market value of the goodwill is estimated to be \$8,000, Company A's goodwill would be considered impaired and the entry below would be recorded in Company A's books. If the fair market value of the goodwill was estimated to be \$10,000 or more, no entry would be recorded in Company A's books.

|   |              |              |
|---|--------------|--------------|
| <b>Goodwill Impairment Charge (Lo, -RE)</b> | <b>2,000</b> |              |
| <b>Goodwill (-A)</b>                        |              | <b>2,000</b> |



ConocoPhillips, a mega oil company, reported a goodwill impairment expense of \$25.4 billion on its 2008 income statement. The company reported an overall net loss that year of \$17 billion, compared to an \$11.9 billion profit in 2007. What might have caused the impairment expense? The impairment expense also appeared in the operating section of the statement of cash flows as an add-back to net earnings in the calculation of net cash from operations. Why?

Estimating the fair market value of goodwill is highly subjective. It essentially involves attempting at the end of each year to place a value on the subsidiaries previously acquired by the company, most of which are no longer publicly traded and many of which do not operate as independent entities. This requirement imposes a large

burden on companies that carry large balances in the goodwill account, and the subjectivity involved offers yet another way for companies to manage reported earnings. In addition, goodwill impairment charges are difficult to audit because auditors normally have limited knowledge of the subsidiaries in question.



General Electric included the following in the footnotes to a recent annual report: "We tested all our goodwill for impairment, and recorded a non-cash charge of \$1.2 billion. Substantially all of the charge related to the GECS IT Solutions business and the GECS U.S. Auto and Home business. Factors contributing to the impairment charge were the difficult economic environment in the information technology sector and the heightened price competition in the auto insurance industry." Briefly explain the meaning of this quote.

Accounting for business acquisitions and mergers and preparing consolidated financial statements are actually more complex than we have indicated here. Further discussion can be found in Appendix 8A and in intermediate and advanced financial accounting texts.

### The Equity Method or Consolidated Statements?

Accounting for an equity investment under the equity method can give rise to financial statements that are much different from those prepared as consolidated statements. The following example describes an equity investment, comparing the balance sheet produced under the equity method to a consolidated balance sheet.

Figure 8–6 shows the December 31, 2011, balance sheets of Megabucks, a large manufacturing company, and Tiny Inc., a smaller distribution outlet. Note initially that the debt/equity ratio of Megabucks is 67 percent ( $\$20,000 \div \$30,000$ ). Assume that on December 31 Megabucks purchased the outstanding stock of Tiny Inc. for \$10,000.

**FIGURE 8–6**  
The balance sheets of Megabucks and Tiny Inc.

#### Megabucks Balance Sheet December 31, 2011

|              |                 |  |                 |
|--------------|-----------------|--|-----------------|
| Assets       | \$50,000        | Liabilities                                | \$20,000        |
|              |                 | Shareholders' equity                       | 30,000          |
|              |                 | Total liabilities and shareholders' equity | <u>\$50,000</u> |
| Total assets | <u>\$50,000</u> |  |                 |

#### Tiny Incorporated Balance Sheet December 31, 2011

|              |                 |  |                 |
|--------------|-----------------|--|-----------------|
| Assets       | \$20,000        | Liabilities                                | \$15,000        |
|              |                 | Shareholders' equity                       | 5,000           |
|              |                 | Total liabilities and shareholders' equity | <u>\$20,000</u> |
| Total assets | <u>\$20,000</u> |  |                 |

Under the equity method, Megabucks would record the following journal entry.

|   |               |               |
|---|---------------|---------------|
| <b>Long-term investment (+A)</b>        | <b>10,000</b> |               |
| <b>Cash (−A)</b>                        |               | <b>10,000</b> |
| <i>Purchased Tiny Inc. for \$10,000</i> |               |               |

Note that the journal entry to record the investment has no effect on the total assets, total liabilities, total shareholders' equity, or the debt/equity ratio of Megabucks. The transaction is simply recorded as an exchange of two assets, a long-term investment and cash. In future periods under the equity method, Megabucks' total assets will reflect the net incomes (losses) reported by Tiny Inc., less any dividends.

If Megabucks accounts for this acquisition as a purchase and prepares consolidated financial statements, it would record the transaction with the following journal entry. Assume that Tiny's assets and liabilities are reported on its balance sheet at FMV.

|  |               |               |
|--|---------------|---------------|
| <b>Assets (+A)</b>                     | <b>20,000</b> |               |
| <b>Goodwill (+A)</b>                   | <b>5,000</b>  |               |
| <b>Liabilities (+L)</b>                |               | <b>15,000</b> |
| <b>Cash (−A)</b>                       |               | <b>10,000</b> |
| <i>Acquired Tiny Inc. for \$10,000</i> |               |               |

In this case, both the assets and the liabilities of Megabucks would be increased by \$15,000. The resulting consolidated balance sheet would appear as in Figure 8–7. Note that the debt/equity ratio is now 1.17 ( $\$35,000 \div \$30,000$ ). Treating the transaction as a purchase and preparing a consolidated balance sheet, as opposed to using the equity method, increases the debt/equity ratio of Megabucks from 0.67 to 1.17.

**FIGURE 8–7**  
Consolidated  
balance sheet

| <b>Megabucks<br/>Balance Sheet<br/>December 31, 2011</b> |                        |   |                        |
|--|------------------------|---|------------------------|
| <b>Assets</b>  | <b>\$65,000</b>        | <b>Liabilities</b>                                    | <b>\$35,000</b>        |
|  |                        | <b>Shareholders' equity</b>                           | <b>30,000</b>          |
| <b>Total assets</b>                                      | <b><u>\$65,000</u></b> | <b>Total liabilities and<br/>shareholders' equity</b> | <b><u>\$65,000</u></b> |

This difference between the equity method and preparing consolidated financial statements has encouraged many companies in the past to choose the equity method when possible, especially when the investee company carries considerable debt. Such a choice may come in the form of purchasing slightly less than 50 percent of the investee company's common stock, purchasing over 50 percent and claiming that "control is temporary or does not rest with the majority owner," or acquiring 100 percent and claiming that preparing consolidated statements would distort the financial statements because the subsidiary is so unlike the parent. The national director of a major accounting firm once noted that the equity method can be viewed as a method of off-balance-sheet financing. He pointed out that using the equity method can "present a more favorable impression of debt/equity ratios, working capital ratios, and returns on assets invested in the business." Consequently, financial statement users and auditors should pay special attention to cases where some question arises about whether the equity method should be used or consolidated financial statements should be prepared.



As of the end of 2008, Coca-Cola owned approximately a 30 percent interest in bottling companies that reported accumulated assets of \$50.1 billion and accumulated liabilities of \$35.3 billion. The balance sheet of Coca-Cola listed assets of \$40.5 billion and liabilities of \$20.1 billion. If Coca-Cola increased its ownership interest in these bottling companies so that it was required to include their assets and liabilities in a set of consolidated financial statements, what do you think would happen to Coca-Cola's liability-to-total-asset ratio?

### Special Purpose Entities (SPEs)

Companies often create separate entities to carry out activities or transactions directly related to specific purposes. The entities (called **special purpose entities** or **special purpose vehicles**) take on various legal forms (e.g., corporations, partnerships) and create efficiencies for sponsoring companies by separating certain activities from their other activities. Primary motivations for the creation of SPEs include raising funds and transferring risks.

To illustrate, rather than directly purchasing property on which to conduct operations, suppose that Company A creates a separate entity (SPE), which raises capital by issuing debt or equity to investors. The SPE then uses these funds to purchase the property, which in turn is leased to Company A. Company A then uses the property, making periodic lease payments to SPE. Company A may prefer this arrangement to a direct purchase of the property because the responsibility for both raising the funds to finance the purchase and bearing the risks of owning the property has been transferred to SPE.

The key accounting question related to SPEs is whether the sponsoring company (e.g., Company A) should include (consolidate) the financial statements of the SPE with its own financial statements. According to professional standards, if the sponsoring company relinquishes control of the SPE, there is little reason to consolidate; if the sponsoring company retains control, the assets and liabilities should be consolidated. Unfortunately, determining who actually controls the SPE can be very subjective, and the transaction can be strategically structured by management to achieve the preferred accounting treatment, which sometimes fails to reflect the economic essence of the arrangement.

Accounting for SPEs is a difficult and controversial area, and in this section we only scratch the surface. It is important, however, because companies currently are using literally thousands of these vehicles. The vast majority of the SPEs are designed to achieve legitimate company goals, but occasionally they are used to mislead investors.

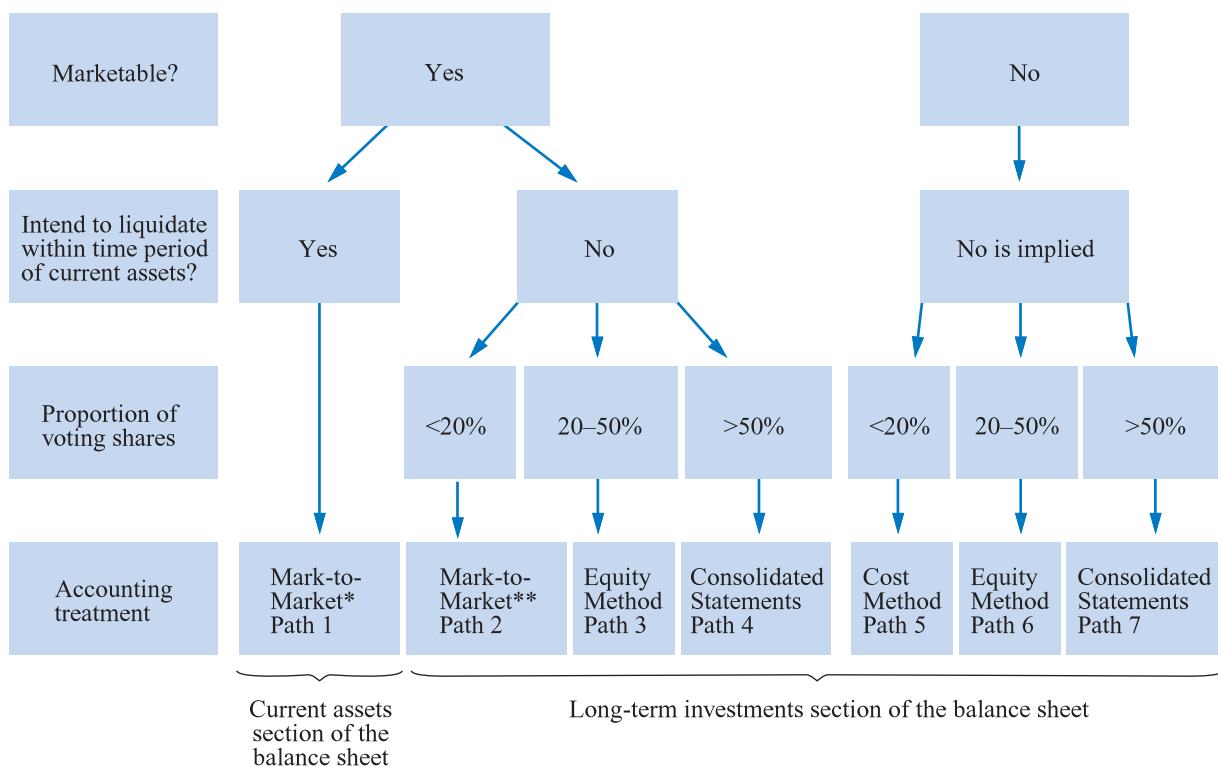


The recent interest in SPEs was in part motivated by the Enron fraud. It appears that Enron controlled a number of SPEs, many of which were financed by significant amounts of debt that were not consolidated on Enron's financial statements. Explain why Enron's management may not have wanted to consolidate the financial statements of the SPEs, and how not consolidating the SPEs may have misled investors.

## Accounting for Equity Investments: A Summary

Figure 8–8 provides a framework that summarizes the methods used to account for investments in equity securities. It summarizes the appropriate accounting methods for all (short-term and long-term) investments in equity securities. In general, three questions must be answered before the appropriate accounting method and disclosure can be determined: (1) Is the security marketable? (2) Does management intend to liquidate the security within the time period of current assets? and (3) Is the proportion of ownership less than 20 percent, between 20 and 50 percent, or greater than 50 percent?

FIGURE 8–8 Accounting for equity securities



\*Trading or available-for-sale securities, depending on expected liquidations.

\*\*Available-for-sale securities.

If the purchased equity securities are marketable, and management intends to liquidate them within the time period of current assets, the investment is considered short-term. This is regardless of the proportion of ownership and whether it is considered trading or available-for-sale, and it is carried on the balance sheet at market value (Path 1). If the purchased securities are marketable, but management does not intend to liquidate them within the time period of current assets, the investment is considered long-term. Such long-term investments, where less than 20 percent of the voting shares are held, are considered available-for-sale and are carried on the balance sheet at

market value (Path 2). Long-term investments of between 20 and 50 percent of the voting shares are normally accounted for using the equity method (Path 3), but companies now have the option to use mark-to-market accounting. Long-term investments of 50 percent or more of the voting shares give rise to consolidated statements (Path 4).

Equity investments that are not marketable are accounted for using the cost method if they represent less than 20 percent of the voting shares (Path 5), or the equity method if they represent an investment of between 20 and 50 percent (Path 6). Consolidated statements should be prepared if such investments represent 50 percent or more of the voting stock (Path 7).

### Preparing Consolidated Financial Statements for Multinationals

Multinational U.S. companies typically own a number of subsidiaries that have financial statements expressed in foreign currencies and prepared based on accounting standards other than U.S. GAAP (e.g., International Financial Reporting Standards). General Mills, for example, has major subsidiaries in several European countries, Canada, and Latin America, all of which publish their own financial statements denominated in local currencies. When General Mills prepares consolidated financial statements at year-end, the financial statements of these subsidiaries must first be converted to U.S. GAAP and then translated into U.S. dollars before they can be combined with the accounts of General Mills.

The process of translating the foreign currencies to U.S. dollars involves three steps: (1) classify the foreign subsidiaries, (2) translate the financial statements into U.S. dollars, and (3) consolidate the accounts. Foreign subsidiaries fall into two general categories: those (Type I) whose operations depend primarily on the parent (e.g., act as a supplier or channel of distribution); and those (Type II) that operate independently of the parent, transact primarily in the local currency, and are basically part of the countries in which they operate.

When the financial statements of Type I foreign subsidiaries are translated into U.S. dollars, gains or losses resulting from the translation process are considered part of consolidated income because these subsidiaries transact with the parent in U.S. dollars, and gains and losses on changes in the exchange rates can affect the cash flows of the U.S. parent. Motorola, which has subsidiaries in China and a number of other non-U.S. companies, reported a loss on foreign currency exchange rates of \$149 million on its 2008 income statement.

When the financial statements of Type II foreign subsidiaries are translated into U.S. dollars, the gains or losses resulting from the translation process are *not* considered part of consolidated income. Instead, these **foreign currency translation adjustments** are considered part of comprehensive income. As such, these adjustments appear on the statement of comprehensive income, and their cumulative balance appears in the shareholders' equity section of the balance sheet.



During 2008, on its statement of comprehensive income, General Electric reported a currency translation adjustment of approximately  $-\$11.0$  billion. The currency adjustment cumulative balance reported in the shareholders' equity section of GE's 2008 balance sheet was approximately  $-\$299$  million. Describe the nature of a currency translation adjustment, and estimate its balance on GE's 2007 balance sheet.



## ROE EXERCISE: MANAGING INVESTMENTS IN EQUITY SECURITIES AND RETURN ON EQUITY

The ROE model, introduced and illustrated in Appendix 5A, provides a framework linking the management of a company's operating, investing, and financing activities to its return on the shareholders' investment (return on equity). In terms of this model, investments in equity securities can be viewed as either short-term or long-term.

Short-term investments in equity securities are part of working capital management, which is most directly concerned with maintaining liquid assets to meet debts as they come due. Management invests in short-term equity securities to achieve both liquidity and some level of return. The current and quick ratios reflect that level of investment, and the role of these two ratios in the ROE model is discussed in the ROE Exercise at the end of Chapter 6.

Long-term investments in equity securities are designed to generate returns for the shareholders. The success of such investments is measured by comparing the size of the return to the size of the investment. Accordingly, return on assets (ROA) is an important performance barometer for long-term investments in equity securities. As indicated in the ROE model, asset turnover is a key determinant of ROA, and ROA is a key determinant of ROE.

### ROE ANALYSIS

Access the Web site (<http://www.wiley.com/college/pratt>), and conduct an ROE analysis on Kellogg vs. General Mills and/or AT&T vs. Verizon, paying special attention to how asset turnover impacts ROE.

## APPENDIX 8A

### CONSOLIDATED FINANCIAL STATEMENTS

Many companies expand by purchasing other companies and/or extending operations into other countries. For example, as of December 31, 2008, Johnson & Johnson, one of the world's largest consumer products companies, owned more than 200 companies that operated in almost every country of the world. In a typical year, Johnson & Johnson spends \$1 billion acquiring other domestic and foreign operations. Each of these acquisitions involves acquiring large amounts of the outstanding equity securities of the investee companies. This appendix covers the methods used to account for investments in excess of 50 percent of the investee company's outstanding voting stock.

Such transactions give rise to consolidated financial statements, which reflect the combined accounts of both the investor and the investee companies. Virtually all major U.S. corporations prepare financial statements on a consolidated basis. The following excerpt is from the 2008 financial report of IBM and is typical of the disclosures made by other major U.S. companies.

*The consolidated financial statements include the accounts of IBM and its controlled subsidiaries, which are generally majority owned. Investments in . . . business entities in which the company . . . has the ability to exercise significant influence . . . are accounted for using the equity method.*

## Accounting for Business Acquisitions and Mergers: The Purchase Method

Equity shares in other companies can be acquired by paying cash or other assets, issuing stock, or issuing bonds to the acquired company's shareholders. Often some combination of these forms of payment is used. When Delta Airlines acquired Western Airlines, for example, the \$787 million payment to Western's shareholders consisted of \$383 million in cash and 8.3 million shares of Delta stock, each with a value of \$48.75.

For simplicity, in the following examples we assume that cash is paid for the acquired stock. To illustrate how the purchase method is used to account for business acquisitions and mergers, assume that on December 31, 2011, Multi Corporation acquired a controlling interest in the equity shares of Littleton Company. The December 31 balance sheets for both companies and some additional information for Littleton Company appear in Figure 8A-1.

FIGURE 8A-1 Balance sheets for Multi Corporation and Littleton Company (before acquisition)

| Multi Corporation<br>Balance Sheet<br>December 31, 2011 |                  | Littleton Company<br>Balance Sheet<br>December 31, 2011 |                 |
|---|------------------|---|-----------------|
| <b>ASSETS</b>   |                  | <b>ASSETS</b>   |                 |
| Cash  | \$ 65,000        | Cash  | \$ 6,000        |
| Accounts receivable                                     | 70,000           | Accounts receivable                                     | 9,000           |
| Notes receivable  | 35,000           | Inventory   | 10,000          |
| Inventory   | 120,000          | Long-lived assets (net)                                 | 35,000          |
| Long-lived assets (net)                                 | <u>230,000</u>   | Total assets  | <u>\$60,000</u> |
| Total assets  | <u>\$520,000</u> |   |                 |
| <b>LIABILITIES AND SHAREHOLDERS' EQUITY</b>             |                  | <b>LIABILITIES AND SHAREHOLDERS' EQUITY</b>             |                 |
| Accounts payable  | \$ 90,000        | Accounts payable  | \$14,000        |
| Long-term notes payable                                 | 130,000          | Long-term notes payable                                 | 16,000          |
| Common stock  | 200,000          | Common stock  | 22,000          |
| Retained earnings                                       | <u>100,000</u>   | Retained earnings                                       | <u>8,000</u>    |
| Total liabilities and shareholders' equity              | <u>\$520,000</u> | Total liabilities and shareholders' equity              | <u>\$60,000</u> |
|   |                  | <b>Additional information:</b>                          |                 |
|   |                  | Common shares outstanding                               | 8,000           |

When a parent company (Multi Corporation) purchases a controlling interest in a subsidiary (Littleton), the parent is essentially purchasing the assets and liabilities of the subsidiary. It is important to realize that the historical costs of the subsidiary's assets, which are included on Littleton's balance sheet in Figure 8A-1, are of little consequence to the purchase decision. The parent is actually purchasing the fair market values (FMVs), not the historical costs, of the assets and liabilities of the subsidiary. An important rule, therefore, in understanding accounting for consolidated financial statements is: When a parent purchases a controlling interest in a subsidiary, the assets and liabilities of the subsidiary are recorded on the balance sheet of the parent at their FMVs.

Consequently, from Multi Corporation's standpoint, it is more appropriate to view the value of Littleton's net assets as shown in Figure 8A-2, where all assets and liabilities have been

valued at their individual FMVs. As of December 31, 2011, there were 8,000 shares of Littleton common stock outstanding. The per-share market value of the net assets, therefore, is \$5 (\$40,000 ÷ 8,000 shares).

**FIGURE 8A-2**  
FMV of Littleton's  
net assets

**Littleton Company**  
**Schedule of Fair Market Values of Assets and Liabilities**  
**December 31, 2011**

|                                |                        |
|--------------------------------|------------------------|
| <b>Cash</b>                    | <b>\$ 6,000</b>        |
| <b>Accounts receivable</b>     | <b>9,000</b>           |
| <b>Inventory</b>               | <b>15,000</b>          |
| <b>Long-lived assets</b>       | <b>40,000</b>          |
| <b>Accounts payable</b>        | <b>(14,000)</b>        |
| <b>Long-term notes payable</b> | <b>(16,000)</b>        |
| <b>FMV of net assets</b>       | <b><u>\$40,000</u></b> |

The following sections account for Multi Corporation's purchase of Littleton shares under the two most common scenarios: (1) purchase 100 percent of the common stock for a price greater than the per-share market value of the net assets, and (2) purchase between 50 and 100 percent of the common stock for a price greater than the per-share market value of the net assets.<sup>7</sup>

**CASE 1: PURCHASE 100 PERCENT OF STOCK AT A PRICE GREATER THAN THE PER-SHARE MARKET VALUE OF THE NET ASSETS**

Assume that Multi Corporation purchased all 8,000 shares of the outstanding stock of Littleton for \$8 per share, a total cost of \$64,000. The purchase entry and illustrative adjusting entry appear in Figure 8A-3.<sup>8</sup>

**FIGURE 8A-3**  
Consolidated  
journal entries for  
Multi Corporation:  
Case 1

|                |   |                |               |
|----------------|---|----------------|---------------|
| <b>Dec. 31</b> | <b>Investment in subsidiary (+A)</b>  | <b>64,000</b>  |               |
|                | <b>Cash (-A)</b>  |                | <b>64,000</b> |
|                | <i>Purchased 8,000 shares of Littleton common stock at \$8</i>                            |                |               |
|                | <b>Cash (+A)</b>  | <b>6,000</b>   |               |
|                | <b>Accounts receivable (+A)</b>   | <b>9,000</b>   |               |
|                | <b>Inventory (+A)</b>   | <b>15,000</b>  |               |
|                | <b>Long-lived assets (+A)</b>   | <b>40,000</b>  |               |
|                | <b>Goodwill (+A)</b>  | <b>24,000*</b> |               |
|                | <b>Accounts payable (+L)</b>  |                | <b>14,000</b> |
|                | <b>Long-term notes payable (+L)</b>   |                | <b>16,000</b> |
|                | <b>Investment in subsidiary (-A)</b>  |                | <b>64,000</b> |
|                | <i>Added assets and liabilities of Littleton at FMV and eliminated investment account</i> |                |               |

\*\$3 (\$8 price per share - \$5 per-share market value of net assets) × 8,000 sh.

7. It is unusual for a company to be purchased for less than the FMV of its net assets, and we do not cover such cases in this text. These situations are covered in advanced financial accounting texts.

8. The purchase entry would be recorded on Multi Corporation's books. The adjusting entry, however, is only for illustrative purposes. It is not actually on Multi Corporation's books. It is reflected only in the consolidation process, as illustrated in Figure 8A-4.

The purchase price in this case (\$64,000) exceeds the FMV of Littleton's net assets (\$40,000) by \$24,000; therefore, goodwill of \$24,000 is recognized on the acquisition. Multi Corporation apparently believes that Littleton is worth more than the FMV of its net assets. It paid \$3 per share over and above the \$5 ( $\$40,000 \div 8,000$  shares) per-share market value of the net assets, resulting in a total payment of \$24,000 ( $\$3/\text{sh.} \times 8,000$  shares) for goodwill, which Littleton had accumulated up to the date of the purchase. Goodwill, an intangible asset, appears on the asset side of the consolidated balance sheet, usually below fixed assets. The consolidated balance sheet would be prepared using a work sheet, as illustrated in Figure 8A-4.

FIGURE 8A-4 Work sheet for Multi Corporation: Case 1

Multi Corporation  
Consolidated Work  
Sheet December 31, 2011

| ACCOUNTS                                      | MULTI CORP.    | LITTLETON CO. | ADJUSTMENTS<br>AND ELIMINATIONS |               | CONSOLIDATED<br>BALANCE SHEET |
|---|----------------|---------------|---------------------------------|---------------|-------------------------------|
|   |                |               | DR.                             | CR.           |                               |
| Cash  | 1,000          | 6,000         |                                 |               | 7,000                         |
| Accounts receivable                           | 70,000         | 9,000         |                                 |               | 79,000                        |
| Notes receivable                              | 35,000         | —             |                                 |               | 35,000                        |
| Inventory                                     | 120,000        | 10,000        | 5,000                           |               | 135,000                       |
| Investment in subsidiary                      | 64,000         | —             |                                 | 64,000        | —                             |
| Long-lived assets                             | 230,000        | 35,000        | 5,000                           |               | 270,000                       |
| Goodwill                                      | —              | —             | 24,000                          |               | 24,000                        |
| Total assets                                  | <u>520,000</u> | <u>60,000</u> | <u>34,000</u>                   | <u>64,000</u> | <u>550,000</u>                |
| Accounts payable                              | 90,000         | 14,000        |                                 |               | 104,000                       |
| Long-term notes payable                       | 130,000        | 16,000        |                                 |               | 146,000                       |
| Common stock                                  | 200,000        | 22,000        | 22,000                          |               | 200,000                       |
| Retained earnings                             | 100,000        | 8,000         | 8,000                           |               | 100,000                       |
| Total liabilities and<br>shareholders' equity | <u>520,000</u> | <u>60,000</u> | <u>30,000</u>                   |               | <u>550,000</u>                |

Transactions where 100 percent of a subsidiary's stock is purchased at a price that exceeds the per-share market value of the subsidiary's net assets are very common. In 2006 alone, Johnson & Johnson spent \$18 billion in acquiring seven different businesses, including the consumer health care business of Pfizer.

### CASE 2: PURCHASE BETWEEN 50 AND 100 PERCENT OF STOCK AT A PRICE GREATER THAN THE PER-SHARE MARKET VALUE OF THE NET ASSETS

Assume that Multi Corporation purchased 6,400 shares (80%) of Littleton's outstanding stock for \$8 per share, a total cost of \$51,200. The purchase entry and illustrative adjusting entry appear in Figure 8A-5.

In this case, both goodwill and **noncontrolling interest** are recognized. Goodwill is recognized because Multi Corporation paid \$8 for each share, which is \$3 more than the \$5 per-share market value of the net assets. The total goodwill recognized by Multi Corporation on the transaction is still \$24,000 because Multi Corporation still has control over Littleton. Noncontrolling interest is recognized, however, because Multi Corporation purchased only 80 percent

**FIGURE 8A-5**

Consolidated  
journal entries for  
Multi Corporation:  
Case 2

|                |   |                |               |
|----------------|---|----------------|---------------|
| <b>Dec. 31</b> | <b>Investment in subsidiary (+A)</b>  | <b>51,200</b>  |               |
|                | <b>Cash (-A)</b>  |                | <b>51,200</b> |
|                | <i>Purchased 6,400 shares (80%) of Littleton common stock at \$8</i>                      |                |               |
|                | <b>Cash (+A)</b>  | <b>6,000</b>   |               |
|                | <b>Accounts receivable (+A)</b>   | <b>9,000</b>   |               |
|                | <b>Inventory (+A)</b>   | <b>15,000</b>  |               |
|                | <b>Long-lived assets (+A)</b>   | <b>40,000</b>  |               |
|                | <b>Goodwill (+A)</b>  | <b>24,000*</b> |               |
|                | <b>Accounts payable (+L)</b>  |                | <b>14,000</b> |
|                | <b>Long-term note payable (+L)</b>  |                | <b>16,000</b> |
|                | <b>Noncontrolling interest (+SE)</b>  |                | <b>12,800</b> |
|                | <b>Investment in subsidiary (-A)</b>  |                | <b>51,200</b> |
|                | <i>Added assets and liabilities of Littleton at FMV and eliminated investment account</i> |                |               |
|                | *20% × \$64,000 (\$8/share × 8,000 shares)  |                |               |

of Littleton's stock. The amount of noncontrolling interest recognized on the transaction is computed by multiplying the number of Littleton's shares owned by the minority shareholders (1,600 = 8,000 × 20%) times the value of each share (\$8), giving rise to \$12,800.



Under IFRS, noncontrolling interest can be computed in the manner illustrated in Figures 8A-5 and 8A-6, or by multiplying the noncontrolling interest (20 percent) by the FMV of the net assets (\$40,000), giving rise to \$8,000. If this option is chosen, goodwill would be reduced to \$19,200 (\$24,000 - \$4,800), reflecting the assumption that the minority shareholders have no equity interest in the goodwill.

The economic significance of noncontrolling interest is somewhat unclear. It can be interpreted as a liability in that it represents an interest held by outsiders in a portion of the net assets listed on the consolidated balance sheet. On the other hand, it resembles a shareholders' equity item because the interest held by outsiders is an equity interest held by outside shareholders. Very recently, U.S. GAAP was changed to require that noncontrolling interest be considered an item of shareholders' equity, a position consistent with International Financial Reporting Standards (IFRS).

The consolidated balance sheet would be prepared using a work sheet, as illustrated in Figure 8A-6.

Acquisitions where both goodwill and noncontrolling interest are recognized occur periodically in the United States but are much less common than those where 100 percent of the subsidiary's stock is purchased. Often such transactions are followed quite closely by the acquisition of the outstanding minority stock. For example, when Alcoa acquired approximately 91 percent of the outstanding stock of TRE Corporation for \$326 million, the transaction recognized both goodwill and noncontrolling interest, which were included in Alcoa's balance sheet. Shortly after the acquisition, Alcoa acquired the remaining outstanding stock, and TRE became a wholly owned subsidiary of Alcoa.

FIGURE 8A-6 Work sheet for Multi Corporation: Case 2

**Multi Corporation  
Consolidated Work Sheet  
December 31, 2011**

| ACCOUNTS  | MULTI CORP.    | LITTLETON CO. | ADJUSTMENTS<br>AND ELIMINATIONS |               | CONSOLIDATED<br>BALANCE SHEET |
|---|----------------|---------------|---------------------------------|---------------|-------------------------------|
|   |                |               | DR.                             | CR.           |                               |
| Cash  | 13,800         | 6,000         |                                 |               | 19,800                        |
| Accounts receivable                                       | 70,000         | 9,000         |                                 |               | 79,000                        |
| Notes receivable  | 35,000         | —             |                                 |               | 35,000                        |
| Inventory   | 120,000        | 10,000        | 5,000                           |               | 135,000                       |
| Investment in subsidiary                                  | 51,200         | —             |                                 | 51,200        | —                             |
| Long-lived assets   | 230,000        | 35,000        | 5,000                           |               | 270,000                       |
| Goodwill  | —              | —             | 24,000                          |               | 24,000                        |
| <b>Total assets</b>                                       | <u>520,000</u> | <u>60,000</u> | <u>34,000</u>                   | <u>51,200</u> | <u>562,800</u>                |
| Accounts payable  | 90,000         | 14,000        |                                 |               | 104,000                       |
| Long-term notes payable                                   | 130,000        | 16,000        |                                 |               | 146,000                       |
| Noncontrolling interest                                   | —              | —             |                                 | 12,800        | 12,800                        |
| Common stock  | 200,000        | 22,000        | 22,000                          |               | 200,000                       |
| Retained earnings   | 100,000        | 8,000         | 8,000                           |               | 100,000                       |
| <b>Total liabilities and<br/>    shareholders' equity</b> | <u>520,000</u> | <u>60,000</u> | <u>30,000</u>                   | <u>12,800</u> | <u>562,800</u>                |

### Other Issues Concerning Consolidated Financial Statements

Accounting for acquisitions and mergers is a very complex and detailed topic. In this appendix we have only scratched the surface. For example, transactions between a parent and subsidiary (intercompany transactions) must be eliminated when the financial statements of the two companies are consolidated. In the examples above, we focused only on consolidating balance sheets for transactions that occurred at year-end. Many acquisitions and mergers occur during the year, and of course, the income statement, statement of cash flows, and statement of shareholders' equity must also be consolidated. Finally, consolidations between parents and subsidiaries that operate in different countries can be complex because, as discussed in the chapter, adjustments must be made for different currencies, and these adjustments sometimes are reflected on the income statement and sometimes only on the balance sheet.

### REVIEW PROBLEM I

The following information relates to the marketable security investments of Macon Construction. Securities held on December 31, 2011, are described in the table on next page. AAA and BBB are classified as trading securities, and CCC is classified as an available-for-sale security.

| Securities | No. of Shares | Cost/Share | Total Cost   | Value/Share | Total Market Value |
|------------|---------------|------------|--------------|-------------|--------------------|
| AAA        | 10            | \$14       | \$140        | \$17        | \$170              |
| BBB        | 25            | 15         | 375          | 14          | 350                |
| CCC        | 15            | 8          | 120          | 10          | 150                |
|            |               |            | <u>\$635</u> |             | <u>\$670</u>       |

Early in 2012, Macon sold all of its investment in AAA securities for \$18 per share. The company also sold five shares of BBB for \$13 per share. During 2012, Macon received dividends of \$3 per share on the remaining twenty shares of BBB, and dividends of \$2 per share were declared, but not yet received, on the 15 shares of CCC stock. The per-share market values of BBB and CCC on December 31, 2012, were \$12 and \$9, respectively. During 2013, Macon sold the remaining 20 shares of BBB stock for \$13 per share and the 15 shares of CCC for \$11 per share.

The journal entries that would be required for 2011 under the mark-to-market rule follow.

- Trading Securities (AAA) (+A)** 30\*

**Unrealized Gain on Trading Securities (R, +RE)** 30

*Revalued AAA securities to market*

\*10 sh. × \$3 per sh.
- Unrealized Loss on Trading Securities (Lo, -RE)** 25

**Trading Securities (BBB) (-A)** 25\*

*Revalued BBB securities to market*

\*25 sh. × \$1 per sh.
- Available-for-Sale Securities (CCC) (+A)** 30\*

**Unrealized Price Increase on Available-for-Sale Securities (+SE)** 30

*Revalued CCC securities to market*

\*15 sh. × \$2 per sh.

The journal entries that reflect 2012 activities involving short-term equity investments follow.

- Cash (+A)** 180\*

**Trading Securities (-A)** 170\*\*

**Realized Gain on Sale of Trading Sec. (Ga, +RE)** 10

*Sold ten shares of AAA stock at \$18*

\*10 sh. × \$18 per sh.

\*\*10 sh. × \$17 per sh.
- Cash (+A)** 65\*

**Realized Loss on Sale of Trading Sec. (Lo, -RE)** 5

**Trading Securities (-A)** 70\*\*

*Sold five shares of BBB stock at \$13 per share*

\*5 sh. × \$13 per sh.

\*\*5 sh. × \$14 per sh.
- Cash (+A)** 60\*

**Dividend Receivable (+A)** 30\*\*

**Dividend Revenue (R, +RE)** 90

*Received BBB dividends and recognized dividends declared on CCC stock*

\*20 sh. × \$3 per sh.

\*\*15 sh. × \$2 per sh.

|  |    |     |
|--|----|-----|
| 4. <b>Unrealized Loss on Trading Securities (Lo, -RE)</b>                  | 40 |     |
| <b>Trading Securities (BBB) (-A)</b>                                       |    | 40* |
| <i>Revalued BBB shares to market</i>                                       |    |     |
| *20 sh. × \$2 per sh.  |    |     |
| 5. <b>Unrealized Price Increase on Available-for-Sale Securities (-SE)</b> | 15 |     |
| <b>Available-for-Sale Securities (CCC) (-A)</b>                            |    | 15* |
| <i>Revalued CCC shares to market</i>                                       |    |     |
| *15 sh. × \$1 per sh.  |    |     |

The journal entries that reflect the sales of short-term equity investments in 2013 follow.

|   |      |       |
|---|------|-------|
| 1. <b>Cash (+A)</b>   | 260* |       |
| <b>Trading Securities (BBB) (-A)</b>                                    |      | 240** |
| <b>Realized Gain on Trading Securities (R, +RE)</b>                     |      | 20    |
| <i>Sold twenty shares of BBB stock at \$13 per share</i>                |      |       |
| *20 sh. × \$13 per sh.  |      |       |
| **20 sh. × \$12 per sh.   |      |       |
| 2. <b>Cash (+A)</b>   | 165* |       |
| <b>Unrealized Price Increase on Available-for-Sale Securities (-SE)</b> | 15   |       |
| <b>Available-for-Sale Securities (CCC) (-A)</b>                         |      | 135** |
| <b>Realized Gain on Available-for-Sale Securities (Ga, +RE)</b>         |      | 45    |
| <i>Sold fifteen shares of CCC stock at \$11 per share</i>               |      |       |
| *15 sh. × \$11 per sh.  |      |       |
| **15 sh. × \$9 per sh.  |      |       |

## REVIEW PROBLEM II

Traylor Corporation entered into the two transactions listed below on January 1, 2011.

- On January 1, 2011, Traylor purchased 30 percent of the outstanding common stock of Rowers Company for \$50,000. Income reported by Rowers during 2011 and 2012 was \$15,000 and \$8,000, respectively. Rowers declared and paid dividends to Traylor in the amount of \$3,000 during each of the two years.
- On January 1, 2011, Traylor purchased 100 percent of the outstanding common stock of Kleece Corporation for \$20,000. The FMVs of the individual assets and liabilities of Kleece Corporation, as of the time of the acquisition, were \$40,000 and \$28,000, respectively.

The related journal entries that would be recorded for each transaction over the subsequent two-year period follow.

|                 |  |               |               |
|-----------------|--|---------------|---------------|
| <b>a. 2011:</b> |  |               |               |
| <b>Jan. 1</b>   | <b>Investment in Equity Securities (+A)</b>    | <b>50,000</b> |               |
|                 | <b>Cash (-A)</b>                               |               | <b>50,000</b> |
|                 | <i>Purchased Rowers common stock</i>           |               |               |
| <b>Dec. 31</b>  | <b>Investment in Equity Securities (+A)</b>    | <b>4,500*</b> |               |
|                 | <b>Income from Equity Investments (R, +SE)</b> |               | <b>4,500</b>  |
|                 | *\$15,000 × 30%                                |               |               |

(continued)



|                 |   |               |               |
|-----------------|---|---------------|---------------|
|                 | <b>Cash (+A)</b>  | <b>3,000</b>  |               |
|                 | <b>Investment in Equity Securities (-A)</b>                           |               | <b>3,000</b>  |
|                 | <i>Recognized 30% of Rowers's income and received dividends*</i>      |               |               |
|                 | <i>*Assume that dividends were declared and paid on the same day.</i> |               |               |
| <b>2012:</b>    |   |               |               |
|                 | <b>Investment in Equity Securities (+A)</b>                           | <b>2,400*</b> |               |
|                 | <b>Income from Equity Invest. (R, +RE)</b>                            |               | <b>2,400</b>  |
|                 | <i>*\$8,000 × 30%.</i>  |               |               |
|                 | <b>Cash (+A)</b>  | <b>3,000</b>  |               |
|                 | <b>Investment in Equity Securities (-A)</b>                           |               | <b>3,000</b>  |
|                 | <i>Recognized 30% of Rowers's income and received dividends*</i>      |               |               |
|                 | <i>*Assume that dividends were declared and paid on the same day.</i> |               |               |
| <b>b. 2011:</b> |   |               |               |
| <b>Jan. 1</b>   | <b>Assets (+A)</b>  | <b>40,000</b> |               |
|                 | <b>Goodwill (+A)</b>  | <b>8,000</b>  |               |
|                 | <b>Liabilities (+L)</b>   |               | <b>28,000</b> |
|                 | <b>Cash (-A)</b>  |               | <b>20,000</b> |
|                 | <i>Acquired Kleece Corporation</i>                                    |               |               |

## SUMMARY OF KEY POINTS

The key points of the chapter are summarized below.

- *Criteria that must be met before a security can be listed in the current assets section of the balance sheet.*

Two criteria must be met before an investment in a security can be listed in the current assets section of the balance sheet: (1) the security must be able to be converted into cash within the time period that defines current assets (i.e., the current operating cycle or one year, whichever is longer), and (2) management must intend to convert the security into cash within the time period that defines current assets.

- *Trading and available-for-sale securities and how the mark-to-market rule is used to account for them.*

Trading securities are bought and held principally for the purpose of selling them in the near future with the objective of generating profit on short-term price changes. Investments not classified as trading securities are considered available-for-sale securities. Trading securities are always listed in the current assets section of the balance sheet, while available-for-sale securities are listed as current or long-term, depending on management's intention. In applying the mark-to-market rule to trading and available-for-sale securities, four separate events must be considered.

1. *Purchase of securities.* When the securities are purchased, they are capitalized and recorded on the balance sheet at cost. The cost includes the purchase price as well as any incidental acquisition costs, such as brokerage commissions and taxes.
2. *Declaration and payment of dividends.* Cash dividends declared on these securities are initially recognized as receivables and revenues. When a cash dividend is received, the receivable is exchanged for cash.

3. *Sale of securities.* When these securities are sold, their balance sheet value is removed from the books and the difference between this amount and the proceeds of the sale is recognized on the books as either a realizable gain or a realized loss.
4. *End-of-accounting period adjustment.* Both trading and available-for-sale securities are adjusted to current market value at the end of the accounting period. In the case of trading securities, the related unrealized holding gain or loss is reflected directly in income; in the case of available-for-sale securities, the related unrealized price change is booked to shareholders' equity and included on the statement of comprehensive income.

● *Why companies make long-term investments in equity securities.*

Companies make long-term investments in the equity securities of other companies for two primary reasons: (1) investment income in the form of dividends and/or stock price appreciation and (2) management influence, where the voting power of the purchased shares allows the investor company to exert influence or control over the board of directors and management of the investee company. The primary motivation behind the long-term equity investments for most major U.S. companies is reason (2), influence over the investee company's operations and management.

● *The mark-to-market method, the cost method, and the equity method of accounting for long-term equity investments, and the conditions under which each method is used.*

The mark-to-market rule is used to account for trading securities, which are always considered current, and available-for-sale securities whether they are classified in the current or long-term assets section of the balance sheet.

Under the cost method, purchases of equity securities are recorded at cost, including incidental costs of acquisition, dividends are recorded as income when declared, and sales give rise to book gains or losses in the amount of the difference between the acquisition cost of the securities and the proceeds from the sale. The cost method is used for investments in nonmarketable securities that involve less than 20 percent of the investee company's voting stock.

Under the equity method, the purchase of equity securities is originally recorded at cost, and the carrying value of the long-term investment on the investor's balance sheet is (1) periodically increased (decreased) by the investor's proportionate share of the net income (loss) of the investee and (2) decreased by all dividends transferred to the investor from the investee. The equity method is used for investments in marketable or nonmarketable securities that involve from 20 to 50 percent of the investee company's voting stock.

Under both U.S. GAAP and IFRS, companies have the option of using mark-to-market accounting for investments in equity securities, and if they exercise that option, they must disclose the basis for the market value estimate.

● *Consolidated financial statements, when they are prepared, and how they differ from financial statements that account for equity investments using the equity method.*

Consolidated financial statements represent the combined financial statements of a parent company and any companies acquired by the parent. Such acquisitions occur when the parent purchases a controlling interest (51% of the outstanding voting stock) in another company, or as the result of a merger, where one or more of the merged companies ceases to exist. Consolidated statements should be prepared when a parent owns 51 percent or more of a subsidiary's outstanding common stock.

When the parent prepares consolidated financial statements, it includes the assets and liabilities of the subsidiary with its own. If the purchase price exceeds the FMV of the subsidiary's net assets, goodwill is also recognized on the balance sheet of the parent. Under the equity method, the assets and liabilities of the investee company are not included with those of the parent, and this, in turn, can represent a form of off-balance-sheet financing.

## KEY TERMS

*Note: Definitions for these terms are provided in the glossary at the end of the text.*

|  |  |
|--|--|
| Affiliate companies (p. 345)                         | Level 2 measurements (p. 348)                                  |
| Available-for-sale securities (p. 335)               | Level 3 measurements (p. 348)                                  |
| Business acquisition (p. 348)                        | Mark-to-market rule (p. 336)                                   |
| Business combination (p. 349)                        | Merger (p. 349)  |
| Comprehensive income (p. 341)                        | Noncontrolling interest (p. 359)                               |
| Consolidated financial statements (p. 348)           | Parent company (p. 348)  |
| Controlling interest (p. 348)                        | Readily marketable (p. 334)                                    |
| Cost method (p. 343)                                 | Realized gains/losses (p. 337)                                 |
| Equity investment (p. 333)                           | Special purpose entities (SPEs) (p. 353)                       |
| Equity method (p. 344)                               | Special purpose vehicles (p. 353)                              |
| Fair market value option (p. 348)                    | Statement of Recognized Income<br>and Expense (SORIE) (p. 341) |
| Foreign currency translation<br>adjustments (p. 355) | Subsidiary (p. 348)  |
| Holding gains or losses (p. 337)                     | Trading securities (p. 335)                                    |
| Intention to convert (p. 335)                        | Unrealized gains/losses (p. 337)                               |
| Level 1 measurements (p. 348)                        | Unrealized price changes (p. 339)                              |

## ETHICS in the Real World

The takeover battle for Gerber Products Co. included bids by a number of U.S. companies, including Quaker Oats (now part of PepsiCo), which entered a bid of \$35 per share. Swiss drug giant Sandoz Ltd. won the battle quickly, however, by raising the ante to \$53 per

share. Some investment bankers claimed that the favorable accounting treatment for acquisitions practiced in Switzerland gave Sandoz the advantage it needed to outbid Quaker Oats.

**ETHICAL ISSUE** Is it ethical for the government or standard-setting body in a particular country to set accounting standards that are designed to provide international economic advantages enjoyed solely by the companies and capital markets in that country?

## INTERNET RESEARCH EXERCISE

The chapter began by noting that the extraordinary growth experienced by Cisco Systems in the late 1990s was fueled by acquisitions of other companies. How much has Cisco grown since 1999? Has Cisco maintained high levels of performance? Begin your search at [www.cisco.com](http://www.cisco.com).

## BRIEF EXERCISES

### REAL DATA

#### BE8-1

Short-term investments

The following table was taken from the 2008 annual report of Merck & Company, a major U.S. pharmaceutical company (dollars in millions).

|                                   | 2008           | 2007           | 2006           |
|-----------------------------------|----------------|----------------|----------------|
| Net income                        | \$7,808        | \$3,275        | \$4,434        |
| Other comprehensive income (loss) |                |                |                |
| Net unrealized (loss)             | (80.5)         | 58             | 26             |
| Other                             | (1,647)        | 280            | (10)           |
| Comprehensive income              | <u>\$6,080</u> | <u>\$3,613</u> | <u>\$4,450</u> |

**REQUIRED:**

- What is comprehensive income and how does it differ from net income?
- This table indicates that Merck carries certain kinds of investments on its balance sheet. What are they, and what happened to the values of those investments in 2008, 2007, and 2006?

**REAL DATA****BE8-2**

Available-for-sale securities

On the statement of comprehensive income within its 2008 annual report, Bristol-Myers Squibb included a (\$37) million line item behind “available-for-sale securities.” During 2008 the company maintained a portfolio of marketable securities in the current asset section of the balance sheet of nearly \$289 million.

**REQUIRED:**

Explain the event that led to the (\$37) million amount listed on the statement of comprehensive income, and where else on the financial statements this amount would be reflected.

**REAL DATA****BE8-3**

Equity method, the income statement, and statement of cash flows

PepsiCo, Inc. reported “bottling equity income” of \$374, \$560, and \$553 on its income statements for 2008, 2007, and 2006, respectively (dollars in millions). The computation of net cash from operating activities on the company’s statement of cash flows includes “bottling equity income, net of dividends” of (\$202), (\$441), and (\$442) for the same three years.

**REQUIRED:**

- Provide the entry made by PepsiCo to record affiliate net income in 2008.
- Why is there a reference to bottling equity income on the statement of cash flows?
- How many cash dividends did PepsiCo receive from its bottling affiliates during 2008, 2007, and 2006?
- Discuss how PepsiCo management might evaluate the performance of these affiliates.

**REAL DATA****BE8-4**

Goodwill

Procter & Gamble’s 2008 balance sheet reported a goodwill balance of \$56.5 billion. Describe what goodwill is, how it was originally recorded, and what it indicates about Procter & Gamble.

**REAL DATA****BE8-5**

Goodwill accounting

Recently, Johnson & Johnson purchased the outstanding common stock of several businesses for \$2.8 billion in cash. The purchase price exceeded the estimated fair market value of the acquired assets by \$1.8 billion, and Johnson & Johnson assumed liabilities of \$323 million.

**REQUIRED:**

Re-create the journal entry for the acquisitions, and describe how the transaction affected the basic accounting equation.

## EXERCISES

## E8-1

Accounting for  
short-term equity  
securities

Monroe Auto Supplies engaged in several transactions involving short-term equity securities during 2011, shown in the following list. The company had never invested in equity securities prior to 2011. All securities were classified as trading securities.

1. Purchased 1,000 shares of IBM for \$50 per share.
  2. Purchased 500 shares of General Motors for \$80 per share.
  3. Sold 750 shares of IBM for \$60 per share.
  4. Received a dividend of \$1.50 per share from General Motors. Assume that the dividend was declared in a previous period.
  5. Purchased 200 shares of Xerox for \$40 per share.
  6. Sold the remaining 250 shares of IBM for \$30 per share.
  7. Sold the 200 shares of Xerox for \$58 per share.
  8. Sold the 500 shares of General Motors for \$60 per share.
- a. Prepare journal entries for each transaction.
  - b. What effect did these transactions have on the company's 2011 net income?

## E8-2

Mark-to-market  
accounting

The following information was extracted from the December 31, 2011, current asset section of the balance sheets of four different companies:

|                                      | Wearever<br>Fabrics   | Frames<br>Corp.      | Pacific<br>Transport  | Video<br>Magic       |
|--------------------------------------|-----------------------|----------------------|-----------------------|----------------------|
| <b>Trading securities</b>            | <b>\$800,000</b>      | <b>\$490,000</b>     | <b>\$645,000</b>      | <b>\$210,000</b>     |
| <b>Available-for-sale securities</b> | <b><u>130,000</u></b> | <b><u>40,000</u></b> | <b><u>250,000</u></b> | <b><u>85,000</u></b> |
| <b>Short-term equity invest.</b>     | <b>\$930,000</b>      | <b>\$530,000</b>     | <b>\$895,000</b>      | <b>\$295,000</b>     |

There were no transactions in short-term equity securities during 2012, and as of December 31, 2012, the controllers of each company collected the following information:

|                                      | Wearever<br>Fabrics   | Frames<br>Corp.      | Pacific<br>Transport  | Video<br>Magic       |
|--------------------------------------|-----------------------|----------------------|-----------------------|----------------------|
| <b>Trading securities</b>            | <b>\$820,000</b>      | <b>\$480,000</b>     | <b>\$625,000</b>      | <b>\$220,000</b>     |
| <b>Available-for-sale securities</b> | <b><u>122,000</u></b> | <b><u>52,000</u></b> | <b><u>246,000</u></b> | <b><u>88,000</u></b> |
| <b>Short-term equity invest.</b>     | <b>\$942,000</b>      | <b>\$532,000</b>     | <b>\$871,000</b>      | <b>\$308,000</b>     |

- a. Compute the change in the wealth levels of each of the four companies due to the market value changes in their equity investments.
- b. Compute the effect on 2012 reported income for each of the four companies due to the market value changes in their equity investments.
- c. Explain why the answers to (a) and (b) are not the same.
- d. How would 2012 reported income change for each company if each chose to use the fair market value option for the available-for-sale securities?

## E8-3

Mark-to-market  
accounting

The following information relates to the activity in the short-term investment account of Lido International, which held no short-term investments as of January 1.

1. **January 28** Purchased ten shares of Able Co. stock at \$14 per share.
2. **February 18** Purchased twenty shares of Baker Co. stock at \$26 per share.
3. **March 15** Received dividends from Able Co. of \$1 per share.
4. **April 29** Sold five shares of Able Co. for \$15 per share.
5. **May 18** Received dividends from Baker Co. of \$2 per share.
6. **June 1** Sold five shares of Baker Co. for \$22 per share.
7. **June 30** Market value of Able shares is \$17 per share.  
Market value of Baker shares is \$20 per share.

- Prepare journal entries for each transaction, excluding the June 30 adjusting entry. Use the asset account "Short-Term Investments," and assume that dividends were declared and paid on the same day.
- Prepare the June 30 adjusting entry, and describe the effect on reported income, assuming that: (1) Able and Baker shares are both considered trading securities; (2) Able is considered a trading security, and Baker is considered an available-for-sale security; (3) Able is considered an available-for-sale security, and Baker is considered a trading security; and (4) both Able and Baker are considered available-for-sale securities.
- Which combination in (b) depicts management as most successful in the current period? Explain.

**E8-4**

Activity in the short-term investment account across time periods

On November 11, 2011, Wadsworth Company purchased twenty shares of ZZZ for \$8 per share. Wadsworth held the investment for the remainder of 2011, and as of December 31, the per-share market value of ZZZ had risen to \$10. During 2012, Wadsworth sold ten shares of ZZZ for \$9 each, and at the end of 2012, the per-share market price of the remaining ten shares was \$12. During 2013, the remaining shares of ZZZ were sold for \$14 each. Assume that Wadsworth held no other equity investments during this time period.

- Complete the following chart. The first column assumes that the investment was classified as trading securities; the second column assumes that the investment was classified as available-for-sale securities.

|  | Trading | Available-for-Sale |
|--|---------|--------------------|
| <b>2011 income</b>                             |         |                    |
| <b>12/31/11 balance sheet investment value</b> |         |                    |
| <b>2012 income</b>                             |         |                    |
| <b>12/31/12 balance sheet investment value</b> |         |                    |
| <b>2013 income</b>                             |         |                    |
| <b>Total income ('11 + '12 + '13)</b>          |         |                    |

- Comment on the differences.

**REAL DATA****E8-5**

Available-for-sale disclosures

Biomet, Inc. provided the following disclosures in Note 5 of its 2008 annual report. It describes the company's investments in available-for-sale equity securities (dollars in millions).

|             | Cost           | Unrealized |                |
|-------------|----------------|------------|----------------|
|             |                | Gains      | Losses         |
| <b>2008</b> | <b>\$825.3</b> | <b>\$0</b> | <b>\$(0.6)</b> |
| <b>2007</b> | <b>42.9</b>    | <b>0.1</b> | <b>(3.9)</b>   |

- Compute the fair market value of Biomet's available-for-sale equity portfolio for both 2008 and 2007.
- What was the effect on the company's comprehensive income amount associated with its available-for-sale securities?
- Assume that Biomet sold its entire portfolio of available-for-sale securities at the end of 2008. How much income would be realized on the sale? Provide the journal entry.

**E8-6**

Reporting problems with mark-to-market accounting as applied to available-for-sale securities

Tom Miller and Larry Rogers each started separate businesses on December 1, 2011, by contributing \$6,000 of their own funds. Early in December, both men purchased 120 shares of Diskette common stock, which was selling at the time for \$26 per share, and classified the investment as available-for-sale securities. During December, they both also purchased \$1,500 of inventory on account.

As of December 30, the market price of Diskette common stock had risen to \$32 per share. Tom was delighted by the price increase but chose simply to hold the stock, expecting that the price would continue to appreciate for at least another month. Larry, on the other hand, sold his shares, but immediately repurchased them because he too believed that they would continue to appreciate.

- a. Prepare separate year-end balance sheets for both Tom and Larry.
- b. Compute net income, working capital, and the current ratio for both Tom and Larry.
- c. From the financial statements alone, which of the two appears to be in the better financial position? Why?
- d. Assume that there are brokerage commissions on all security purchases and sales. Which of the two is actually in the better financial position? Why?

**E8-7**

Classifying and  
accounting for  
equity investments

Hartney Consulting Services is involved in the following investments as of December 31, 2011:

1. Owns 40 percent of the common stock issued by Doyle Corporation. Doyle Corporation's stock is actively traded, and Hartney Consulting intends to hold this investment for at least five years.
  2. Owns 55 percent of the common stock issued by Jacobs Automotive Parts Manufacturing. This stock is actively traded. Hartney Consulting intends to hold this investment indefinitely.
  3. Owns 10 percent of the common stock issued by Markert Computers. Markert Computers is a closely held company with just two other shareholders.
  4. Owns 45 percent of the common stock issued by Luther Brewery. Luther Brewery has just recently joined the New York Stock Exchange. Hartney intends to sell this investment to raise cash within the next five years.
  5. Owns 15 percent of the common stock of Hartney Farms. The stock is publicly traded, but Hartney intends to hold the investment indefinitely.
  6. On November 30, 2012, Hartney Consulting owned 18 percent of Whittenbach Industries. During December, Hartney Consulting purchased an additional 15 percent of the company. This company's stock is actively traded, and Hartney fully intends to hold this stock for four years.
- a. Indicate whether each investment should be classified as short-term or long-term on the December 31, 2012, balance sheet. Also indicate the appropriate accounting treatment for each investment. Explain your answer.
  - b. Explain why the nonmarketable equity securities are disclosed in the long-term investment section of the balance sheet and are not carried at market value.

**E8-8**

The cost method

Mystic Lakes Food Company began investing in equity securities for the first time in 2011. During 2011, the company engaged in the following transactions involving equity securities. Assume that the stock of Thayers International and Bayhe Enterprises is not considered marketable and that ownership is less than 20 percent of the equity. Prepare journal entries to record these transactions.

1. Purchased 10,000 shares of Thayers International for \$26 per share.
2. Purchased 25,000 shares of Bayhe Enterprises for \$35 per share.
3. Thayers International declared a \$2-per-share dividend to be paid at a later date.
4. Sold 4,500 shares of Bayhe Enterprises for \$30 per share.
5. Sold 8,000 shares of Thayers International for \$32 per share.

**E8-9**

Applying the  
mark-to-market rule

Refer to the data provided in E8-8.

- a. Assume that the stock of Thayers International and Bayhe Enterprises is considered marketable, and Mystic Lakes Food Company wishes to hold all investments indefinitely. Prepare journal entries to record the transactions.
- b. Assume that on December 31, 2011, the market values of Thayers International and Bayhe Enterprises are \$25 and \$32, respectively. Prepare the entry to adjust the company's long-term investments to market value.

**E8-10**

The equity method

On January 1, 2011, Nover Solar Systems purchased 10,000 shares of Reilly Manufacturing for \$190,000. The investment represented 25 percent of Reilly's outstanding common stock. Nover intended to hold the investment indefinitely. During 2011, Reilly earned net income of \$75,000, and during 2012, Reilly suffered a net loss of \$6,000. Reilly paid dividends both years of \$1.50 per share.

## REAL DATA

## E8-11

Inferring information from equity method disclosures

- Prepare all relevant journal entries that would be recorded on Nover's books during 2011 and 2012.
- Compute the book value of Nover's long-term equity investment account as of December 31, 2011, and December 31, 2012.

Duke Energy Corporation accounts for certain investments under the equity method, and as of December 31, 2008, Duke reported equity method investments of \$473 million on its balance sheet and \$696 million on its 2007 balance sheet. Equity income on the income statement totaled (\$102) million for 2008.

- Assume that Duke owns approximately 40 percent of the outstanding common stock of the affiliates and made no additional equity investment on sales during 2008. How much net loss did the affiliates report for 2008?
- How much in dividends did Duke receive in 2008?

## E8-12

Inferring information about the equity method from the financial statements

Mainmont Industries uses the equity method to account for its long-term equity investments from affiliates. The following information from the financial statements of Mainmont refers to an investment in the securities of Tumbleweed Construction, a company 30 percent owned by Mainmont:

|  | 2011            | 2010            |
|--|-----------------|-----------------|
| <b>Long-term investment in equity securities</b> | <b>\$29,000</b> | <b>\$25,000</b> |
| <b>Income from equity securities</b>             | <b>12,000</b>   | <b>7,000</b>    |

Mainmont neither purchased nor sold any equity securities during 2011.

- How much net income did Tumbleweed Construction earn during 2011?
- What was the dollar amount of the total dividend declared by Tumbleweed Construction during 2011?
- Provide the journal entries recorded by Mainmont during 2011 with respect to its investment in Tumbleweed Construction.
- Describe how this activity would be reported on Mainmont's statement of cash flows.

## E8-13

Recording an acquisition under the purchase method

Multiplex purchased 100 percent of the outstanding common stock of Lipley Company for \$900,000. At the time of the acquisition, the fair market values of Lipley's individual assets and liabilities follow:

|                            |                  |
|----------------------------|------------------|
| <b>Cash</b>                | <b>\$ 90,000</b> |
| <b>Accounts receivable</b> | <b>60,000</b>    |
| <b>Inventory</b>           | <b>160,000</b>   |
| <b>Plant and equipment</b> | <b>560,000</b>   |
| <b>Payables</b>            | <b>300,000</b>   |

- Provide the journal entry recorded by Multiplex at the time of the acquisition.
- Assume that the book values of the assets and liabilities on Lipley's balance sheet as of the date of the acquisition were \$550,000 and \$300,000, respectively. Explain how the book value of Lipley could be less than the net FMV of Lipley's assets and liabilities, which in turn is less than the price Multiplex paid for Lipley's common stock.

## E8-14

Appendix 8A: 100 percent purchases in excess of the net market value of the assets and liabilities

The following chart describes six transactions where 100 percent of a subsidiary's voting stock was purchased for cash:

| Purchase Price | Book Value | Net FMV in Excess of Book Value | Goodwill |
|----------------|------------|---------------------------------|----------|
| 1. ?           | \$ 7,000   | \$1,000                         | \$1,000  |
| 2. \$ 6,000    | 6,000      | ?                               | 0        |
| 3. 12,000      | ?          | 4,000                           | 3,000    |
| 4. 15,000      | 10,000     | 3,000                           | ?        |
| 5. ?           | 2,000      | 1,000                           | 3,000    |
| 6. 12,000      | 4,000      | 8,000                           | ?        |

Provide the missing values.



**E8-15**

Appendix 8A:  
Per-share book  
and market value

The book value of a share of Camden common stock on December 31 is \$12. The balance sheet value and the market value of the company's assets and liabilities as of that date follow:

|                         | Balance Sheet Value | Market Value    |
|-------------------------|---------------------|-----------------|
| <b>Cash</b>             | <b>\$15,000</b>     | <b>\$15,000</b> |
| <b>Receivables</b>      | <b>26,000</b>       | <b>24,000</b>   |
| <b>Inventories</b>      | <b>15,000</b>       | <b>25,000</b>   |
| <b>Fixed assets</b>     | <b>40,000</b>       | <b>47,000</b>   |
| <b>Liabilities</b>      | <b>(60,000)</b>     | <b>(60,000)</b> |
| <b>Net book value</b>   | <b>\$36,000</b>     |                 |
| <b>Net market value</b> |                     | <b>\$51,000</b> |

On December 31, Conglomerate, Inc. purchased 100 percent of the outstanding stock of Camden for \$22 per share.

- How many shares of common stock did Camden have outstanding as of December 31?
- Compute the per-share net market value of Camden's common stock.
- Why would Conglomerate pay more than the per-share market value for a share of Camden common stock?
- Prepare the entry that reflects the acquisition.

**E8-16**

Appendix 8A:  
Computing goodwill  
and noncontrolling  
interest

Maxwell Industries paid \$18 per share for 80 percent of the 10,000 outstanding shares of Kendall Hall. The balance sheet of Kendall Hall and additional market value information follow.

|                             | Historical Cost  | FMV              |
|-----------------------------|------------------|------------------|
| <b>Current assets</b>       | <b>\$125,000</b> | <b>\$150,000</b> |
| <b>Noncurrent assets</b>    | <b>65,000</b>    | <b>80,000</b>    |
| <b>Liabilities</b>          | <b>70,000</b>    | <b>70,000</b>    |
| <b>Shareholders' equity</b> | <b>120,000</b>   | <b>—</b>         |

- Compute the amounts of goodwill and noncontrolling interest recognized by Maxwell.
- Compute goodwill and noncontrolling interest assuming that Maxwell uses IFRS and chooses the accounting treatment that assumes that the minority shareholders have no equity interest in the goodwill.
- Where on the balance sheet would noncontrolling interest be disclosed?

**E8-17**

Appendix 8A:  
Completing  
a consolidated  
work sheet

Glover Chemical purchased 100 percent of the outstanding stock of Ward Supply on December 31 for \$100,000 cash. As of that date, the FMVs of the inventory and fixed assets of Ward equaled \$70,000 and \$125,000, respectively. Assume that cash, accounts receivable, and the liabilities are on the books of Ward at FMV. Provide the information to complete the following consolidated work sheet, which already reflects the entry recorded at acquisition.

| Accounts                        | Glover                  | Ward                  | Adjustments and Eliminations |     | Consolidated Balance Sheet |
|---------------------------------|-------------------------|-----------------------|------------------------------|-----|----------------------------|
|                                 |                         |                       | Dr.                          | Cr. |                            |
| <b>Cash</b>                     | <b>73,000</b>           | <b>10,000</b>         |                              |     |                            |
| <b>Accounts receivable</b>      | <b>110,000</b>          | <b>40,000</b>         |                              |     |                            |
| <b>Inventory</b>                | <b>220,000</b>          | <b>60,000</b>         |                              |     |                            |
| <b>Investment in subsidiary</b> | <b>100,000</b>          | <b>—</b>              |                              |     |                            |
| <b>Fixed assets</b>             | <b>615,000</b>          | <b>120,000</b>        |                              |     |                            |
| <b>Goodwill</b>                 | <b>30,000</b>           | <b>—</b>              |                              |     |                            |
| <b>Total assets</b>             | <b><u>1,148,000</u></b> | <b><u>230,000</u></b> |                              |     |                            |

(continued)

|   |                         |                       |
|---|-------------------------|-----------------------|
| Accounts payable                                  | 80,000                  | 70,000                |
| Long-term notes                                   | 450,000                 | 80,000                |
| Common stock                                      | 500,000                 | 70,000                |
| Retained earnings                                 | <u>118,000</u>          | <u>10,000</u>         |
| <b>Total liabilities and shareholders' equity</b> | <b><u>1,148,000</u></b> | <b><u>230,000</u></b> |

## PROBLEMS

### P8-1

Applying the mark-to-market rule to investments in equity securities

O'Leary Enterprises began investing in short-term equity securities in 2011. The following information was extracted from its 2011 internal financial records. Houser and Miller were classified as trading securities, while Letter and Nordic were classified as available-for-sale securities.

| Security         | Purchases         | Sales             | Total Dividends Received | 12/31/08 Market Value* |
|------------------|-------------------|-------------------|--------------------------|------------------------|
| Houser Company   | 90 shares @ \$22  | 60 shares @ \$25  | \$40                     | \$25                   |
| Miller, Inc.     | 180 shares @ \$40 | 90 shares @ \$30  | 85                       | 35                     |
| Letter Books     | 75 shares @ \$48  | 5 shares @ \$55   | 30                       | 46                     |
| Nordic Equipment | 170 shares @ \$70 | 145 shares @ \$95 | 50                       | 90                     |

\*Per share

### REQUIRED:

- Compute the effect on reported 2011 income from all investment transactions and price changes.
- Compute the effect on reported 2011 income if O'Leary Enterprises exercised the fair market value option for all its investments.

### P8-2

Trading securities: Purchases, sales, dividends, and end-of-period adjustments

Anderson Cabinets began operations during 2005. During the initial years of operations, the company invested primarily in fixed assets to promote growth. During 2011, H. Hurst, the company president, decided that the company was sufficiently stable that it could now invest in short-term marketable securities, classified as trading securities. During 2011, the company entered into the following transactions concerning marketable securities:

- March 10 Purchased 1,000 shares of Arctic Oil & Gas for \$28 per share.
- March 31 Purchased 800 shares of Humphries Manufacturing for \$10 per share.
- May 26 Received a cash dividend of \$1.25 per share from Arctic Oil & Gas.
- July 10 Purchased 1,000 shares of Kingsman Game Co. for \$18 per share.
- September 11 Sold 800 shares of Arctic Oil & Gas for \$35 per share.
- September 27 Sold 500 shares of Humphries Manufacturing for \$8 per share.
- October 19 Purchased 1,000 shares of Quimby, Inc. for \$25 per share.
- November 6 Received a cash dividend of \$1.25 per share from Arctic Oil & Gas.
- December 8 Sold the remaining shares of Arctic Oil & Gas and Humphries Manufacturing for \$30 and \$15, respectively.
- December 31 According to the *Wall Street Journal*, the market values of these securities at the close of business on December 31 follow:

|                         |      |
|-------------------------|------|
| Arctic Oil & Gas        | \$32 |
| Humphries Manufacturing | 14   |
| Kingsman Game Company   | 15   |
| Quimby, Inc.            | 26   |

**REQUIRED:**

- a. Prepare the necessary journal entries for each of these transactions. Assume that any dividends were declared and paid on the same day.
- b. Prepare the short-term equity securities section of the balance sheet as of December 31, 2011.
- c. Compute the impact of these transactions on the income statement for the year ended December 31, 2011.

**P8-3**

Changing security investment classifications

On October 18, 2011, Daley Inc. purchased 100 shares of Orthon at \$32 per share. The investment was classified as available-for-sale securities. The shares were held throughout the remainder of 2011 and 2012, and by December 31, 2011 and 2012, the per-share market price had risen to \$40 and \$50, respectively. On December 31, 2012, Daley decided to change the classification from available-for-sale to trading securities.

**REQUIRED:**

- a. Provide the journal entries recorded at October 18, 2011; December 31, 2011; and December 31, 2012.
- b. Assume that the investment was originally classified as trading securities and then changed to available-for-sale on December 31, 2012. Provide the journal entries recorded at October 18, 2011; December 31, 2011; and December 31, 2012.
- c. Compute the 2011 and 2012 income effects under the two assumptions.

**P8-4**

Window dressing and the mark-to-market rule

Levy Company and Guyer Books made the same equity investment—200 shares of Watson Manufacturing at a cost of \$12 per share—on November 18. On December 31, the market value of Watson had risen to \$45 per share. Guyer Books held its investment in Watson, while Levy sold the shares and immediately repurchased them at the December 31 market value.

**REQUIRED:**

- a. Compute the balance sheet value and income effect associated with these events recorded by the two companies, assuming that the investment was classified as trading and available-for-sale. That is, fill in the following chart with the appropriate dollar values.

| Guyer Books         |               | Levy Co.            |               |
|---------------------|---------------|---------------------|---------------|
| Balance Sheet Value | Income Effect | Balance Sheet Value | Income Effect |

**Investment classified as:**

- Trading securities**
- Available-for-sale securities**

- b. Discuss the differences.

**P8-5**

Trading versus available-for-sale classifications

Rochester Enterprises purchased 500 shares of Newark Corporation for \$15 per share on June 15, 2011, when Newark had approximately 10,000 equity shares outstanding. Rochester held the investment throughout 2011, and as of December 31, the per-share market price had risen to \$18. On January 16, 2012, Rochester sold 300 shares for \$19 per share, and on October 20 sold the remaining 200 shares for \$13 each. The company held no other security investments during this time period.

**REQUIRED:**

- a. Assume that Rochester classified the investment as trading securities, and provide the journal entries recorded on June 15, 2011; December 31, 2011; January 16, 2012; and October 20, 2012.

- Assume that Rochester classified the investment as available-for-sale securities, and provide the journal entries recorded on June 15, 2011; December 31, 2011; January 16, 2012; and October 20, 2012.
- Compute the net cash effect of these transactions across 2011 and 2012.
- Compute the 2011, 2012, and total income effect, assuming that the investment was classified as trading securities.
- Compute the 2011, 2012, and total income effect, assuming that the investment was classified as available-for-sale securities.
- Comment on the difference between the two assumptions.

**P8-6**

Inferring from  
balance sheet  
disclosures

The following information was taken from the 2011 annual report of Orleans Enterprises:

|                           | 2011            | 2010            |
|---------------------------|-----------------|-----------------|
| <b>Trading securities</b> | <b>\$25,440</b> | <b>\$27,000</b> |

Related footnote: The 2011 and 2010 balances in the trading securities account consist of 1,600 and 1,800 equity shares of Atwater Company, respectively. During 2011, in the only transaction related to these securities, 200 shares were sold for \$15.50 each.

**REQUIRED:**

- Compute the 2011 income effect related to the company's investment in Atwater. Divide the effect into its realized and unrealized components.
- Repeat (a), assuming that the securities were classified as available-for-sale and that Orleans's first investment in these securities occurred on December 31, 2010.

**REAL DATA****P8-7**

Inferring information  
about trading and  
available-for-sale  
investments

JPMorgan Chase carries portfolios of both trading securities and available-for-sale securities. At the end of 2008 and 2007, the trading securities were valued at \$347.4 billion and \$414.3 billion, respectively; and the available-for-sale securities were valued at \$205.9 billion and \$85.4 billion, respectively. Together, the investments comprise about 25 percent of the company's total assets as of December 31, 2008. Unrealized gains reported on the 2008 income statement totaled \$9.9 billion.

**REQUIRED:**

- Trading securities are carried on the balance sheet at market value. Compute the net decrease in the investment in trading securities during 2008.
- The net increase in the investment in available-for-sale securities reported on the statement of cash flows during 2008 was approximately \$107.4 billion. Compute the unrealized net gains on the available-for-sale securities during 2008. On which financial statement would this dollar amount be found?

**P8-8**

Long-term equity  
investments: The  
mark-to-market  
method versus the  
equity method

A summary of the December 31, 2010, balance sheet of Masonite Tires follows:

|               |                         |                             |                         |
|---------------|-------------------------|-----------------------------|-------------------------|
| <b>Assets</b> | <b>\$160,000</b>        | <b>Liabilities</b>          | <b>\$ 70,000</b>        |
|               |                         | <b>Shareholders' equity</b> | <b>90,000</b>           |
| <b>Total</b>  | <b><u>\$160,000</u></b> | <b>Total</b>                | <b><u>\$160,000</u></b> |

On January 1, 2011, Masonite purchased 2,000 (20% of the outstanding common shares) shares of Bingo Boots for \$40,000 and held the investment throughout 2011 and 2012. During 2011 and 2012, Bingo earned net income of \$15,000 and \$20,000, respectively. Bingo paid total dividends of \$10,000 and \$15,000 during 2011 and 2012. The per-share prices of Bingo common stock as of the end of 2011 and 2012 were \$18 and \$21, respectively. During 2011 and 2012, Masonite generated revenues (excluding revenues related to the investment in Bingo) of \$85,000 and \$75,000, respectively, and incurred expenses of \$50,000 and \$70,000, respectively. Assume that all these revenues and expenses involve cash. Masonite pays no dividends.

**REQUIRED:**

- a. Assume that Masonite exercises its option to use the mark-to-market method.
  - (1) Prepare a balance sheet as of January 1, 2011.
  - (2) Prepare a balance sheet as of December 31, 2011, and an income statement for the year ended December 31, 2011.
  - (3) Prepare a balance sheet as of December 31, 2012, and an income statement for the year ended December 31, 2012.
- b. Assume that Masonite uses the equity method.
  - (1) Prepare a balance sheet as of January 1, 2011.
  - (2) Prepare a balance sheet as of December 31, 2011, and an income statement for the year ended December 31, 2011.
  - (3) Prepare a balance sheet as of December 31, 2012, and an income statement for the year ended December 31, 2012.
- c. Identify some reasons why the management of Masonite may wish to use the mark-to-market method instead of the equity method. Describe why the equity method might be preferred. Does holding 20 percent of a company's outstanding common stock necessarily mean that the investor company can exert substantial influence over the investee?

**P8-9**

The equity method versus consolidated financial statements

A summary of the 2011 balance sheet of Alsop, Ltd., follows:

|               |                         |                             |                         |
|---------------|-------------------------|-----------------------------|-------------------------|
| <b>Assets</b> | <b>\$180,000</b>        | <b>Liabilities</b>          | <b>\$ 90,000</b>        |
|               |                         | <b>Shareholders' equity</b> | <b>90,000</b>           |
| <b>Total</b>  | <b><u>\$180,000</u></b> | <b>Total</b>                | <b><u>\$180,000</u></b> |

On January 1, 2011, Alsop acquired 100 percent of the outstanding common stock of Martin Monthly for \$62,000 cash. At the time of the acquisition, the fair market values of the assets and liabilities of Martin were \$86,000 and \$64,000, respectively. During 2011, Martin operated as a subsidiary of Alsop; it recognized \$15,000 of net income and paid a \$10,000 dividend.

**REQUIRED:**

- a. Account for the acquisition as a purchase. Provide the journal entry to record the acquisition, and prepare Alsop's consolidated balance sheet as of January 1, 2011.
- b. Account for the acquisition using the equity method. Provide the journal entry to record the acquisition, and prepare Alsop's balance sheet as of January 1, 2011.
- c. Compute the debt/equity ratios produced by the two methods of accounting for this investment. Explain why Alsop's management might wish to use the equity method instead of preparing consolidated financial statements.

**P8-10**

Inferring information from the financial statements

Excerpts from the financial statements of Macy Limited are as follows. (Numbers are in thousands.)

|   | 2011  | 2010  |
|---|-------|-------|
| <b>BALANCE SHEET</b>                                |       |       |
| <b>Assets:</b>                                      |       |       |
| Short-term investments                              | \$290 | \$160 |
| Investment in affiliate                             | 530   | 0     |
| <b>Shareholders' equity:</b>                        |       |       |
| Unrealized price decrease on short-term investments | (20)  | 0     |
| <b>INCOME STATEMENT</b>                             |       |       |
| Realized gain on short-term investments             | \$ 80 |       |
| Unrealized gain on short-term investments           | 30    |       |
| Income on equity investment                         | 40    |       |

(continued)

**STATEMENT OF CASH FLOWS**

**Operating section (The following amounts were subtracted from net income in the calculation of net cash from operating activities.):**

|  |         |
|--|---------|
| Gains on short-term investments          | \$(110) |
| Equity income in excess of cash received | (30)    |
| <b>Investing section:</b>                |         |
| Investment in affiliate                  | (500)   |
| Investment in short-term investments     | (280)   |
| Sale of short-term investments           | 240     |

*Footnotes:*

**Short-term investments.** As of December 31, 2010, trading securities were valued at \$130; during 2011, no available-for-sale securities were acquired or sold.

**Investment in affiliate.** On January 30, 2011, the company purchased 40 percent (50,000 shares) of the outstanding equity of Lehmon Financial Services at \$10 per share.

**REQUIRED:**

Compute the following dollar amounts.

- The December 31, 2011, market value of the short-term equity investments classified as available-for-sale.
- The balance sheet carrying value of the trading securities sold during 2011.
- Compute the earnings-per-share dollar amount reported by the affiliate.
- Compute the per-share dividend declared by the affiliate.

**P8-11**

Appendix 8A:  
100 percent purchase  
and the recognition  
of goodwill

The condensed balance sheets as of December 31 for Rice and Associates and Rachel Excavation are as follows:

|   | Rice                      | Rachel                  |
|---|---------------------------|-------------------------|
| <b>ASSETS</b>   |                           |                         |
| Cash  | \$ 196,000                | \$ 10,000               |
| Accounts receivable                                       | 150,000                   | 40,000                  |
| Inventory   | 300,000                   | 40,000                  |
| Fixed assets  | 400,000                   | 130,000                 |
| <b>Total assets</b>                                       | <b><u>\$1,046,000</u></b> | <b><u>\$220,000</u></b> |
| <b>LIABILITIES AND SHAREHOLDERS' EQUITY</b>               |                           |                         |
| Accounts payable  | \$ 80,000                 | \$ 20,000               |
| Long-term liabilities                                     | 300,000                   | 50,000                  |
| Common stock  | 400,000                   | 90,000                  |
| Additional paid-in capital                                | 140,000                   | 10,000                  |
| Retained earnings   | 126,000                   | 50,000                  |
| <b>Total liabilities and<br/>    shareholders' equity</b> | <b><u>\$1,046,000</u></b> | <b><u>\$220,000</u></b> |

As of December 31, the market values of Rachel's inventories and fixed assets were \$70,000 and \$120,000, respectively. Liabilities are at FMV on the balance sheet.

On December 31, Rice and Associates purchased all of the outstanding common shares of Rachel Excavation for \$180,000 cash. The preceding balance sheets were prepared immediately prior to the acquisition.

**REQUIRED:**

- Prepare the journal entry recorded by Rice to recognize the acquisition.
- Prepare a consolidated work sheet and a consolidated balance sheet.

**P8-12**

Appendix 8A:  
Noncontrolling interest  
and no goodwill

Assume that Rice and Associates in P8-11 purchased 80 percent of the outstanding shares of Rachel for \$136,000 cash.

**REQUIRED:**

- Prepare the journal entry recorded by Rice to recognize the acquisition.
- Prepare a consolidated work sheet and a consolidated balance sheet.

**P8-13**

Appendix 8A:  
Noncontrolling interest  
and goodwill

Assume that Rice and Associates in P8-11 purchased 80 percent of the 10,000 shares of outstanding stock of Rachel for \$140,000 cash.

**REQUIRED:**

- Prepare the journal entries recorded by Rice to recognize the acquisition.
- Prepare a consolidated work sheet and a consolidated balance sheet.
- Compute noncontrolling interest and goodwill assuming that Rice uses IFRS and exercises its option to compute noncontrolling interest assuming that the minority shareholders have no equity interest in the goodwill.

**P8-14**

Appendix 8A:  
Allocating the excess  
purchase price among  
tangible assets and  
goodwill

Assume the same facts as in P8-11, except that the FMVs for the inventory and fixed assets of Rachel are not as precisely specified. That is, appraisers have indicated that the FMV of the inventory is between \$65,000 and \$75,000 and that the FMV of the fixed assets is between \$115,000 and \$125,000. You, as the accountant for Rice and Associates, can use any value within these ranges to record the acquisition.

**REQUIRED:**

- Assume that you wish to maximize reported income in the next period. What dollar amounts would you allocate to Rachel's inventory, fixed assets, and goodwill when recording the acquisition? Explain.
- Assume that you wish to minimize reported income in the next period (e.g., when preparing the transaction for tax purposes). What dollar amounts would you allocate to Rachel's inventory, fixed assets, and goodwill when recording the acquisition? Explain.

**P8-15**

Appendix 8A:  
Noncontrolling interest  
and goodwill

Groomer purchased a controlling interest in three companies during 2011. Financial information concerning the three companies follows:

|   | <b>Company X</b> | <b>Company Y</b> | <b>Company Z</b> |
|---|------------------|------------------|------------------|
| <b>Cash</b>   | \$ 6,000         | \$ 4,000         | \$ 2,000         |
| <b>Accounts receivable</b>                            | 12,000           | 9,000            | 7,000            |
| <b>Inventory</b>                                      | 30,000           | 12,000           | 18,000           |
| <b>Fixed assets</b>                                   | 70,000           | 30,000           | 15,000           |
| <b>Total assets</b>                                   | <u>\$118,000</u> | <u>\$55,000</u>  | <u>\$42,000</u>  |
| <b>Current liabilities</b>                            | \$ 7,000         | \$12,000         | \$ 5,000         |
| <b>Long-term liabilities</b>                          | 25,000           | 20,000           | 18,000           |
| <b>Common stock</b>                                   | 50,000           | 10,000           | 15,000           |
| <b>Retained earnings</b>                              | 36,000           | 13,000           | 4,000            |
| <b>Total liabilities and shareholders' equity</b>     | <u>\$118,000</u> | <u>\$55,000</u>  | <u>\$42,000</u>  |
| <b>FMV:</b>   |                  |                  |                  |
| <b>Inventory</b>                                      | \$ 45,000        | \$18,000         | \$18,000         |
| <b>Fixed assets</b>                                   | 75,000           | 35,000           | 15,000           |
| <b>Shares of stock outstanding before acquisition</b> | 10,000           | 1,000            | 2,000            |

All other assets and liabilities on the balance sheet are at FMV.

Groomer purchased 8,000, 600, and 1,500 shares of Company X, Company Y, and Company Z, respectively. The share prices and cash payments follow.

|                  |                            |
|------------------|----------------------------|
| <b>Company X</b> | 8,000 × \$10.60 = \$84,800 |
| <b>Company Y</b> | 600 × 40.00 = 24,000       |
| <b>Company Z</b> | 1,500 × 11.00 = 16,500     |

**REQUIRED:**

For each company, prepare the journal entry to record the acquisition by Groomer. Then, for each company, prepare a journal entry that could have been recorded to include the individual assets and liabilities on the books of Groomer.

**P8-16**

Appendix 8A:  
Consolidated  
statements, the equity  
method, and debt  
covenants

Mammoth Enterprises purchased 50 percent of the outstanding stock of Atom, Inc. on December 31 for \$60,000 cash. On that date, the book value of Atom's net assets was \$70,000. The market value of Atom's assets was \$180,000, \$20,000 above book value. Mammoth's condensed balance sheet, immediately before the acquisition, follows:

| Assets              |                         | Liabilities and Shareholders' Equity |                  |
|---------------------|-------------------------|--------------------------------------|------------------|
| Current assets      | \$150,000               | Current liabilities                  | \$ 30,000        |
| Noncurrent assets   | 350,000                 | Long-term liabilities                | 200,000          |
|                     |                         | Common stock                         | 100,000          |
|                     |                         | Retained earnings                    | 170,000          |
|                     |                         | <b>Total liabilities and</b>         |                  |
|                     |                         | <b>shareholders' equity</b>          | <b>\$500,000</b> |
| <b>Total assets</b> | <b><u>\$500,000</u></b> |                                      |                  |

Mammoth entered into a debt covenant earlier in the year that requires the company to maintain a debt/equity ratio of less than 1:1.

**REQUIRED:**

- Compute Mammoth's debt/equity ratio both before and after the acquisition. Consider minority interest a liability.
- Explain why in this situation Mammoth would probably prefer the equity method instead of treating this transaction as a purchase and preparing consolidated financial statements.

**ISSUES FOR DISCUSSION****REAL DATA****ID8-1**

Equity adjustments  
for marketable  
securities

H&R Block reported the following account on its statement of shareholders' equity (dollars in thousands):

|   | 2007              | 2008             | 2009             |
|---|-------------------|------------------|------------------|
| <b>Change in net unrealized gain<br/>on marketable securities</b> | <b>\$(26,152)</b> | <b>\$(4,197)</b> | <b>\$(4,000)</b> |

**REQUIRED:**

- Did the market value of H&R Block's marketable securities increase or decrease in 2007, 2008, and 2009?
- How could H&R Block manage its earnings by choosing when to sell certain of its marketable securities?
- Explain how the FASB requirement on comprehensive income will influence the reporting practices of H&R Block.

**REAL DATA****ID8-2**

Short-term equity  
investments classified  
as available-for-sale

The following was taken from the 2009 annual report of H&R Block:

**Marketable securities—available for sale:** *Proceeds from the sales of available-for-sale securities were \$8.3 million, \$13.9 million, and \$3.5 million during fiscal years 2009, 2008, and 2007, respectively. Gross realized gains on those sales during 2009, 2008, and 2007 were \$0.7 million, \$0.4 million, and \$0.3 million, respectively; gross realized losses were \$1.3 million, \$0.1 million, and \$0.1 million, respectively.*



**REQUIRED:**

- Describe the difference between trading securities and available-for-sale securities.
- How is the company's total comprehensive income affected by the dollar values reported in the footnote?
- Compute the cost of the securities sold during 2007, 2008, and 2009.

**REAL DATA****ID8-3**

Equity method

The following excerpts, all of which related to the equity investment account, were taken from the 2008 annual report of AT&T (dollars in millions):

|                                    | 2008    | 2007    |
|------------------------------------|---------|---------|
| <b>BALANCE SHEET</b>               |         |         |
| Investment in affiliates           | \$2,332 | \$2,270 |
| <b>INCOME STATEMENT</b>            |         |         |
| Equity in net income of affiliates | 819     | 692     |
| <b>FOOTNOTES</b>                   |         |         |
| Dividends received from affiliates | 165     |         |

**REQUIRED:**

- The statement of cash flows indicates that no equity investments in affiliates were sold in 2008. Estimate how much was invested in affiliates during 2008.
- What would you expect to see on AT&T's 2008 statement of cash flows related to this investment activity?
- Explain why equity income is or is not a good measure of the cash AT&T received from its equity investments.

**REAL DATA****ID8-4**

IFRS financial statements and the equity method

The 2008 IFRS-based financial statements of EADS N.V., the owner of Airbus, the French-based airline manufacturer, included the following account information (in million euros).

|  | 2008  | 2007  |
|--|-------|-------|
| <b>INCOME STATEMENT:</b>   |       |       |
| Share of profits from associates accounted for under equity method | 188   | 210   |
| <b>BALANCE SHEET:</b>  |       |       |
| Investments in associates accounted for under equity method        | 2,356 | 2,238 |
| <b>STATEMENT OF CASH FLOWS:</b>                                    |       |       |
| Operating section—   |       |       |
| Results of companies accounted for by equity method                | (188) | (210) |
| Investing section—   |       |       |
| Payments for investments in associates                             | (122) | (132) |
| Proceeds from disposals of associates                              | 180   | 186   |

**REQUIRED:**

- Explain the meaning of each of the 2008 disclosures.
- Estimate the balance sheet carrying amount of the investments in associates disposed of during 2008. (*Hint:* Attempt to recreate the activity in the "investments in associates accounted for under the equity method" account.)
- Was there a gain or loss on the disposal? How large?

**REAL DATA****ID8-5**

Equity method and the fair market value option

Sony Corporation, the Japanese electronics manufacturer, prepares U.S. GAAP-based financial statements (in million yen). On its 2008 balance sheet it reported investments in affiliate companies of 381,188 and 236,779 for 2008 and 2007, respectively. It also reported income

from equity investees of 31,509 on the 2008 income statement, and (31,509) appeared in the operating section of the 2008 statement of cash flows.

**REQUIRED:**

- Describe the factors that may have explained the increase in the balance sheet value of investments in affiliate companies from 2007 to 2008.
- Why does  $-31,509$  appear in the operating section of the 2008 statement of cash flows?
- How would income from these investments be computed if Sony chose to exercise the option to account for these equity investments using the fair market value option? What additional information would be needed, and what additional disclosures would be required?

**REAL DATA****ID8-6**

Evaluating the equity method

In 2008, Chevron reported net income of \$23.9 billion, \$5.4 billion of which was income recognized on investments in affiliate companies accounted for under the equity method. In that same year, Chevron received much less than that amount in dividends from these affiliates. Some accountants have argued that the net income amount reported by Chevron from the equity method is distorted because the company received much less cash on its investment.

**REQUIRED:**

- Comment on this criticism of the equity method. In your answer, explain the accounting procedures that characterize the equity method and why income is recognized that is not always backed up by cash receipts. Also explain why investors and creditors must be careful when analyzing financial statements that reflect the use of the equity method.
- Chevron uses the indirect method of presenting the statement of cash flows. Indicate the direction of the adjustment to net income associated with earnings and dividends under the equity method that appears in the operating section of the statement.

**REAL DATA****ID8-7**

Consolidating a finance subsidiary's financial statement: Economic consequences

Prior to Financial Accounting Standard 94 in 1988, wholly owned finance subsidiaries of major U.S. companies were accounted for by the parent using the equity method. These companies justified the procedure by claiming that the operations of the subsidiaries were so unlike those of the parents that consolidating the subsidiaries' financial statements would distort those of the parents. At the same time, by using the equity method, the parents were able to avoid including the subsidiaries' liabilities, which were often quite large, on their consolidated balance sheets. It was estimated, for example, that adding the liabilities of General Motors Acceptance Company, a finance subsidiary, to those of General Motors (GM), the parent, would have quadrupled GM's debt/equity ratio.

*Forbes* commented that if the FASB required such companies to consolidate their finance subsidiaries, it "could cause difficulties with bond indenture agreements and loan covenants requiring that certain ratios be maintained." Others have commented that such problems are of little concern because they can be avoided by writing debt covenants so that all financial ratios are defined in terms of generally accepted accounting principles. Moreover, most financial statement users are reasonably sophisticated and are already aware of the subsidiary's debt. Credit-rating agencies claim, for example, that as long as the debt of the subsidiary is disclosed, it matters little whether it is consolidated or not.

**REQUIRED:**

- Briefly explain the difference between using the equity method and preparing consolidated financial statements, and describe how requiring the consolidation of subsidiary financial statements could "cause difficulties with bond indenture agreements."
- How might the fact that most financial statement users are reasonably sophisticated affect the nature of the accounting standards developed by the FASB?

**REAL DATA****ID8-8**

Classifying marketable securities

In its 2009 annual report, Starbucks shows that as of September 27, 2009, it owned \$21.5 million in marketable securities designated as available-for-sale. On the same date, Starbucks owned \$44.8 million in marketable securities designated as trading securities. Assume that Starbucks sold no marketable securities during the month of October, 2009.

**REQUIRED:**

- What would have happened to Starbucks's net income for the month ended October 31, 2009, if the stock market crashed and share price valuations fell, on average, by 50 percent?
- Under the same scenario as (a), what could management have done to lessen the impact of the crash on net income? What management decision would have increased the negative impact on net income?
- Why might management want to classify marketable securities as available-for-sale instead of trading?

**REAL DATA****ID8-9**

Earnings due to selling investments

The *Wall Street Journal* recently reported quarterly earnings for the technology company Acer, Inc. and the oil company Royal Dutch Shell. In the opening paragraph of the Acer article, it stated that there was a "41 percent jump in first-quarter profits, thanks in part to the sale of shares held in other companies." Shell's strong profits were "boosted by gains from proceeds of sales in the company's portfolio of equity investments."

**REQUIRED:**

- From the preceding quotes can you tell whether the securities were classified as available-for-sale or trading? Why?
- Why would a financial statement reader want to separate profits from investment sales from other profits?
- What earnings concept would an analyst be examining by separating different kinds of earnings?

**REAL DATA****ID8-10**

Available-for-sale and earnings management

Large U.S. corporations, especially banks, tend to hold larger portfolios of securities they classify as available-for-sale than of securities they classify as trading. On its 2008 balance sheet, for example, Bank of New York reported available-for-sale securities of \$32.1 billion and trading securities of only \$11.1 billion. Some have commented that classifying investments as available-for-sale gives management greater ability to manage reported earnings from one year to the next.

**REQUIRED:**

Explain how the methods used to account for investments classified as available-for-sale (compared to the methods used to account for trading securities) could give management greater ability to manage reported earnings.

**REAL DATA****ID8-11**

Comprehensive income and its components

A consolidated statement of comprehensive income for Eli Lilly, a major pharmaceutical, is provided below (dollars in millions).

|  | 2008             | 2007           | 2006           |
|--|------------------|----------------|----------------|
| <b>Net income</b>                                  | <b>\$(2,072)</b> | <b>\$2,953</b> | <b>\$2,663</b> |
| <b>Other comprehensive income (loss):</b>          |                  |                |                |
| <b>Foreign currency translation adjustments</b>    | <b>(766)</b>     | <b>757</b>     | <b>542</b>     |
| <b>Net unrealized gains (losses) on securities</b> | <b>(191)</b>     | <b>(11)</b>    | <b>(3)</b>     |
| <b>Other items (inc. SFAS 158)</b>                 | <b>(1,843)</b>   | <b>656</b>     | <b>81</b>      |
| <b>Comprehensive income</b>                        | <b>\$(4,872)</b> | <b>\$4,355</b> | <b>\$3,283</b> |

**REQUIRED:**

Define comprehensive income and describe the events that led to the dollar values (positive and negative) associated with foreign currency translation adjustments and net unrealized gains (losses) on securities.

**REAL DATA****ID8-12**

Noncontrolling interest

If a company owns over 50 percent of another company (subsidiary), the financial statements of the two entities are consolidated into one larger entity. For example, the 2008 financial statements of Verizon Communications, Inc. include the financial statements of Verizon Wireless, the cellular phone operator, owned 55 percent by Verizon Communications and 45 percent by Vodafone. Vodafone's interest in the assets and liabilities reported on Verizon's balance

sheet are represented in an account on the balance sheet called “minority interest” (noncontrolling interest) in the amount of approximately \$37 billion, which is over 18 percent of Verizon’s total assets.

**REQUIRED:**

- a. Explain how noncontrolling interest ends up on the balance sheet.
- b. Discuss whether it should be classified as an asset, a liability, or a shareholders’ equity item.

**REAL DATA****ID8-13**

Nike SEC Form 10-K

The SEC Form 10-K of NIKE is reproduced in Appendix C.

**REQUIRED:**

Review Nike SEC Form 10-K, and answer the following questions.

- a. Does NIKE carry investment portfolios in trading and available-for-sale securities?
- b. Has NIKE exercised the fair market value option for any of these investments? If so, which ones, and what level of measurement (1, 2, or 3) did NIKE rely upon to estimate the market values?
- c. Did NIKE have any major acquisitions during 2008? Replicate the entry NIKE recorded to account for this acquisition.
- d. How much goodwill did NIKE report on its 2009 and 2008 balance sheets? From 2008 to 2009, NIKE had a decrease in goodwill. What does this indicate about management’s evaluation of the future of the companies it previously purchased? Is there any evidence on the 2009 income statement?
- e. Why does a goodwill impairment appear in the operating section of the 2009 statement of cash flows?
- f. Does NIKE have significant investments in companies in which it does not have control?