

## 15

## OBJECTIVES

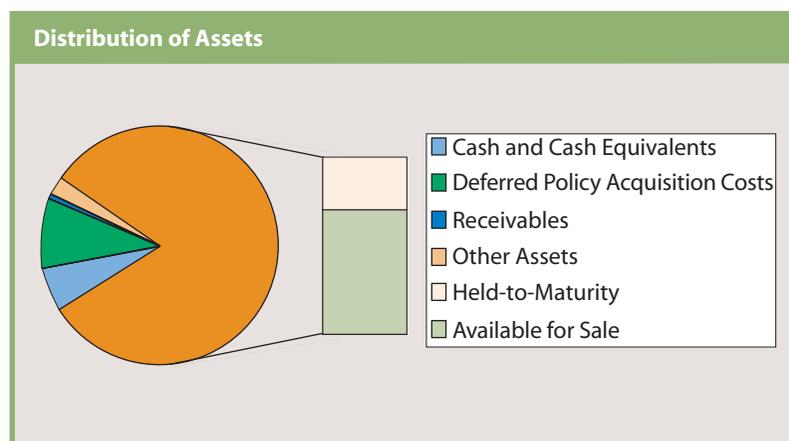
After reading this chapter you will be able to:

- 1 Explain the classification and valuation of investments.
- 2 Account for investments in debt and equity trading securities.
- 3 Account for investments in available-for-sale debt and equity securities.
- 4 Account for investments in held-to-maturity debt securities, including amortization of bond premiums and discounts.
- 5 Understand transfers and impairments.
- 6 Understand disclosures of investments.
- 7 Explain the conceptual issues regarding investments in marketable securities.
- 8 Account for investments using the equity method.
- 9 Describe additional issues for investments.
- 10 Account for derivatives of financial instruments. (Appendix)

## Investments

### Gains Trading—Good Business or Earnings Management?

A company invests in securities of other companies for reasons ranging from obtaining additional income to improving its competitive position. For some companies, such as financial institutions and insurers, these investments are a major part of the financial position of the company. For example, the health and accident insurance provider, **Aflac**, reported more than \$48 billion of investments on its 2004 balance sheet. As the following chart shows, investments in other companies represent the majority of Aflac's total assets.



Furthermore, of the almost \$48 billion of investments, nearly 70% are classified as available-for-sale, with the remainder classified as held-to-maturity. Finally, more than \$2 billion in unrealized gains on the available-for-sale securities appear as accumulated



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other comprehensive income on its balance sheet and have never been recognized on the income statement.

An historical criticism of accounting for investments is the ability of a company to selectively sell assets that have risen in value so that it can include the gains in income, while not selling securities that have declined in value and thereby avoid recognizing the losses. This practice has often been referred to as “gains trading.” By allowing unrealized gains or losses on available-for-sale securities to bypass the income statement and be reported directly in stockholders’ equity on a company’s balance sheet, current accounting standards provide the company with the ability to manage its income through its decisions as to which securities to sell. Because the financial effects can be quite significant for companies with large investments like Aflac, it is critical to analyze the extensive disclosures in the notes to the financial statements to gain a clear picture of the financial condition and operating performance of a company.

### FOR FURTHER INVESTIGATION

For a discussion of investments, consult the Business & Company Resource Center (BCRC):

- FAS 115: The Effect of Gains Trading. Lynn Suberly. *Bank Accounting and Finance*. 0894-3958, February 2004, v17, i2, p17(7).

A corporation buys securities of other corporations for many reasons. One reason is to obtain additional income. In Chapter 7 we emphasized that proper cash management requires the temporary investment of excess cash. Many companies have excess cash because the period of highest cash inflows does not coincide with the period of highest cash needs. Seasonal fluctuations in sales patterns frequently result in the period of greatest cash needs preceding the peak production or purchasing period when inventories are increasing. On the other hand, peak cash inflows follow the highest levels of sales activity. For efficient cash management, a company must invest excess cash from the time of peak inflows until the next period of cash outflows. For example, a department store must purchase large amounts of inventory for its peak Christmas selling season. Cash inflows from credit sales do not occur until the receivables are collected. The company may have excess cash until purchases are made for the next Christmas season. Companies may also have excess cash available to invest for longer periods of time.

As we discussed in Chapter 7, companies may invest excess cash in financial instruments called cash equivalents. Alternatively, to earn a higher return, companies may invest in other financial instruments, such as common stock, preferred stock, or bonds of other corporations, as well as municipal, state, or federal bonds. All these securities are classified as investments, and the entire group of securities is often referred to as a **portfolio of marketable securities**. Another reason why securities of other corporations are purchased is to establish long-term relationships with suppliers or to obtain significant influence or control over related companies. It is also common practice to include the cash surrender value of life insurance policies and sinking funds under the Investments category on the balance sheet. We discuss the recording and reporting issues for these types of investments in this chapter.

## INVESTMENTS: CLASSIFICATION AND VALUATION

1 Explain the classification and valuation of investments.

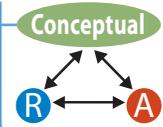
FASB Statement No. 115 establishes generally accepted accounting principles for investments in debt securities and those equity securities that have readily determinable fair values.<sup>1</sup> A fair value is readily determinable if a sales price is currently available on a securities exchange registered with the SEC (e.g., the New York Stock Exchange) or in an over-the-counter market for which prices are publicly reported. A foreign market must be comparable to one of the U.S. markets. At acquisition, a company classifies each investment in debt and equity “marketable” securities into one of three categories. The three categories are:

1. **Trading Securities.** Investments in debt and equity securities that are purchased and held principally to sell in the near term are classified as trading securities. Trading generally involves active and frequent buying and selling, and the securities are held to make a profit on short-term differences in price. For example, a stockbrokerage firm that holds an “inventory” of securities for sale to its customers classifies them as trading securities. A bank that holds securities for active and frequent buying and selling to make a profit on short-term differences in price also classifies them as trading securities.
2. **Available-for-Sale Securities.** Investments in available-for-sale securities are (a) debt securities that are not classified as being held to maturity (see next category), and (b) debt and equity securities that are not classified as trading securities.

1. “Accounting for Certain Investments in Debt and Equity Securities,” *FASB Statement of Financial Accounting Standards No. 115* (Norwalk, Conn.: FASB, 1993), par. 3–13. This *Statement* applies, in the case of equity securities, to investments in equity securities when the investor does *not* have “significant influence.” *Significant influence* generally occurs when the ownership percentage is more than 20%, as we discuss later in the chapter.

3. **Held-to-Maturity Debt Securities.** Investments in held-to-maturity debt securities are debt securities for which the company has the “positive intent and ability to hold those securities to maturity.”<sup>2</sup> Any sales of these securities prior to their maturity should be rare. A company does not classify a security as being held to maturity if it intends to hold the security only for an indefinite period. So the classification is *not* appropriate if the security will be sold for reasons such as a change in market interest rates or a need for liquid funds.<sup>3</sup> The sale of a debt security is *not* inconsistent with the original classification if there is a change of circumstances, or other events that are isolated, nonrecurring, and unusual for the company.

A company uses the “fair value” method to account for trading and available-for-sale securities, but not for held-to-maturity debt securities. The fair value method results in “unrealized holding gains and losses.” Before we discuss the accounting for these securities, you need to know some additional definitions.



1. **An equity security involves an ownership interest in another company.** Thus, *investments* in equity securities include common stocks, preferred stocks, preferred stocks that are redeemable at the option of the company that issued the stock, stock warrants, stock rights, and put and call options. Investments in convertible debt or preferred stock with a mandatory redemption feature or that is redeemable at the option of the holder are *not* investments in equity securities.
2. **A debt security involves a creditor relationship with another entity.** Thus, *investments* in debt securities include U.S. treasury securities, municipal securities, corporate bonds, convertible debt, and commercial paper. Also included are investments in preferred stock that have a mandatory redemption feature or are redeemable at the option of the holder (discussed in Chapter 16). Trade accounts receivable are *not* investments in debt securities.
3. **Fair value is the amount at which a security could be exchanged in a current transaction between willing parties.** Thus, the fair value is the number of units of the security times the quoted market price on a stock exchange. Note that there is no adjustment for any estimated change in the market price that might result from the attempted sale of a large number of a particular security.

There are two additional methods for reporting investments. However, these methods are *not* alternatives, but are applied depending on the level of ownership that the investor has in the investee. The **equity method** is used for investments in equity securities when the investor has *significant influence* over the investee. Significant influence generally occurs when the investor owns between 20% and 50% of the voting common stock of the investee, as we discuss later in the chapter. **Consolidation** occurs when the investor *controls* the investee through an investment in equity securities. Control generally occurs when the investor owns more than 50% of the voting common stock of the investee. The FASB is considering a change so that consolidation will occur whenever a company controls another entity (unless control is temporary). Control will be defined as the power to use the individual assets of the other entity in essentially the same way as the company can use its own assets. This effective control can occur at a lower ownership level than legal control. The investor issues consolidated financial statements, which are the combined financial statements of both companies. The preparation of consolidated financial statements is discussed in an advanced accounting book and is beyond the scope of this chapter, although we briefly discuss the underlying concepts of consolidation accounting in a later section.

2. *Ibid.*, par. 7.

3. Sales of held-to-maturity debt securities are considered to be at maturity if (1) the security is sold near enough to its maturity (or its call date, if exercise of the call is probable) that interest rate risk is substantially eliminated (e.g., within three months of maturity or the call date), or (2) the sale occurs after the company has collected a substantial portion (e.g., 85%) of the principal.

We provide an overview of the various categories and methods for recording and reporting investments in securities in Exhibit 15-1. We explain the related accounting principles in the following sections.

#### EXHIBIT 15-1 Accounting for Investments

	Method	Reporting of Unrealized Holding Gains and Losses
<i>Investments in Equity Securities</i>		
1. No significant influence (less than 20% ownership)		
a. Trading	Fair value	Net income
b. Available for sale	Fair value	Other comprehensive income
2. Significant influence (20% to 50% ownership)	Equity method	Not recognized
3. Control (more than 50% ownership)	Consolidation	Not recognized
<i>Investments in Debt Securities</i>		
1. Trading	Fair value	Net income
2. Available for sale	Fair value	Other comprehensive income
3. Held to maturity	Amortized cost	Not recognized

## INVESTMENTS IN DEBT AND EQUITY TRADING SECURITIES

The generally accepted accounting principles for investments in debt and equity securities classified as trading securities are:

- the investment is initially recorded at cost,
- it is then reported at fair value on the ending balance sheet(s),
- unrealized holding gains and losses from changes in the fair value are included in net income of the current period, and
- interest and dividend revenue, as well as realized gains and losses on sales, are included in net income of the current period.

As we noted earlier, investments in debt and equity trading securities are held primarily by such institutions as banks and stockbrokers. Since the accounting principles for trading securities tend to apply to a relatively few companies, we do not illustrate them here. However, they are the same as those we discuss in the next section on available-for-sale securities, *except* that for investments in trading securities (1) unrealized holding gains and losses on changes in value are included in net income for the current period, and (2) any realized gains or losses on sales are computed by comparing the selling price to the *fair value* recorded on the most recent balance sheet date.

## INVESTMENTS IN AVAILABLE-FOR-SALE DEBT AND EQUITY SECURITIES

The accounting principles for investments classified as available-for-sale debt and equity securities are:

- the investment is initially recorded at cost,
- it is then reported at fair value on the ending balance sheet(s),
- unrealized holding gains and losses from changes in the fair value are reported as a component of other comprehensive income,

**2** Account for investments in debt and equity trading securities.

**3** Account for investments in available-for-sale debt and equity securities.

- the cumulative unrealized holding gains and losses are reported in the accumulated other comprehensive income section of stockholders' equity, and
- interest and dividend revenue, as well as realized gains and losses on sales, are included in net income for the current period.

To illustrate each of these issues, assume that the Kent Company purchases the following securities on May 1, 2006 as an investment in available-for-sale securities:

A Company common stock	100 shares at \$50 per share
B Company common stock	300 shares at \$80 per share
C Company preferred stock	200 shares at \$120 per share
D Company 10% bonds	Face value of \$15,000, acquired at par plus accrued interest. Interest is paid on May 31 and November 30 each year.

### Recording Initial Cost

A company records all investments in securities initially at the acquisition price of the securities plus any other costs necessary for the transaction. Thus, the cost of equity securities is simply the quoted market price at the time of the transaction plus any brokerage fees and taxes. A special issue arises with debt securities because any accrued interest must be separated from the purchase price. Recall from Chapter 14 that bondholders receive six months' interest on each interest payment date. Since interest accrues over time, whenever bonds are purchased between interest payment dates, the purchaser pays the previous bondholder for the interest earned to date.

The accrued interest on the D Company bonds purchased by the Kent Company is the interest from November 30, 2005 to May 1, 2006, or five months, and is \$625 ( $\$15,000 \times 0.10 \times 5/12$ ). Therefore, the payment for the bonds includes the \$15,000 cost of the bonds plus the \$625 accrued interest. Thus, the total cost of the securities purchased by the Kent Company is \$68,000 [ $(100 \times \$50) + (300 \times \$80) + (200 \times \$120) + \$15,000$ ].<sup>4</sup> The total payment is \$68,625 (\$68,000 cost + \$625 accrued interest) and the company records the purchase as follows:

Investment in Available-for-Sale Securities	68,000	
Interest Revenue	625	
Cash		68,625

Note that Kent debited Interest Revenue for the accrued interest. This procedure reduces the possibility of error in recording the next interest revenue transaction.<sup>5</sup>

### Recording Interest and Dividend Revenue

A company records interest revenue as it is earned during the period. On May 31, 2006 the Kent Company receives the semiannual interest on the D Company bonds and records it as follows:

Cash	750	
Interest Revenue ( $\$15,000 \times 0.10 \times 6/12$ )		750

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4. Any costs necessary for the acquisition, such as brokerage fees and taxes, are included in the cost of the securities. However, those amounts then would be allocated among each security purchased to determine its cost. We do not discuss this procedure because the amounts would not be material.
  5. Alternatively, Kent Company could have debited Interest Receivable for \$625, in which case it would eliminate the Interest Receivable account when it receives the interest on May 31, 2006.

Because the Kent Company initially debited interest revenue for five months of accrued interest on the date of acquisition, it credits interest revenue for the full six months of interest received. Therefore, by May 31 it has earned one month's interest and has that amount recorded in its accounting system. If the company purchased the D Company bonds at a premium or discount, it computes the interest revenue using the effective interest (or straight-line) method and amortizes a portion of the premium or discount, as we discuss later in the chapter.

On November 30, 2006 Kent Company receives the next interest payment and records it with the same journal entry. On December 31, 2006, it accrues one month's interest as follows:

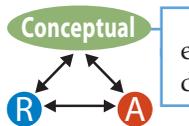
<b>Interest Receivable</b>	<b>125</b>	
<b>Interest Revenue</b> ( $\$15,000 \times 0.10 \times 1/12$ )		<b>125</b>

For the year, the Kent Company has earned interest revenue for eight months, or \$1,000 ( $\$750 - \$625 + \$750 + \$125$ , or  $\$15,000 \times 0.10 \times 8/12$ ).

Dividend revenue is recorded as it is received. So if the Kent Company receives dividends during 2006 of \$3,000 on its investments in the stock of A, B, and C Companies, it records the following:

<b>Cash</b>	<b>3,000</b>	
<b>Dividend Revenue</b>		<b>3,000</b>

It is conceptually more correct to record the Dividend Revenue when the dividends are declared by the investee company because that is the date on which the investor has the right to receive them. However, the date of receipt of the dividends is usually used for convenience. If the investee company has declared dividends at year-end but the investor company has not received them, it should record Dividends Receivable and Dividend Revenue to recognize the appropriate asset values and income, and also because the dividends receivable affect the calculation of any unrealized holding gain or loss, as we discuss later.



Note the different recognition of interest revenue and dividend revenue. Interest revenue accrues continuously over time, whereas dividend revenue is recognized only when dividends are received (or declared).

### Recognition of Unrealized Holding Gains and Losses

On its ending balance sheet, a company reports any investments in available-for-sale securities at fair value. The fair values are determined by the year-end market prices on a securities exchange. *FASB Statement No. 115* uses the phrase “unrealized holding gains and losses” to describe the change in the value of investment securities. Note that a company reports its *realized* gains and losses for the year from sales of securities in its net income on its income statement, but reports its *unrealized* gains and losses for the year in its other comprehensive income. Also, a company reports its *cumulative* net unrealized gains and losses on investments in available-for-sale securities in its accumulated other comprehensive income section of stockholders' equity on its balance sheet. We use the terms “unrealized holding gains and losses” in the text but prefer a more appropriate title for the account, Unrealized Increase/Decrease in Value of Available-for-Sale Securities, in recording journal entries and reporting in the financial statements. Note that this account is a permanent account whose value carries over to the next period.<sup>6</sup> A *credit balance* in the account represents the *cumulative* net unrealized holding *gains* and is reported as a positive element in the accumulated other comprehensive income section of stockholders' equity. A *debit balance* in the account represents the *cumulative* net unrealized holding *losses* and is reported as a negative element in

6. The term “unrealized holding gains and losses” for investments in trading securities is appropriate because the amounts are included in net income for the current period. Also the account is a temporary one that is closed to Income Summary each year.

the accumulated other comprehensive income section of stockholders' equity. Also note that a credit (debit) *change* in this account represents the net unrealized holding gains (losses) on the securities for the *year* and is included as a positive (negative) component of other comprehensive income for the year, as we discussed in Chapter 5.

To illustrate, assume that the total fair value of the available-for-sale securities held by the Kent Company is \$71,000 on December 31, 2006 as follows:

Security	Cost	12/31/06 Fair Value	Cumulative Change in Fair Value
100 shares of A Company common stock	\$ 5,000	\$ 6,000	\$1,000
300 shares of B Company common stock	24,000	23,500	(500)
200 shares of C Company preferred stock	24,000	26,000	2,000
\$15,000 face value of D Company 10% bonds	<u>15,000</u>	<u>15,500</u>	<u>500</u>
Totals	<u>\$68,000</u>	<u>\$71,000</u>	<u>\$3,000</u>

The Kent Company determined the fair value of the securities based on the December 31, 2006 ending quoted market prices, with one adjustment. The quoted market price of the 10% D Company bonds was \$15,625, but this included the \$125 of accrued interest that Kent Company previously recorded. To avoid double-counting, Kent eliminates this interest to determine the \$15,500 (\$15,625 – \$125) fair value of the bonds. (If dividends had been declared but not paid on the equity securities, a similar adjustment would be made.) Furthermore, if the company had purchased bonds at a premium or discount, it would use the amortized cost (i.e., carrying value) in the “cost” column.

The Kent Company records the \$3,000 increase (unrealized holding gain) in the value of the securities at the end of 2006 as follows:

Allowance for Change in Value of Investment	3,000
Unrealized Increase/Decrease in Value of Available-for-Sale Securities	3,000

The Allowance account is an adjunct/contra account to the Investment in Available-for-Sale Securities account. On its December 31, 2006 balance sheet, Kent Company reports the investment as an asset at the \$71,000 fair value of the securities (\$68,000 cost *plus* the \$3,000 increase in fair value recorded in the Allowance account). If some investments are current and some noncurrent, the asset account is separated between the current and non-current components, as we show in a later section of the chapter. We are assuming that the Kent Company uses an Allowance account to record the changes in the fair values of the securities so that information about the original cost of each security is retained in its accounts and can be used to compute the realized gain or loss on the sale of a security, as we discuss later.<sup>7</sup> Also, note that the fair value method is not allowed for federal income tax purposes so a company has to retain cost information to compute its taxable income.<sup>8</sup>



7. Alternatively, a company may choose to record any changes in fair value directly in the Investment account. For example, companies investing in *trading securities* generally may *not* use an Allowance account because these securities “turn over” quickly. When this “direct” method is used for investments in available-for-sale securities, however, it is more difficult for a company to determine information needed for transactions in subsequent periods; therefore, we do not use this method for these securities.

8. A company includes the unrealized holding gains and losses on investments in *trading securities* in its net income for the current period. If it does not include them in its taxable income, the difference is a temporary difference on which the company recognizes deferred income taxes, as we discuss in Chapter 19. A company also recognizes deferred income taxes on a change in the unrealized increase/decrease in the value of investments in available-for-sale securities because the amount included in other comprehensive income is not included in taxable income.



The Unrealized Increase/Decrease account is an adjunct/contra stockholders' equity account. Kent Company reports the \$3,000 *change* (increase) in the Unrealized Increase/Decrease account as an unrealized holding gain in its other comprehensive income for 2006 (as we discussed in Chapter 5). It also reports the \$3,000 *credit balance* in the Unrealized Increase/Decrease account as an addition to stockholders' equity on its balance sheet in the accumulated other comprehensive income section.<sup>9</sup> We show this disclosure in a later section in the chapter. In other words, the change in this account is included in other comprehensive income for the year, and its total is included in accumulated other comprehensive income. In this first year that Kent owns securities, the two amounts are the same.

To illustrate subsequent increases or decreases in fair value, suppose that on December 31, 2007, the fair value of the available-for-sale securities held by Kent Company is \$66,000 as follows:

Security	Cost	12/31/07 Fair Value	Cumulative Change in Fair Value
100 shares of A Company common stock	\$ 5,000	\$ 6,100	\$ 1,100
300 shares of B Company common stock	24,000	22,700	(1,300)
200 shares of C Company preferred stock	24,000	23,200	(800)
\$15,000 face value of D Company 10% bonds	<u>15,000</u>	<u>14,000</u>	<u>(1,000)</u>
Totals	<u>\$68,000</u>	<u>\$66,000</u>	<u>\$(2,000)</u>

Once a company has established an Allowance account, it determines the amount of the year-end adjustment in a subsequent period by comparing the required amount of the Allowance account with the previous balance in the account. At December 31, 2007 the required amount of the Kent Company's Allowance account is a \$2,000 *credit* balance, but the previous balance at December 31, 2006 was a \$3,000 *debit* balance. Therefore, the Kent Company credits the Allowance account for \$5,000 at the end of 2007 to record the decline in value (unrealized holding loss) as follows:

<b>Unrealized Increase/Decrease in Value of Available-for-Sale Securities</b>	<b>5,000</b>	
<b>Allowance for Change in Value of Investment</b>		<b>5,000</b>



On its December 31, 2007 balance sheet, the Kent Company reports the investment as an asset at the \$66,000 fair value of the securities (\$68,000 cost – \$2,000 allowance) as we showed earlier.<sup>10</sup> It reports the \$5,000 *change* (decrease) in the Unrealized Increase/Decrease account as an unrealized holding loss in its other comprehensive income for 2007. It also reports the \$2,000 *debit balance* in the Unrealized Increase/Decrease account as a subtraction from stockholders' equity in the accumulated other comprehensive income section.

### Realized Gains and Losses on Sales of Available-for-Sale Securities

A company reports realized gains and losses on sales of investments in available-for-sale securities in net income. They are measured as the difference between the selling price and the *cost* (of an equity security) or the *amortized cost* (of a debt security). Furthermore, since the security is no longer in the portfolio of available-for-sale securities, the portion of the

9. The amounts included in other comprehensive income for the year and accumulated other comprehensive income are reported net of tax. We do not include the tax effects in this discussion.

10. A company preparing interim (quarterly) financial statements would use the same accounting procedures, applied each quarter.

balances in the Allowance and Unrealized Increase/Decrease accounts reported at the previous balance sheet date for the security sold must be “reversed” out of the accounts.

For example, suppose that on March 1, 2008 the Kent Company sold the 100 shares of A Company common stock for \$6,000. The cost of the securities was \$5,000 and the fair value at the previous balance sheet was \$6,100, as follows:

Security	Cost	12/31/07 Fair Value	Cumulative Change in Fair Value
100 shares of A Company common stock	\$5,000	\$6,100	\$1,100

The company recognizes a gain of \$1,000 (\$6,000 selling price – \$5,000 cost) and eliminates the \$1,100 cumulative unrealized gain (and allowance) on the A Company stock. The company records the sale and the “reversal” on March 1, 2008 in two journal entries as follows:

<b>Cash</b>	<b>6,000</b>	
<b>Investment in Available-for-Sale Securities</b>		<b>5,000</b>
<b>Gain on Sale of Available-for-Sale Securities</b>		<b>1,000</b>
<b>Unrealized Increase/Decrease in Value of Available-for-Sale Securities</b>	<b>1,100</b>	
<b>Allowance for Change in Value of Investment</b>		<b>1,100</b>

The first journal entry records the sale and the \$1,000 realized gain in 2008. The second journal entry reverses (eliminates) the \$1,100 cumulative unrealized gain that had accumulated from May 1, 2006 (the date the company purchased the securities) until December 31, 2007 (the most recent balance sheet date). This is called a “reclassification adjustment,” which we discuss in the next section. A sale of an investment in securities at a loss would be recorded in the same way. The company would record the sale and realized loss in the first journal entry and would reverse (eliminate) any cumulative unrealized loss (or gain) and allowance on that security.

At the end of 2008, Kent Company must adjust the Allowance and Unrealized Increase/Decrease accounts to report the fair values of the securities it still owns. To illustrate, assume that the total fair value of the remaining securities is \$62,300 on December 31, 2008 as follows:

Security	Cost	12/31/08 Fair Value	Cumulative Change in Fair Value
300 shares of B Company common stock	\$24,000	\$23,500	\$(500)
200 shares of C Company preferred stock	24,000	24,100	100
\$15,000 face value of D Company 10% bonds	<u>15,000</u>	<u>14,700</u>	<u>(300)</u>
Totals	<u>\$63,000</u>	<u>\$62,300</u>	<u>\$(700)</u>

Before the 2008 year-end adjusting entry, the Allowance account has a credit balance of \$3,100 (\$2,000 12/31/07 credit balance + \$1,100 from 3/1/08 reversal) and the Unrealized Increase/Decrease account has a \$3,100 debit balance.<sup>11</sup> At December 31, 2008 the required amount of the Allowance account is a \$700 credit balance, so the Kent

11. The \$3,100 debit balance (cumulative unrealized holding loss) in the Unrealized Increase/Decrease account is the difference between the \$63,000 cost (\$24,000 + \$24,000 + \$15,000) of the remaining securities held (in Company B, C, and D securities) and the 12/31/07 fair value of \$59,900 (\$22,700 + \$23,200 + \$14,000).

Company debits the Allowance account for \$2,400 ( $\$3,100 - \$700$ ) to record the increase in value (unrealized holding gain) as follows:

Allowance for Change in Value of Investment	2,400
Unrealized Increase/Decrease in Value of Available-for-Sale Securities	2,400



The Kent Company reports the \$1,000 gain on the sale of its investment in the A Company common stock in its 2008 net income because this amount is realized. The company reports the \$2,400 unrealized holding gain (on the Company B, C, and D securities) in its 2008 other comprehensive income.

### Reclassification Adjustment

As we discussed in Chapter 5, a company's comprehensive income consists of two parts: net income and other comprehensive income. A reclassification adjustment is made to avoid "double-counting" in the company's comprehensive income. Recall that the Kent Company reports the \$1,000 gain on the sale of the Company A common stock in its income statement for 2008. So the company includes the \$1,000 in the net income that it reports as the first part of its comprehensive income. Also recall that it computed the \$1,000 gain by comparing the \$6,000 selling price to the \$5,000 *cost*. But the company had already reported a \$1,100 cumulative unrealized gain ( $\$6,100$  fair value  $- \$5,000$  cost) on these securities in its other comprehensive income for 2006 and 2007. So to avoid double-counting, the Kent Company *reduced* its other comprehensive income for 2008 by the \$1,100 adjustment of the Unrealized Increase/Decrease account that it made on March 1, 2006 (when it sold the Company A common stock). This offsets the \$1,100 cumulative unrealized holding gain that it reported in the prior years. It reports the \$1,100 reclassification adjustment as a *negative* component of other comprehensive income.

## INVESTMENTS IN HELD-TO-MATURITY DEBT SECURITIES

The generally accepted accounting principles for investments in held-to-maturity debt securities are:

- the investment is initially recorded at cost,
- it is then reported at amortized cost on the ending balance sheet(s)<sup>12</sup>,
- unrealized holding gains and losses are *not* recorded, and
- interest revenue and realized gains and losses on sales (if any) are all included in net income.

In Chapter 14 we pointed out that bonds carrying a stated interest rate above the prevailing yield for securities with a similar amount of risk sell at a premium. This premium lowers the stated interest rate to the market (yield) rate. Bonds carrying a stated interest rate below the prevailing market rate for securities with a similar amount of risk sell at a discount. The discount effectively increases the stated interest rate to the market rate. Therefore, accounting for investments in bonds is essentially a "mirror image" of accounting for bonds payable. However, in contrast to accounting for premiums and discounts by debtor companies, investor companies generally do *not* use a separate valuation account for the premiums and discounts on investments in bonds. Instead, the purchase price is recorded in the investment account, which is directly adjusted for any premium and discount amortization, even though *APB Opinion No. 21* recommended separate disclosure. The effect of not separately

4 Account for investments in held-to-maturity debt securities, including amortization of bond premiums and discounts.

12. "Amortized cost" is the remaining amount (i.e., carrying value) of the cost (face value plus any premium or less any discount at acquisition) after any premium or discount has been amortized each period as interest revenue is recognized.

disclosing premiums or discounts is to report the Investment in Held-to-Maturity Bonds account directly at its carrying value (amortized cost) on each balance sheet date.

### Recording Initial Cost

Investments in debt securities held to maturity are recorded in the same way as we discussed earlier. For example, assume that a company purchases 9% bonds with a face value of \$100,000 on August 1, 2006 at 99 plus accrued interest. Interest on these bonds is payable semiannually on May 31 and November 30. The company records this purchase on August 1, 2006 as follows:

<b>Investment in Held-to-Maturity Debt Securities</b> ( $\$100,000 \times 0.99$ )	<b>99,000</b>	
<b>Interest Revenue</b> ( $\$100,000 \times 0.09 \times 2/12$ )	<b>1,500</b>	
<b>Cash</b>		<b>100,500</b>

Note that the company debits the Investment account for \$99,000. Therefore, it includes the \$1,000 discount directly in the Investment account and amortizes it as an adjustment to interest revenue, as we discuss later. Note also that, as we showed for investments in available-for-sale securities, the company debits the Interest Revenue account for the two months of accrued interest (\$1,500). It will credit the Interest Revenue account for \$4,500 when it receives the November 30, 2006 semiannual interest, resulting in the recognition of \$3,000 interest earned for the period August 1 through November 30, 2006.

### Recognition and Amortization of Bond Premiums and Discounts

Investments in held-to-maturity debt securities that are purchased at a premium or discount result in an effective interest rate that is different than the stated rate, as we discussed in Chapter 14. Consequently, for these investments in bonds, **the amount of interest revenue recognized each accounting period is based on the effective interest rate (yield) at the time of acquisition.** Therefore, **any premium or discount is amortized over the remaining life of the bonds to record the proper amount of interest revenue for each accounting period.** The effective interest method and straight-line method are the alternative procedures that are used to record interest revenue and account for premiums and discounts. However, *APB Opinion No. 21* requires use of the effective interest method, unless the use of the straight-line method does not result in a material difference in the amount of interest revenue recognized in any year. Premium amortizations result in an effective interest rate lower than the stated rate, whereas discount amortizations result in an effective interest rate higher than the stated rate.

#### Accounting for Premiums

Assume that the Colburn Company invests in bonds that will be held to maturity, with a face value of \$100,000, paying \$102,458.71 on January 1, 2006. These bonds carry a stated interest rate of 13% payable semiannually on June 30 and December 31; they mature on December 31, 2008, and yield an effective interest rate of 12%. The Colburn Company records the acquisition on January 1, 2006 as follows:

<b>Investment in Held-to-Maturity Debt Securities</b>	<b>102,458.71</b>	
<b>Cash</b>		<b>102,458.71</b>

Examples 15-1 and 15-2 show the schedules for computing interest revenue, the premium amortization, and the carrying value under the straight-line and effective interest methods for these bonds. We explained the preparation of similar schedules for bonds payable in Chapter 14, so our discussion here is limited. The Colburn Company records

the first interest receipt on June 30, 2006 using the *effective interest method* (see Example 15-2) for the bonds purchased at a premium, as follows:

Cash	6,500.00	
Investment in Held-to-Maturity Debt Securities		352.48
Interest Revenue		6,147.52

Note that the company credits the premium amortization directly to the Investment account. If it uses the straight-line method, it makes a similar entry using the amounts from Example 15-1.

**EXAMPLE 15-1** Bond Investment Interest Revenue and Premium Amortization Schedule: *Straight-Line Method*

Date	Cash Debit <sup>a</sup>	Investment in Debt Securities Credit <sup>b</sup>	Interest Revenue Credit <sup>c</sup>	Carrying Value of Investment in Debt Securities <sup>d</sup>
1/1/06				\$102,458.71
6/30/06	\$6,500.00	\$409.79	\$6,090.21	102,048.92
12/31/06	6,500.00	409.79	6,090.21	101,639.13
6/30/07	6,500.00	409.79	6,090.21	101,229.34
12/31/07	6,500.00	409.79	6,090.21	100,819.55
6/30/08	6,500.00	409.79	6,090.21	100,409.76
12/31/08	6,500.00	409.76 <sup>e</sup>	6,090.24	100,000.00

- a.  $\$100,000$  (face value)  $\times$  0.13 (stated rate of interest)  $\times$  1/2 (year).  
b.  $(\$102,458.71 - \$100,000) = \$2,458.71 \div 6$  (remaining semiannual periods of bond life).  
c.  $\$6,500 - \$409.79$ .  
d. Previous investment carrying value  $-$  amount from footnote b.  
e. Difference due to \$0.03 rounding error.

**EXAMPLE 15-2** Bond Investment Interest Revenue and Premium Amortization Schedule: *Effective Interest Method*

Date	Cash Debit <sup>a</sup>	Interest Revenue Credit <sup>b</sup>	Investment in Debt Securities Credit <sup>c</sup>	Carrying Value of Investment in Debt Securities <sup>d</sup>
1/1/06				\$102,458.71
6/30/06	\$6,500.00	\$6,147.52	\$352.48	102,106.23
12/31/06	6,500.00	6,126.37	373.63	101,732.60
6/30/07	6,500.00	6,103.96	396.04	101,336.56
12/31/07	6,500.00	6,080.19	419.81	100,916.75
6/30/08	6,500.00	6,055.01	444.99	100,471.76
12/31/08	6,500.00	6,028.24 <sup>e</sup>	471.76	100,000.00

- a.  $\$100,000$  (face value)  $\times$  0.13 (stated rate of interest)  $\times$  1/2 (year).  
b. Previous investment carrying value  $\times$  0.12 (effective interest rate)  $\times$  1/2 (year).  
c. Amount from footnote a  $-$  amount from footnote b.  
d. Previous investment carrying value  $-$  amount from footnote c.  
e. Difference due to \$0.07 rounding error.

### Accounting for Discounts

Now assume that Colburn acquired the bonds at a discount for \$97,616.71. This discount indicates that the rate of interest desired by investors is greater than the stated rate of 13%. These bonds yield an effective interest rate of 14%. Examples 15-3 and 15-4 illustrate the

schedules for computing interest revenue, the discount amortization, and the carrying value under the straight-line and effective interest methods for these bonds. On January 1, 2006 Colburn records the acquisition as follows:

<b>Investment in Held-to-Maturity Debt Securities</b>	<b>97,616.71</b>	
<b>Cash</b>		<b>97,616.71</b>

Colburn records the first interest receipt on June 30, 2006, using the *effective interest method* (see Example 15-4) for the bonds purchased at a discount, as follows:

<b>Cash</b>	<b>6,500.00</b>	
<b>Investment in Held-to-Maturity Debt Securities</b>	<b>333.17</b>	
<b>Interest Revenue</b>		<b>6,833.17</b>

Note that the company debits the discount amortization directly to the Investment account. If it uses the straight-line method, it makes a similar entry using the amounts from Example 15-3.

**EXAMPLE 15-3** Bond Investment Interest Revenue and Discount Amortization Schedule: *Straight-Line Method*

Date	Cash Debit <sup>a</sup>	Investment in Debt Securities Debit <sup>b</sup>	Interest Revenue Credit <sup>c</sup>	Carrying Value of Investment in Debt Securities <sup>d</sup>
1/1/06				\$ 97,616.71
6/30/06	\$6,500.00	\$397.22	\$6,897.22	98,013.93
12/31/06	6,500.00	397.22	6,897.22	98,411.15
6/30/07	6,500.00	397.22	6,897.22	98,808.37
12/31/07	6,500.00	397.22	6,897.22	99,205.59
6/30/08	6,500.00	397.22	6,897.22	99,602.81
12/31/08	6,500.00	397.19 <sup>e</sup>	6,897.19	100,000.00

- a.  $\$100,000$  (face value)  $\times$  0.13 (stated rate of interest)  $\times$  1/2 (year).  
 b.  $(\$100,000 - \$97,616.71) = \$2,383.29 \div 6$  (remaining semiannual periods of bond life).  
 c.  $\$6,500 + \$397.22$ .  
 d. Previous investment carrying value + amount from footnote b.  
 e. Difference due to \$0.03 rounding error.

**EXAMPLE 15-4** Bond Investment Interest Revenue and Discount Amortization Schedule: *Effective Interest Method*

Date	Cash Debit <sup>a</sup>	Interest Revenue Credit <sup>b</sup>	Investment in Debt Securities Debit <sup>c</sup>	Carrying Value of Investment in Debt Securities <sup>d</sup>
1/1/06				\$ 97,616.71
6/30/06	\$6,500.00	\$6,833.17	\$333.17	97,949.88
12/31/06	6,500.00	6,856.49	356.49	98,306.37
6/30/07	6,500.00	6,881.45	381.45	98,687.82
12/31/07	6,500.00	6,908.15	408.15	99,095.97
6/30/08	6,500.00	6,936.72	436.72	99,532.69
12/31/08	6,500.00	6,967.31 <sup>e</sup>	467.31	100,000.00

- a.  $\$100,000$  (face value)  $\times$  0.13 (stated rate of interest)  $\times$  1/2 (year).  
 b. Previous investment carrying value  $\times$  0.14 (effective interest rate)  $\times$  1/2 (year).  
 c. Amount from footnote b – amount from footnote a.  
 d. Previous investment carrying value + amount from footnote c.  
 e. Difference due to \$0.02 rounding error.

### Amortization for Bonds Acquired Between Interest Dates

As we showed earlier, held-to-maturity bonds may be acquired between interest dates. When these bonds are purchased at a premium or discount, the premium or discount is amortized over the remaining life of the bonds. For example, assume that the Tallen Company purchased 13% bonds with a face value of \$200,000 for \$204,575.07 on April 3, 2006. Interest on these bonds is payable June 30 and December 31, and the bonds mature December 31, 2008 (33 months after the date of purchase). Tallen records the acquisition on April 3, 2006 as follows:

<b>Investment in Held-to-Maturity</b>	
<b>Debt Securities</b>	204,575.07
<b>Interest Revenue</b> ( $\$200,000 \times 0.13 \times 3/12$ )	6,500.00
<b>Cash</b>	211,075.07

The company amortizes the \$4,575.07 premium ( $\$204,575.07 - \$200,000$ ) over the remaining 33-month life of the bond issue. If it uses straight-line amortization, it amortizes \$138.64 ( $\$4,575.07 \div 33$ ) of the premium to reduce interest revenue for each month it holds the bonds.

When the effective interest method is used, the actual yield<sup>13</sup> is computed and then used to amortize the premium over the length of time the investment is to be held. The purchase of a \$200,000 investment due in 33 months with a stated 13% interest rate, payable semiannually, for \$204,575.07 results in an effective interest rate of 12%. Using the effective interest method of amortization, the company would record the first two interest receipts as follows:

#### June 30, 2006

<b>Cash</b>	13,000.00
<b>Interest Revenue</b>	
$[(\$204,575.07 \times 0.12 \times 1/4) + \$6,500^*]$	12,637.25
<b>Investment in Held-to-Maturity</b>	
<b>Debt Securities</b> ( $\$13,000 - \$12,637.25$ )	362.75

\* Amount debited to interest revenue on the date the bonds were acquired.

#### December 31, 2006

<b>Cash</b>	13,000.00
<b>Interest Revenue</b>	
$[(\$204,575.07 - \$362.75) \times 0.12 \times 1/2]$	12,252.74
<b>Investment in Held-to-Maturity</b>	
<b>Debt Securities</b> ( $\$13,000 - \$12,252.74$ )	747.26

In calculating the premium amortization for the first interest payment, note that the actual amount of interest revenue is only \$6,137.25 ( $\$204,575.07 \times 0.12 \times 3/12$ )<sup>14</sup> even though Tallen credited the interest revenue account for \$12,637.25. The additional \$6,500 credit reflects the interest payment to the former owner. Subsequently, Tallen computes the amount of interest revenue by multiplying the carrying value of the investment (acquisition price less amortized premium) by the 6% semiannual yield ( $0.12 \times 6/12$ ). It records the difference between the amount of cash received and the amount of interest revenue as premium amortization in each successive period.

13. See Chapter 14 for an illustration of the calculation of yields.

14. This calculation assumes that the purchase price yields 12% interest for 33 months. Normally, it is necessary to find the present value of the bonds at the last interest payment date (December 31, 2005 in this case), subtract the present value of the bonds on the next interest payment date (June 30, 2006), and apply the straight-line method to amortize the premium for the interim period. See Chapter 14 (pp. 652–653) for an illustration of this procedure.

### Sale of Investment in Bonds Before Maturity

Selling an investment in held-to-maturity bonds before the maturity date should be rare because the sale may violate the reason for their classification. Alternatively, as we discussed earlier in the chapter, certain changes in circumstances are *not* inconsistent with the classification. When such a sale occurs, a company must record any gain or loss from the transaction. Also, the company eliminates its Investment account, and collects any interest earned since the last interest date from the purchaser.

Before computing the gain or loss on the sale of an investment, the company amortizes any premium or discount on the bonds from the last interest date to the sale date. This procedure is necessary to record the correct amount of interest revenue, and to determine the carrying value of the investment on the date of the sale. The carrying value of the bonds is then compared with the sales price (*excluding* any accrued interest) to determine the gain or loss. To illustrate, assume that the \$100,000 of 13% bonds purchased by the Colburn Company for \$97,616.71 that we discussed earlier were sold on March 31, 2007 for \$102,000 plus accrued interest. Colburn records the following journal entries on March 31, 2007 (assuming it amortizes the bond discount by the straight-line method illustrated in Example 15-3):

<b>Investment in Held-to-Maturity Debt Securities</b>		
	$[(\$2,383.29 \div 6) \times 1/2]$	198.61
<b>Interest Revenue</b>		198.61
<b>Cash (\$102,000 + \$3,250)</b>	<b>105,250.00</b>	
<b>Interest Revenue (\$100,000 × 0.13 × 1/4)</b>		<b>3,250.00</b>
<b>Investment in Held-to-Maturity Debt Securities (\$98,411.15 from Example 15-3 + \$198.61)</b>		<b>98,609.76</b>
<b>Gain on Sale of Debt Securities</b>		<b>3,390.24</b>

The first journal entry brings the investment carrying value up to date. In the second journal entry, the debit to Cash records the sales price plus the \$3,250 interest earned in the three months since the last interest payment date. The credit to the Investment account eliminates the current carrying value of the investment on the sale date. The Colburn Company computes the gain by comparing the \$98,609.76 current carrying value of the Investment account on the sale date with the \$102,000 selling price of the investment. Colburn reports this gain as ordinary income, unless considered unusual and infrequent, in which case it reports the gain as an extraordinary item.

The diagram at the bottom of this page and top of the next page summarizes the accounting issues we have discussed for the three categories of investments in securities.



Event	Classify According to Management Intent as:	Initially Record at:	Classify Cash Flow as:	Report on the Ending Balance Sheet at:
Company Purchases Securities	Trading	Cost	Operating	Fair Value
	Available-for-Sale	Cost	Investing	Fair Value
	Held-to-Maturity	Cost	Investing	Amortized Cost

(continued)

Classify According to Management Intent as:	Recognize Unrealized Holding Gains and Losses in:	Recognize Interest and Dividend Revenue in:	Recognize Realized Gain or Loss in:	Compute Realized Gain or Loss as:
Trading	Net Income	Net Income	Net Income	Selling Price minus Fair Value at Most Recent Balance Sheet Date
Available-for-Sale	Other Comprehensive Income	Net Income	Net Income	Selling Price minus (Amortized) Cost
Held-to-Maturity	—	Net Income	Net Income*	Selling Price* minus (Amortized) Cost

\*Sales of held-to-maturity securities should be rare.



### SECURE YOUR KNOWLEDGE 15-1

- Investments in the financial instruments (debt and equity securities) of other companies in which the investor does not have significant influence or control are classified as either trading securities, available-for-sale securities, or held-to-maturity securities.
- While all investment securities are initially recorded at cost with dividend revenue, interest revenue, and realized gains and losses recorded on the income statement, the subsequent valuation of these securities depends on their classification.
- Investments in debt and equity trading securities are subsequently reported at fair value on each balance sheet date with any unrealized holding gains and losses included in current period income.
- Investments in debt and equity securities classified as available-for-sale are subsequently reported at fair value on each balance sheet date with any unrealized holding gains and losses included in comprehensive income for the year and as a component of accumulated other comprehensive income in stockholders' equity on the balance sheet.
  - Unrealized holding gains and losses result from increases or decreases in the fair value of the securities.
  - If a company has a realized gain or loss on available-for-sale securities (measured as the difference between the selling price and the cost of the security), it recognizes this gain in income and “reverses” any previously recognized unrealized gain or loss.
- Investments in held-to-maturity debt securities are subsequently reported at amortized cost on each balance sheet date with no recognition of any unrealized holding gains and losses.
  - Any premium or discount resulting from the purchase of a held-to-maturity debt security is amortized over the remaining life of the security.
  - If the held-to-maturity securities are acquired between interest payment dates, any accrued interest since the last interest payment date is recorded as a debit to interest revenue.

## TRANSFERS AND IMPAIRMENTS

Two additional issues arise in accounting for investments. The first involves transfers between investment categories. The second involves impairments of investments.

### Transfers of Investments Between Categories

The transfer of a security between investment categories is accounted for at the fair value at the time of the transfer. However, transfers into or out of the trading category should be rare, as should transfers *from* the held-to-maturity category. In the journal entry to record the transfer, the fair value is used as the “new” investment carrying value, and the “old” investment carrying value is eliminated. However, the accounting for any related unrealized gain or loss varies, depending on the type of transfer.

1. A transfer *from the trading* category. No accounting for the unrealized holding gain or loss is needed because it has already been recognized in net income.
2. A transfer *into the trading* category. The previous unrealized holding gain or loss is eliminated and a gain or loss is included in net income.
3. A transfer *into the available for sale* category *from the held-to-maturity* category. An unrealized holding gain or loss is established and included in other comprehensive income.
4. A transfer of a debt security *into the held-to-maturity* category *from the available-for-sale* category. The unrealized holding gain or loss on the available-for-sale security is eliminated and an unrealized holding gain or loss on the held-to-maturity security is recorded for the same amount and included in other comprehensive income. The amount is amortized over the remaining life of the security as an adjustment of interest revenue by computing a new yield to maturity for that security.

We will use three examples to illustrate transfers (we do not discuss a transfer *from* the trading category).

#### Example: Transfer into Trading Category from Available-for-Sale Category

Assume the same facts as earlier for the Kent Company at December 31, 2007. Assume also that in 2008 Kent transfers the Company A securities into the trading category when their fair value is \$6,300. Because Kent does not use an Allowance account for its investments in trading securities, it debits the asset account directly for the fair value of the securities. Since the available-for-sale securities had a cost of \$5,000, it records a \$1,300 realized holding gain. Also, it debits the Unrealized Increase/Decrease account and credits the Allowance account related to the available-for-sale securities for \$1,100, respectively, to eliminate the December 31, 2007 adjustment (\$6,100 fair value – \$5,000 cost) recorded on that date. It records the transfer as follows:

Investment in Trading Securities	6,300	
Investment in Available-for-Sale Securities		5,000
Gain on Transfer of Securities		1,300
Unrealized Increase/Decrease in Value of Available-for-Sale Securities	1,100	
Allowance for Change in Value of Investment		1,100

Kent includes the gain in its net income for 2008, and as we discussed earlier, includes the \$1,100 as a reduction in its other comprehensive income for 2008. ♦



#### Example: Transfer into Available-for-Sale Category from Held-to-Maturity Category

Assume that the Devon Company has bonds included in the category of investments held to maturity. The bonds have a face value of \$10,000 and the company purchased them at par. When the fair value of the bonds is \$9,500, the company transfers the bonds into the available-for-sale category. Since an Investment in Available-for-Sale Securities is recorded at cost and an Allowance account is used to adjust the carrying value to fair value (with a

corresponding adjustment to the Unrealized Increase/Decrease account), the company records the transfer as follows:

Investment in Available-for-Sale Securities	10,000	
Investment in Held-to-Maturity Debt Securities		10,000
Unrealized Increase/Decrease in Value of Available-for-Sale Securities	500	
Allowance for Change in Value of Investment		500

If the company purchased bonds being held to maturity at a premium or discount, it would record the investment in available-for-sale securities at the amortized cost, and it would compute the adjustment to the Allowance and Unrealized Increase/Decrease accounts by comparing the fair value to the amortized cost. ♦

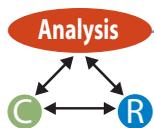
### Example: Transfer into Held-to-Maturity Category from Available-for-Sale Category

Assume the same facts for the Devon Company except that it currently classifies the bonds as available for sale and transfers them into the held-to-maturity category. Assume further that the available-for-sale bonds had a fair value of \$9,700 on the previous balance sheet date. In this case, the company records the investment in debt securities at the current fair value of \$9,500, and eliminates the previous \$300 (\$9,700 – \$10,000) amounts in the Allowance and Unrealized Increase/Decrease accounts. It creates a new stockholders' equity account, Unrealized Increase/Decrease in Value of Held-to-Maturity Debt Securities for the \$500 difference between the current fair value and the original cost. It records the transfer as follows:

Investment in Held-to-Maturity Debt Securities	9,500	
Unrealized Increase/Decrease from Transfer of Securities	500	
Investment in Available-for-Sale Securities		10,000
Allowance for Change in Value of Investment	300	
Unrealized Increase/Decrease in Value of Available-for-Sale Securities		300

In later periods the company amortizes the \$500 discount in the Investment account (\$10,000 face value – \$9,500 carrying value) using the effective interest method over the remaining life of the bonds. This requires the computation of a new effective interest rate. The new rate is computed by equating, on a present value basis, the future cash flows and the new “carrying value.”<sup>15</sup> Interest revenue is then computed by multiplying the carrying value each period by the effective interest rate. We discussed this procedure in Chapter 14 in the section on troubled debt restructuring. The \$500 unrealized amount is also amortized as an adjustment to interest revenue, using the effective interest method over the remaining life of the debt security (bonds), and this amount offsets the amortization of the discount. ♦

## Impairments



There may be an “other than temporary” decline below the amortized cost of an investment in a debt security classified as available for sale or held to maturity. A company uses factors such as the reason for the decline, the length of the decline, the future potential of the investee, and the current state of the economy to determine whether a particular decrease in the value of a security is other than temporary. Impairment occurs when it is probable that the company will be unable to collect all the amounts due. The company writes down the amortized cost of the security to the fair value and includes the amount of the write-down in net income as a realized loss. The fair value becomes the new “cost” and is not changed for

15. This procedure is used for investments in marketable debt securities. We discussed accounting for the impairment of a loan (which does not have a fair value available on a stock exchange) in Chapter 14.



Credit: RAMIN TALAJE/Bloomberg News/Landov

subsequent recoveries in fair value. However, increases and decreases in the fair value of available-for-sale securities are included in stockholders' equity as we discussed earlier.

To illustrate this situation, suppose that the Tracy Company has a bond investment categorized as held to maturity, which has a carrying value (amortized cost) of \$21,500 and a fair value of \$6,500. If it considers the decline in value to be other than temporary, the company records the decline of \$15,000 ( $\$21,500 - \$6,500$ ) as follows:

<b>Realized Loss on Decline in Value</b>	<b>15,000</b>	
<b>Investment in Held-to-Maturity Debt Securities</b>		<b>15,000</b>

The \$6,500 becomes the new "cost" of the security. The company computes interest revenue using the effective interest method based on the new effective interest rate computed. We discussed this approach earlier for bonds transferred into the held-to-maturity category.

A similar procedure is followed for an investment in a security classified as available for sale which has a decline in value that is considered to be other than temporary. Since a company is already reporting the security at fair value by using an allowance account, it establishes a new cost basis at the fair value. It eliminates the allowance and unrealized increase/decrease accounts, and records the loss from the write-down as a realized loss. It includes any subsequent changes in value (that are considered to be temporary) as unrealized holding gains and losses in other comprehensive income. The realized gain or loss on the eventual sale of the security is the difference between the selling price and the new "cost."

The SEC has also been involved in the issue of how the "other than temporary" criterion is to be applied by publicly-traded companies. It suggests that companies should consider the length of time a security has been impaired, the severity of the impairment, and the financial condition of the issuer of the security. While it has not issued a specific rule, it has indicated that a loss should be recognized if recovery of the loss is not probable within a year.

Also, at the time of writing this book, interest rates were rising. These increases reduce the present (market) value of investments in debt securities. Therefore, companies must decide whether these decreases in value should be considered "other than temporary" and recognize losses in their income statements. For this, and other reasons, the FASB is re-evaluating the whole issue of other-than-temporary impairments for investments in debt and equity securities.



## DISCLOSURES

A company is required to make the following major disclosures for investments in securities by *FASB Statement No. 115*:

1. *Trading Securities*. Disclose the change in the net unrealized holding gain or loss that is included in each income statement.

**6** Understand disclosures of investments.



2. *Available-for-Sale Securities*. For each balance sheet date, disclose the aggregate fair value, gross unrealized holding gains and gross unrealized holding losses, and (amortized) cost by major security types. For each income statement period, disclose (1) the proceeds from sales and the gross realized gains and gross realized losses on those sales, (2) the basis on which cost was determined (e.g., the average cost method), (3) the gross gains and gross losses included in net income from transfers of securities from this category into the trading category, and (4) the change in the net unrealized holding gain or loss included as a separate component of other comprehensive income.
3. *Held-to-Maturity Debt Securities*. For each balance sheet date, disclose the aggregate fair value, gross unrealized holding gains, gross unrealized holding losses, and amortized cost by major security types. For any sales or transfers from this category, the disclosures must include the amortized cost, the related realized or unrealized gain or loss, and the circumstances leading to the decision to sell or transfer the security.

Real Report 15-1 shows the disclosures of **Intel Corporation** in its 2004 annual report. Financial institutions must make additional disclosures, which we do not discuss here.



### Real Report 15-1 Disclosure of Marketable Securities

#### INTEL CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (in part):

##### Note 2: Accounting Policies (in part)

##### Investments

*Trading Assets*. Trading assets are stated at fair value, with gains or losses resulting from changes in fair value recognized currently in earnings.

*Available-for-Sale Investments*. Investments designated as available-for-sale include marketable debt and equity securities. Investments that are designated as available-for-sale are reported at fair value, with unrealized gains and losses, net of tax, recorded in stockholders' equity. The cost of securities sold is based on the specific identification method. Realized gains and losses on the sale of debt securities are recorded in interest and other, net. Realized gains or losses on the sale or exchange of equity securities and declines in value judged to be other than temporary are recorded in gains (losses) on equity securities, net. Marketable equity securities are presumed to be impaired if the fair value is less than the cost basis continuously for at least six months, absent evidence to the contrary.

##### NOTE 6: Investments (in part)

##### Trading Assets

Trading assets outstanding at fiscal year-ends were as follows:

(In Millions)	2004		2003	
	Net Unrealized Gains	Estimated Fair Value	Net Unrealized Gains	Estimated Fair Value
Debt instruments	\$187	\$2,772	\$174	\$2,321
Equity securities offsetting deferred compensation	81	339	60	304
<b>Total trading assets</b>	<b>\$268</b>	<b>\$3,111</b>	<b>\$234</b>	<b>\$2,625</b>

Continued

Net holding gains on fixed income debt instruments classified as trading assets were \$80 million in 2004, \$208 million in 2003 and \$79 million in 2002. Net holding losses on the related derivatives were \$(77) million in 2004, \$(192) million in 2003 and \$(75) million in 2002. These amounts were included in interest and other, net in the consolidated statements of income.

#### Available-for-Sale Investments

Available-for-sale investments at December 25, 2004 were as follows:

(In Millions)	Adjusted Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Commercial paper	\$9,024	\$—	\$ (4)	\$ 9,020
Floating rate notes	3,419	—	(1)	3,418
Bank time deposits	1,936	—	—	1,936
Corporate bonds	794	—	—	794
Marketable strategic equity securities	589	118	(51)	656
Preferred stock and other equity	200	—	—	200
Other debt securities	234	—	—	234
<b>Total available-for-sale investments</b>	<b>\$16,196</b>	<b>\$118</b>	<b>\$(56)</b>	<b>\$16,258</b>

Available-for-sale investments at December 27, 2003 were as follows:

(In Millions)	Adjusted Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Commercial paper	\$ 9,948	\$	\$(1)	\$ 9,947
Bank time deposits	1,900	—	—	1,900
Floating rate notes	1,078	—	—	1,078
Corporate bonds	703	—	—	703
Marketable strategic equity securities	467	47	—	514
Preferred stock and other equity	224	9	—	233
Other debt securities	352	—	—	352
<b>Total available-for-sale investments</b>	<b>\$14,672</b>	<b>\$56</b>	<b>\$(1)</b>	<b>\$14,727</b>

The duration of the unrealized losses on available-for-sale investments at December 25, 2004 did not exceed 12 months. The company's unrealized losses of \$51 million on investments in marketable strategic equity securities at December 25, 2004 related primarily to a \$450 million investment in Micron Technology, Inc. The unrealized losses were due to market-price movements. Management does not believe that any of the unrealized losses represented an other-than-temporary impairment based on its evaluation of available evidence as of December 25, 2004.

The company sold available-for-sale securities, primarily equity securities, with a fair value at the date of sale of \$85 million in 2004, \$39 million in 2003, and \$114 million in 2002. The gross realized gains on these sales totaled \$52 million in 2004, \$16 million in 2003, and \$15 million in 2002. The company recognized impairment losses on available-for-sale and non-marketable investments of \$117 million in 2004, \$319 million in 2003, and \$524 million in 2002.

#### Questions:

1. What was the pretax amount of the unrealized gain or loss on available-for-sale securities that Intel included in other comprehensive income for 2004, excluding the reclassification amounts from sales?
2. How much did Intel include in accumulated other comprehensive income (pretax) at December 31, 2004 for available-for-sale securities?
3. How much gain or loss did Intel include in its income statement for 2004 related to marketable securities?



## Financial Statement Classification

Investments in trading securities are always classified as current assets (if the company presents a classified balance sheet). Investments in available-for-sale securities are classified as current or noncurrent assets depending on whether or not they will be sold within one year or the operating cycle, whichever is longer.<sup>16</sup> For example, if the Kent Company investments in A and B are current and in C and D are noncurrent at December 31, 2006, it reports the \$71,000 fair value (from our earlier example on page 711) as follows:

Assets	
<i>Current Assets</i>	
Temporary investment in available-for-sale securities (at cost)	\$29,000
Plus: Allowance for change in value of investment	<u>500</u>
Temporary investment in available-for-sale securities (at fair value)	\$29,500
<i>Noncurrent Assets</i>	
Investment in available-for-sale securities (at cost)	\$39,000
Plus: Allowance for change in value of investment	<u>2,500</u>
Investment in available-for-sale securities (at fair value)	\$41,500

Investments in held-to-maturity debt securities are classified as noncurrent assets unless they mature within the next year.

Kent Company would show the \$3,000 (\$500 + \$2,500) related total balance of the Unrealized Increase in Value of Available-for-Sale Securities in stockholders' equity as follows:

Stockholders' Equity	
Accumulated other comprehensive income:	
Unrealized increase in value of available-for-sale securities	\$3,000

Cash flows from purchases, sales, and maturities of available-for-sale securities and held-to-maturity securities are classified as cash flows from investing activities. The gross amounts of inflows and outflows are reported for each category. Cash flows from purchases, sales, and maturities of trading securities are classified as cash flows from operating activities.

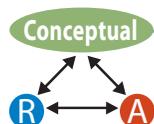
## FASB STATEMENT NO. 115: A CONCEPTUAL EVALUATION

Before *FASB Statement No. 115*, investments in marketable equity securities were accounted for by the lower of cost or market (LCM) method. There were no specific general principles for investments in debt securities. Most companies used the cost method, but financial institutions followed regulatory accounting principles, which require that some securities be accounted for by the fair value method.

The LCM method was widely criticized for two primary reasons. First, it was argued that it was not a *relevant* value because it did not show the *liquidity* of the securities when the fair value exceeded the cost. In that situation, more funds could be obtained through a sale in the current market than was indicated by the balance sheet. Secondly, the method allowed companies to engage in what was often referred to as "gains trading." Gains trading meant that companies would sell those securities that had a fair value above cost so that the realized gain on the sale would be included in income.

The major controversies involved in the new principles focus on four issues: (1) fair value is required in the balance sheet for trading securities and available-for-sale securities, but amortized cost is required for held-to-maturity securities, (2) fair value is *not* required for certain liabilities, (3) unrealized holding gains and losses are reported in net

7 Explain the conceptual issues regarding investments in marketable securities.



16. *FASB Statement No. 115, op. cit.*, par. 17.

income for trading securities but in other comprehensive income for available-for-sale securities, and (4) the classification of securities is based on management intent. The *Statement* was adopted by a 5-to-2 majority. The dissenters argued that a company should report all three categories at fair value, and include all unrealized holding gains and losses in net income.

### Fair Value Is Required for Certain Investments

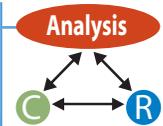
It may be argued that the fair value of trading securities and available-for-sale securities is more *relevant* than the LCM value. In particular, reporting the fair value may assist users in evaluating the performance of a company's investment strategies and increase the *comparability* of balance sheets. Fair value is the market's estimate of the present value of the net future cash flows of those securities, discounted to reflect both the current interest rate and the market's estimate of the *risk* associated with those cash flows.

The fair value of investments also may provide a better indication of the *financial flexibility*, or *solvency*, of companies, particularly for financial institutions that have a large portion of their assets in such securities. In a *liquidity* shortage, the fair value of investments is the amount available to cover a company's obligations.

It also may be argued that the fair value of held-to-maturity debt securities is *not* relevant. Amortized cost may provide relevant information because it focuses on the decision to acquire the asset, the earnings effects of that decision that will be realized over time, and the future recoverable value of the asset. Fair value ignores those concepts and focuses instead on the effects of transactions and events that do not directly involve the company. If a debt security is held to maturity, the maturity value will be realized and any interim unrealized holding gains and losses will reverse. If a company has no intent to sell a security and has no need to, then the fair value may *not* be relevant because that cash flow will not occur.

The FASB made the held-to-maturity category restrictive, so that the use of the amortized cost method must be justified for each investment in a debt security. At each acquisition, the company must establish the positive intent and ability to hold the security to maturity, which is *not* the same as the absence of an intent to sell. Thus the amortized cost method is appropriate if the security is actually held to maturity, but is not appropriate if the company merely has no intent to sell it. Of course, the classification does involve judgment and that judgment may prove to be incorrect. Also, the judgment may be changed by unforeseen circumstances such as changes in tax laws or in the security's credit risk.

Note that the arguments in favor of reporting fair value for some securities do not necessarily apply to the reporting of other assets, such as inventories. Therefore, the arguments do not invalidate the use of the LCM method for inventories.



### Fair Value Is Not Required for Certain Liabilities

The FASB also considered requiring certain liabilities to be reported at fair value because they are "mirror images" of the assets. This was supported by financial institutions, which manage their interest rate risk by coordinating their holdings of financial assets and liabilities. Therefore, they argued that financial statements would provide a more *relevant* view of a company's exposure to *risk* if some liabilities were also reported at fair value. In other words, they felt that recognizing fair value on only one side of their portfolios introduced bias into their financial statements.

The FASB rejected the fair value reporting of liabilities because of the difficulty of (1) determining which liabilities should be reported at fair value, and (2) obtaining a *reliable* value because many of the liabilities do not trade in an established market. Also nonfinancial companies do not manage risk in the same way and use the proceeds from borrowing to invest in physical and intangible assets that are not reported at fair value. Since liabilities are not reported at fair value, the FASB concluded that it would not

require all investments (i.e., those held to maturity) to be valued at fair value. The FASB admitted that this conclusion represents a compromise, and one of the dissenters voted against adoption partly for this reason. However, the FASB has since announced an *intent* to change GAAP so that liabilities would be reported at fair value.

### Reporting of Unrealized Gains and Losses

Since trading securities are actively managed, the FASB concluded that income measurement for those securities is more relevant if it includes the results of changes in fair value—the unrealized holding gains and losses. Therefore, a company's net income includes the results of economic events that occur in the period and provides a better measure of the company's *return on investment*.

Partly in response to the issue of not reporting liabilities at fair value, the FASB concluded that including unrealized holding gains and losses in income for available-for-sale securities would create unnecessary volatility in a company's reported net income. Such volatility does not represent the way that the company manages its business and the impact of economic events of the period. In addition, when the intent is to hold securities for a long period, it is more likely that any unrealized holding gains and losses will offset before the sale occurs. Therefore, including those gains and losses in net income would also create unnecessary volatility in income. For these reasons, the FASB concluded that unrealized holding gains and losses on available-for-sale securities should not be included in net income, but instead should be reported as a component of other comprehensive income.

This reporting of unrealized holding gains and losses, however, does not eliminate the possibility of "gains trading," because the realized gain on a sale is the difference between the selling price and the cost of the security, and is included in net income. Note also that a company may tend to avoid selling a security classified as available for sale when its fair value is less than its cost. The sale would result in the recognition of a realized loss in net income. However, if the company continues to hold the security, the decline in value is included in other comprehensive income. Therefore the decision not to sell avoids the recognition of the decline in value in net income. Thus, companies are able to "manage" the amount of net income they report by selecting which securities to sell.



### LINK TO ETHICAL DILEMMA

As you complete the audit of Blanket Insurance Company, an interesting item has come to your attention. One of the staff accountants on the job noted that at the end of each quarter, the company has sold a portion of its investments classified as available-for-sale. With each sale, the company was able to recognize a gain and increase income so that it would be able to just meet analyst forecasts. As the audit manager, you began to look into this finding and an interesting pattern has emerged. For the last five years, if the company's income appeared to fall short of the analysts' expectations, the company would sell available-for-sale investments that had increased in value and recognize a gain that would allow the company to meet the analysts' forecasts. Because the company has a significant investment portfolio, you had overlooked these sales in previous years. In discussions with the company's management, the CEO noted that this practice was part of the company's financial reporting strategy. Also, the CEO argued that the recognition of these gains and losses was entirely within GAAP. What is your reaction to the CEO's comments?

## Classification of Securities Is Based on Management Intent

Classifying securities into three categories using management intent as a criterion to distinguish among the categories may result in an inconsistent application of the principles. Companies with three identical securities could account for those securities using three different accounting methods. Both issues may create a lack of *comparability*.

In addition, transfers between categories, which are also based partly on management intent and judgment, allow for the management of earnings because the gain (or loss) is included in net income. Combined with the opportunities for gains trading, the new principles may not produce sufficient *relevance*.



### LINK TO INTERNATIONAL DIFFERENCES

International accounting standards also use the trading, available-for-sale, and held-to-maturity categories but apply them to all financial assets, not just investments in securities. The valuation methods are the same for each category as U.S. principles, but companies are allowed to make a one-time election to choose whether to record the changes in value of any financial asset or liability in net income or equity (which would be similar to other comprehensive income) if it meets certain restrictions. Additionally, international accounting standards allow for the reversal of impairment losses related to held-to-maturity securities and available-for-sale *equity* securities.

## EQUITY METHOD

When an investor corporation owns a sufficiently large percentage of common stock, it is able to exert significant influence over the operating and financial policies of the investee corporation. In particular, the investor may be able to influence the investee's dividend policy. The dividends paid may be affected by the investor's cash needs, desire to raise its income, or by tax considerations. The fair value methods, which recognize income when dividends are received (declared), are not appropriate when significant influence exists because the investor could influence its income. Also, the fair value of the stock does not represent the cash that would be received if such a large number of shares were sold. The equity method of accounting is used to account for these investments.

The equity method is based on the existence of a material economic relationship between the investor and the investee. **APB Opinion No. 18 requires that an investor use the equity method when it is able to exercise significant influence over the operating and financial policies of an investee.** "Significant influence" is determined by factors such as:

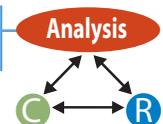
- Representation on the board of directors
- Participation in policy-making processes
- Material intercompany transactions
- Interchange of managerial personnel
- Technological dependency.

In the absence of evidence to the contrary, however, **an investment of 20% or more in the outstanding common stock of the investee leads to the presumption of significant influence and the use of the equity method.**<sup>17</sup> An investor also uses the equity method when significant influence exists even though the investor holds less than a 20% investment in the common stock of the investee.

On the other hand, there are situations in which an investor holds 20% or more of the outstanding common stock of an investee and does not have the ability to exercise

**8** Account for investments using the equity method.

17. "The Equity Method of Accounting for Investments in Common Stock," *APB Opinion No. 18* (New York: AICPA, 1971), par. 17.



significant influence over the investee. In these cases, the investor does not use the equity method to account for the investment. For example, an investor holding an investment of 20% or more in the investee should *not* use the equity method when; (1) the investee challenges the investor's ability to exercise significant influence through litigation or complaints to governmental regulatory authorities; (2) the investor and investee sign an agreement that the investor surrenders significant rights as a shareholder; (3) a small group of shareholders hold majority ownership and operate the investee and ignore the views of the investor; (4) the investor needs more financial information to apply the equity method than is available to the investee's other shareholders, and cannot obtain that information (the application of the equity method requires information not typically included in published financial statements); or (5) the investor cannot obtain representation on the investee's board of directors.<sup>18</sup>

### Accounting Procedures

When an investor company uses the equity method, it uses the following procedures:

- The investor initially records an investment in common stock at its acquisition cost. However, in contrast to the fair value method, the investor records income when it is *reported* by the investee.
- The investor records income and an increase in the carrying value of the investment account at an amount that is based on the investor's percentage of ownership in the investee.
- The investor records dividends received (or receivable) as reductions in the carrying value of the investment account when they are paid (or declared) by the investee.

Also, (1) since a material relationship is presumed, the investor removes from its investment account the effects of all intercompany items of revenue and expense to avoid "double-counting," and (2) if the acquisition cost is greater than the proportionate book value of the investee, the investor may recognize additional depreciation. Therefore, the investor must make certain adjustments to its investment income. The most frequent are to:

1. Eliminate intercompany transactions in the determination of investor income (e.g., a sale from the investor to the investee that results in revenue to the investor and an expense to the investee).
2. Depreciate the proportionate share of any difference between the fair values and book values of investee depreciable assets implied by the acquisition price of the investee shares. [In the event the investor cannot determine the fair value of the specific investee assets, the entire excess of cost (i.e., acquisition price) over the proportionate book value is treated as goodwill and is *not* amortized.]
3. Treat the proportionate share of investee extraordinary items as investor extraordinary items. The proportionate share of investee results of discontinued operations are treated similarly.<sup>19</sup>

In summary, the investor accounts for the investment and income under the equity method as follows:

$$\text{Investment} = \text{Acquisition Cost} + \frac{\text{Investor's Share of Investee Income}}{\text{Investor's Share of Investee Income}} - \text{Dividends Received}$$

18. "Criteria for Applying the Equity Method of Accounting for Investments in Common Stock," *FASB Interpretation No. 35* (Stamford, Conn.: FASB, 1981), par. 4.

19. In addition, the investor recognizes deferred income taxes for any difference between income reported under the equity method for financial reporting purposes and dividend income reported for income tax purposes. We do not consider deferred income taxes further in this chapter; we discuss them in Chapter 19.

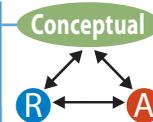
where

$$\text{Investor's Share of Investee Income} = (\text{Investee's Net Income} \times \text{Ownership \%}) - \text{Adjustments}$$

and

$$\text{Dividends Received} = \text{Total Dividends Paid by Investee} \times \text{Ownership \%}$$

The use of the equity method more closely fits the requirements of accrual accounting because the investor's share in investee income is reported by the investor during the period in which it is earned rather than as cash is received. The equity method, therefore, supplies more relevant information for decision makers who rely on financial statements.



**Example: Equity Method** Assume Cliborn Company purchases 4,200 shares of the S Company's outstanding common stock on January 1, 2007. (On that date, S Company had 16,800 shares outstanding, so Cliborn's investment is 25% and significant influence is presumed to exist.) Cliborn paid \$125,000 for the shares, and on the date of acquisition obtains the following information concerning S Company:

	Balance Sheet	
	Book Value	Fair Value
Depreciable assets (remaining life, 10 years)	\$400,000	\$450,000
Other nondepreciable assets (e.g., land)	190,000	246,000
Total	<u>\$590,000</u>	<u>\$696,000</u>
Liabilities	\$200,000	\$220,000
Common stock	250,000	
Retained earnings	140,000	
Total	<u>\$590,000</u>	

There were no intercompany transactions during the year. S Company paid a \$20,000 dividend on August 27, 2007, and reported net income for 2007 of \$81,000, consisting of ordinary income of \$73,000 and an extraordinary gain of \$8,000. Cliborn Company records these events as follows:

- To record the original investment on January 1, 2007:

<b>Investment in Stock: S Company</b>	<b>125,000</b>	
<b>Cash</b>		<b>125,000</b>

- To record the receipt of dividends on August 27, 2007:

<b>Cash</b>	<b>5,000</b>	
<b>Investment in Stock: S Company</b>		
<b>(0.25 × \$20,000)</b>		<b>5,000</b>

The effect of this transaction is simply to exchange one asset (Investment in Stock: S Company) for another (Cash).

- To record Cliborn Company's 25% share in the year's net income on December 31, 2007:

<b>Investment in Stock: S Company</b>		
<b>(0.25 × \$81,000)</b>	<b>20,250</b>	
<b>Investment Income: Ordinary</b>		
<b>(0.25 × \$73,000)</b>		<b>18,250</b>
<b>Investment Income: Extraordinary</b>		
<b>(0.25 × \$8,000)</b>		<b>2,000</b>

Note that Cliborn increases the investment account by its share of the total net income, and separates the investment income into its share of the ordinary and extraordinary income.

4. To depreciate the increase in the recorded value of depreciable assets acquired:

<b>Investment Income: Ordinary</b>	<b>1,250</b>
<b>Investment in Stock: S Company</b>	
(\$12,500 ÷ 10)	<b>1,250</b>

The depreciable assets acquired have a fair value that exceeds book value by \$50,000 (\$450,000 – \$400,000) and the remaining useful life of the assets is 10 years. Cliborn acquired 25% of this increase in asset value, so it depreciates \$12,500 ( $0.25 \times \$50,000$ ) of the additional depreciable asset value over the remaining useful life of the assets according to the matching principle. This \$12,500 divided by the 10-year life results in \$1,250 additional depreciation, which Cliborn records directly as a deduction from the ordinary investment income and the investment on December 31, 2007.

The investment must also be reviewed for impairment.<sup>20</sup> *APB Opinion No. 18* requires a company to recognize an impairment loss and reduce the investment to its fair value if there is an “other than temporary” decline in value, as we discuss later in the chapter. ♦



### Financial Statement Disclosures

Cliborn computes the carrying value of its Investment in Stock: S Company account by adding the reported income for the year and deducting the dividends, depreciation, and goodwill amortization. It reports the Investment in Stock: S Company account in the long-term investment section of its December 31, 2007 balance sheet. This account has a carrying value of \$139,000, computed as follows:

<u>Investment in S Company</u>		
Acquisition price January 1, 2007		\$125,000
Add: Share of 2007 reported ordinary income	\$18,250	
Share of 2007 reported extraordinary income	<u>2,000</u>	<u>20,250</u>
		\$145,250
Less: Dividends received August 27, 2007	\$ 5,000	
Depreciation on excess fair value of acquired assets		
(\$12,500 ÷ 10; see earlier computation)	<u>1,250</u>	<u>(6,250)</u>
Carrying value		<u>\$139,000</u>

The total amount of investee income that Cliborn reports on its income statement for 2007 is \$19,000. This amount consists of \$17,000 that it reports as income from continuing operations and \$2,000 that it reports as an extraordinary item. The accompanying notes to the financial statements include a supporting schedule reconciling these amounts. This schedule appears as follows:

<u>Income from Investment</u>	
Share of 2007 ordinary income	\$18,250
Less: Depreciation on excess fair value of acquired assets	<u>(1,250)</u>
Ordinary investment income	\$17,000
Plus: Share of investee extraordinary income	<u>2,000</u>
Net investment income	<u>\$19,000</u>

20. “Goodwill and Other Intangible Assets,” *FASB Statement of Financial Accounting Standards No. 142* (Norwalk, Conn.: FASB, 2001), par. 40 states that any implied goodwill at the purchase of the equity investment is *not* reviewed for impairment.

## Special Issues

Sometimes an investor acquires enough additional common shares during a year to justify a change from the fair value method to the equity method, or an investor may dispose of a portion of its investment so that a change from the equity method to the fair value method is necessary. Additionally, an investment carried under the equity method may be acquired for a cost that is less than the fair value of the assets. Or investments carried under the equity method may have impairments and/or declines in value that are not temporary. Finally, a company may acquire enough of an investee's outstanding common stock to issue consolidated financial statements.

### Change to Equity Method

When an investor currently using the fair value method acquires enough additional common shares during a year to exercise significant influence over the investee, the investor is required to adopt the equity method of accounting. It is most likely (and assumed in this discussion) that the shares were accounted for as available-for-sale securities. When the equity method is adopted, the investor restates its investment in the investee by debiting the Investment account and crediting Retained Earnings for its *previous* percentage of investee income (less dividends) for the period from the original date of acquisition to the date that significant influence was obtained. This is a retrospective restatement (adjustment). The company also eliminates any amounts included in the allowance and unrealized increase/decrease accounts that it used to record these shares at fair value. Thereafter, the equity method is applied in the usual manner based on the *current* percentage ownership.

For example, assume that on January 2, 2006, Short Company purchased as its only investment 15% of the outstanding common stock of J Corporation for \$150,000 (when the book value of net assets was \$1,000,000). At the end of 2006, the J Corporation reported net income of \$300,000 and paid dividends of \$60,000; at this time, the market value of the shares was \$186,000 so the company wrote up the carrying value of the investment (using an allowance account) to fair value. On January 2, 2007, to exert significant influence on J Corporation, Short Company purchased an additional 25% of the outstanding common stock of the J Corporation for \$310,000.

We show the journal entries that Short Company recorded in 2006 and 2007 related to this information in the upper portion of Example 15-5. In 2006, Short Company used the fair value method to account for its investment. It recorded the dividends received as dividend revenue and made an adjustment to the Allowance and Increase/Decrease accounts to record the increase in the investment's carrying value to fair value. In 2007, the Short Company recorded the \$310,000 additional investment that increased its ownership to 40%. The company also made two journal entries to account for its *previous* 15% ownership under the equity method. First, it recognized \$45,000 ( $\$300,000 \times 0.15$ ) of the 2006 net income of J Corporation as an increase in its Investment account and in Retained Earnings. Second, it reduced its Investment account and Retained Earnings by \$9,000, its share of the 2006 dividends of J Corporation. (Note that Retained Earnings was adjusted directly for the share of net income and dividends because these are from the *prior* year.) Thus, the company recognized an increase in value of \$36,000 ( $\$45,000 - \$9,000$ ) in the Investment and Retained Earnings accounts. The company also "reversed" its December 31, 2006 adjustment to increase the carrying value of the investment. Because the purchase price (fair value) of the shares was equal to their underlying book value, no additional depreciation was recorded. Had this adjustment been necessary, it would have been recorded (based on the 15% ownership) as a reduction in the Investment and Retained Earnings accounts.

The lower portion of Example 15-5 explains the rationale behind the adjustments. Note that the book value of the net assets of J Corporation was \$1,240,000 on January 2, 2007. By increasing the \$150,000 initial investment for the \$45,000 share of 2006 net income and decreasing it for the \$9,000 share of the 2006 dividends, the book value of

**EXAMPLE 15-5 Journal Entries to Illustrate a Change to the Equity Method**

<i>Fair Value Method</i>			<i>Change to Equity Method</i>		
1/2/06	Investment in J	150,000	1/2/07	Investment in J	310,000
	Cash	150,000		Cash	310,000
12/31/06	Cash	9,000 <sup>a</sup>	1/2/07	Investment in J	45,000 <sup>c</sup>
	Dividend Revenue <sup>b</sup>	9,000		Retained Earnings	45,000
12/31/06	Allowance for Change in Value of Investment	36,000	1/2/07	Retained Earnings	9,000
	Unrealized Increase/Decrease in Value of Available-for-Sale Securities	36,000		Investment in J	9,000
			1/2/07	Unrealized Increase/Decrease in Value of Available-for-Sale Securities	36,000
				Allowance for Change in Value of Investment	36,000

*Comparison of Book Values*

	J Corporation Net Assets	Investment in J
Book value, 1/2/06	\$1,000,000	\$150,000
+ Net Income for 2006	300,000	45,000
– Dividends for 2006	(60,000)	(9,000)
Book value, 1/2/07	<u>\$1,240,000</u>	<u>\$186,000 (15%<sup>d</sup>)</u>
Additional investment (25%)		<u>310,000 (25%)</u>
Book value, 1/2/07 (40%)		<u>\$496,000</u>

a.  $\$60,000 \times 0.15$ 

b. Closed to Retained Earnings

c.  $\$300,000 \times 0.15$ d.  $\$186,000 \div \$1,240,000$ 

the Investment account is \$186,000 (prior to the additional investment), or 15% of the \$1,240,000 net assets of J Corporation on January 2, 2007. Increasing the \$186,000 for the \$310,000 (25%) additional investment results in an Investment account balance of \$496,000, or 40% of the net assets. From this point on, Short Company will apply the equity method using the 40% ownership interest.

**Change from Equity Method**

Sometimes an investor using the equity method sells a portion of the investment so that its portion of ownership falls below 20%, or the investor may lose significant influence over the investee. Under these conditions, the use of the equity method is no longer appropriate and the investor no longer accrues its share of investee income. However, previously recorded income remains as a part of the book value of the Investment account. The company then accounts for the investment under the fair value method. The investor company deducts from the book value of its Investment account any dividends received in later periods that exceed its share of income for those periods.

**Acquisition at Less Than Fair Value**

When the purchase price of an investment in common stock accounted for by the equity method is less than the proportionate fair value of the net assets acquired, the investment initially is recorded at cost. However, the difference between the cost and proportionate fair value of the net assets acquired (i.e., “negative goodwill”) is allocated to reduce the value assigned to noncurrent assets, as we discussed in Chapter 12.

### Impairment: Declines Other Than Temporary

The investor must recognize “other than temporary” declines in the value of investments accounted for under the equity method. Evidence of these declines may be provided by the bankruptcy of the investee, by lengthy declines in the market value of the stock, or by a number of years of operating losses. These events bring into question the ability of the investee to sustain income sufficient to justify the carrying value of the investment. When a decline that is considered to be other than temporary occurs, the investor debits a Loss account and credits the Investment account for the difference between the carrying value of the investment and the fair value. If the market value of the investment later increases, the investor does not recognize the recovery in value.

### Consolidated Financial Statements

When an investor using the equity method acquires *control* over the investee’s operations, the entity concept is enhanced by preparing financial statements for the combined set of companies. However, the two (or more) companies continue to maintain separate accounting records. During the year, the investor accounts for its investment in the investee by the equity method, as we previously discussed. At the end of the year, the accounting results of the investor and investee are combined (and the Investment account is eliminated) and reported in consolidated financial statements.

The logic of consolidation accounting is to present financial statements for a single economic entity, even though there are separate legal entities. The two guiding principles for the preparation of consolidated financial statements are:

1. The entity cannot make a profit by selling to itself. That is, intercompany sales and profits must be eliminated from the consolidated financial statements.
2. The entity cannot own or owe itself. That is, intercompany receivables and payables are not reported in consolidated financial statements.

Discussion of the preparation of consolidated financial statements is included in an advanced accounting book.



## LINK TO INTERNATIONAL DIFFERENCES

The application of the equity method is generally the same under both international and U.S. accounting standards. However, the U.S. standards require more detailed disclosures.



## SECURE YOUR KNOWLEDGE 15-2

- The transfer of a security between investment categories is accounted for at the fair value at the time of the transfer, with the accounting for any unrealized gain or loss dependent on the type of transfer.
- If a held-to-maturity or available-for-sale security experiences a decline in fair value that is judged to be “other than temporary,” an impairment is recognized in income as a realized loss with the fair value becoming the new “cost” of the security.
- If the investor company is able to exert significant influence over the investee company, the fair value methods are inappropriate and the investor is required to use the equity method.

(continued)

Under the equity method:

- Significant influence is presumed if the investor owns between 20% and 50% of the investee's outstanding common stock.
- The initial investment is recorded at cost, is increased by the investor's proportionate share of the investee's reported income, and is reduced by the investor's proportionate share of any dividends declared.
- The investor depreciates its proportionate share of any difference between the fair value and the book value of the investee's depreciable assets by reducing the investment account.
- If a company changes its accounting for investments to the equity method, a retrospective restatement (adjustment) is made to adjust the accounts to the balance they would have shown if the equity method had always been used.
- If the equity method is no longer appropriate (e.g., the investor's ownership percentage falls below 20%), the company will then account for the investment under the fair value method.

## ADDITIONAL ISSUES FOR INVESTMENTS

9 Describe additional issues for investments.

Additional issues for investments include accounting for investments in nonmarketable securities, stock dividends and stock splits, stock warrants, convertible bonds, the cash surrender value of life insurance, and investments in funds. We discuss each of these in the following sections.

### Nonmarketable Securities

Nonmarketable securities are those that are not traded in a “qualifying” market (e.g., New York Stock Exchange), as we discussed earlier in the chapter. For example, shares or bonds issued by a privately held company are considered nonmarketable (even though they may be traded between individual investors). Investments in nonmarketable securities are outside the scope of *FASB Statement No. 115*. Therefore, there is no requirement to report them at fair value. Companies typically report them at their historical cost and, therefore, ignore any unrealized holding gains and losses.

### Stock Dividends and Splits

Corporations occasionally distribute additional shares of stock to current shareholders (as we discuss in Chapters 16 and 17). In such cases the investor retains the same relative percentage of ownership in the investee because it does not acquire an additional percentage of outstanding shares. Consequently, the investor records no income from the distribution when it receives the new shares. The fair value of each share typically falls. The fair value at year-end, however, is simply the new number of shares multiplied by the year-end fair value.

The investor does not make a formal journal entry to record the receipt of shares of stock from either a stock dividend or a stock split. However, its cost is now spread over a larger number of shares, thereby lowering its average unit cost of the shares. It records a memorandum entry to assign the average unit cost to the old and new shares. It then uses this average cost when there is a sale transaction involving the shares.

For example, assume that the Smith Corporation purchased 2,000 shares of Kell Company common stock for \$30 per share, or a total of \$60,000. Two months later Kell issued a 50% stock dividend and Smith Corporation received another 1,000 shares. Smith records a memo entry for the receipt of the stock dividend as follows:

**Memo: Received 1,000 shares of Kell Company common stock as a stock dividend. The cost of the shares is now \$20 per share, computed as follows: \$60,000 ÷ 3,000 (2,000 + 1,000) shares.**

Later, Smith sold 500 of the shares for \$25 per share, and the fair value at the most recent balance sheet date was \$23 per share. Smith records the *sale* of the 500 shares as follows:

Cash (500 × \$25)	12,500	
Investment in Available-for-Sale Securities (500 × \$20)		10,000
Gain on Sale of Investment [500 × (\$25 – \$20)]		2,500
Unrealized Increase/Decrease in Value of Available- for-Sale Securities [500 × (\$23 – \$20)]	1,500	
Allowance for Change in Value of Investment		1,500

Note that the reduction of the Investment account and calculation of the Gain are based on the \$20 per share cost and not the \$30 original purchase price. Smith still owns a total of 2,500 (2,000 + 1,000 – 500) shares and will report them on its balance sheet at fair value.

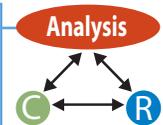
### Stock Warrants

As we discussed in Chapter 14, stock warrants are certificates that enable their holders to purchase a specified number of shares of common stock at a predetermined price. They generally are issued to current stockholders as evidence of preemptive rights (discussed in Chapter 16), or for other reasons. Each stockholder usually receives a warrant for each share owned, although it may take more than one warrant to purchase a share. Warrants are defined as equity securities under *FASB Statement No. 115*.

Stock warrants have value because they usually allow the holder the right to purchase additional shares at a fixed price, usually slightly less than their current market price. Thus, the warrants for these rights will trade on the stock market soon after they are issued. Eventually, the right to purchase additional shares expires, so the stockholder (the investor corporation) who receives these warrants has three alternatives:

1. Purchase additional shares by exercising the warrants.
2. Sell the warrants.
3. Do nothing and allow the warrants to expire.

Option 3 obviously is not a good choice in most circumstances because by selling the warrants, the shareholder can convert them into cash and still retain the original number of shares held. The shareholder thus should choose either alternative 1 or 2, although either the exercise or the sale of the warrants creates a valuation issue. To determine the cost of the new investment shares, or the gain or loss on the sale of the warrants, a cost must be assigned to the warrants. Since no additional cost is incurred when the warrants are received by the investor corporation, it must assign a portion of the cost of the stock to the warrants upon their receipt. This amount is determined by using a weighted average based on the market value of the stock *ex rights* (without the rights attached) and the market value of the warrants (rights) as we discussed in Chapter 14.<sup>21</sup> The accounting for the purchase of additional shares by exercising the warrants (or the sale of the warrants) would use the amount assigned to the warrants.



### Convertible Bonds

As we discussed in Chapter 14, some bonds (and preferred stock) carry a conversion privilege that allows investors to exchange them for common stock. Investments in convertible bonds are *not* included in the held-to-maturity category because the intent is that conversion will occur before the bonds mature. These investments in convertible bonds are included in the available-for-sale (or trading) category and valued at fair value.

21. If the market value is not available when the warrants are received, this process must be delayed until the market value becomes known.

Therefore, conversion requires only a memorandum entry, which specifies the number of shares that are now owned instead of the bonds. Also, the cost per share is calculated to help account for future transactions, such as the sale of the shares.

### Cash Surrender Value of Life Insurance

Since a company is dependent on the skill and expertise of its officers, frequently it will purchase insurance policies on their lives. The reason for this is that the company will be at least partly compensated for the loss of executive skill in the event of an unexpected death.

Many insurance policies allow a portion of accumulated premiums to build up as a savings plan; if the policy is canceled, this savings plan or **cash surrender value** of the policy is returned to the company buying the life insurance policy. When a company is guaranteed a return equal to the amount of the cash surrender value of the policy, part of each annual premium represents an investment. The company records the portion of the yearly premium that does not increase the cash surrender value of the policy as insurance expense. It includes the amount of the cash surrender value of life insurance policies as a long-term investment on the balance sheet. The investment increases from year to year and is stated in the policy. Typically, the company records the yearly increase in this investment at the end of the year. Additionally, some life insurance policies pay dividends. The company holding such a policy treats any dividends received as a reduction of insurance expense.

For example, suppose that at the beginning of the year the Mele Corporation pays an annual insurance premium of \$5,500 to cover the lives of its officers. It records the payment as follows:

<b>Prepaid Insurance</b>	5,500	
Cash		5,500

According to the terms of the insurance contract, the cash surrender value of the policies increases from \$7,200 to \$8,300 during that year. The adjusting entry at the end of the year to record the Insurance Expense and the increase in the Cash Surrender Value of Life Insurance is as follows:

<b>Insurance Expense</b>	4,400	
<b>Cash Surrender Value of Life Insurance</b>		
(\$8,300 – \$7,200)	1,100	
<b>Prepaid Insurance</b>		5,500

Upon the death of any of the insured officers, Mele would collect the face amount of the insurance policy and credit the cash surrender value account to close out the balance in the account related to this policy. The difference between the proceeds and the cash surrender value is reported as an ordinary gain, because the insuring of officers' lives is a usual operating procedure. For income tax purposes the premiums are not tax deductible and the gain is not taxable.

### Investments in Funds

Companies may place assets in special funds for specific purposes, and some of these assets then become unavailable for normal operations because of indenture or other contractual arrangements. Special funds may be current, such as petty cash funds, or they may be long term. The most common long-term funds are as follows:

- Funds used to accumulate cash to retire long-term liabilities (**sinking funds**)
- Funds used to retire preferred stock (**stock redemption funds**)
- Funds used to purchase long-term assets (**plant expansion funds**)

A company reports its long-term funds as investments on its balance sheet. It is important to understand the distinction between a fund and an appropriation (restriction) of retained earnings. A fund actually sets aside cash and other assets to accomplish specific

objectives. In contrast, an appropriation of retained earnings discloses legal or contractual restrictions (as we discuss in Chapter 17). An appropriation does not provide any cash.

Accounting for long-term funds requires separate accounts. In essence, the fund is accounted for as an individual set of books. For example, the accounts that a company might use in connection with a bond sinking fund are Sinking Fund Cash, Sinking Fund Securities, Sinking Fund Revenues, Sinking Fund Expenses, Allowance for Change in Value of Sinking Fund Securities, Unrealized Increase/Decrease in Value of Sinking Fund Securities, Gain on Sale of Sinking Fund Securities, and Loss on Sale of Sinking Fund Securities. This company makes journal entries to these accounts to record its (1) initial and/or periodic cash contributions to the sinking fund, (2) investments in various securities to earn dividends and interest, (3) expenses to administer the fund, (4) unrealized increases and decreases in value, and (5) sale of the securities to acquire cash to retire the bonds. The company reports any revenues, expenses, gains, and losses in the usual manner on its income statement.

### Investment Transactions and Operating Cash Flows

We discussed how a company reports its investments on its balance sheet and statement of cash flows in various sections earlier in the chapter. We also discussed how a company reports any gains or losses related to its investments on its income statement. We did not discuss how a company reports certain investment-related transactions in the operating activities section of its statement of cash flows. A company includes the cash received for interest in the operating activities section. Even though the interest received is related to an investing activity, GAAP requires it to be included in operating activities because the related interest revenue is included in the company's income statement. If a company has amortized a discount (premium) on an investment in bonds, under the indirect method the company subtracts (adds) the discount (premium) to net income in the operating activities section of its statement of cash flows. Similarly, if a company is accounting for an investment under the equity method, it subtracts (adds) any increase (decrease) in the equity investment to net income in the operating activities section.

## APPENDIX: DERIVATIVES OF FINANCIAL INSTRUMENTS

Companies have always held or issued financial instruments. However, derivatives of those financial instruments are relatively new and are becoming increasingly common. Companies often use derivatives to reduce the risk of adverse changes in interest rates, commodity prices, and foreign currency exchange rates. It is important for financial statements to show the effects of that risk management. In this Appendix, we discuss recording and reporting issues as they relate to selected derivative transactions.

A **financial instrument** is cash, evidence of an ownership interest in an entity, or a contract that both (1) imposes on one entity a contractual obligation (a) to deliver cash or another financial instrument to a second entity or (b) to exchange other financial instruments on potentially unfavorable terms with the second entity, and (2) conveys to that second entity a contractual right (a) to receive cash or another financial instrument from the first entity or (b) to exchange other financial instruments on potentially favorable terms with the first entity.<sup>22</sup> Thus, financial instruments include cash, accounts and notes receivable, accounts and notes payable, and investments in debt and equity securities, as well as bonds payable and common stock. We discuss accounting for these financial instruments throughout the book.

**10** Account for derivatives of financial instruments. (Appendix)

22. "Accounting for Derivative Instruments and Hedging Activities," *FASB Statement of Financial Accounting Standards No. 133* (Norwalk, Conn.: FASB 1998), Appendix F and "Accounting for Certain Derivative Instruments and Certain Hedging Activities," *FASB Statement of Financial Accounting Standards No. 138* (Norwalk, Conn.: FASB 2000).

A **derivative financial instrument** (or simply **derivative**) derives its value from an underlying asset or index. Thus, derivatives include futures, forward, swap, and option contracts. Derivative contracts can be very complex, and they involve the following concepts:<sup>23</sup>

1. A derivative's cash flows or fair value must fluctuate and vary based on the changes in one or more underlying variables.
2. The contract must be based on one or more notional (defined later) amounts or payment provisions or both, even though title to that amount never changes. The underlying and notional amounts determine the amount of the settlement.
3. Many contracts require no initial net investment.
4. The contract can be readily settled by a net cash payment.

A recent study indicated that more than \$41 trillion of derivative contracts are outstanding worldwide. Derivatives contracts have been in the news in recent years and include situations in which **Procter & Gamble** sustained significant losses, **Bankers Trust** has been sued by numerous clients, **Barings Bank** in London was bankrupted, **Orange County, California**, lost millions of dollars, and **Fannie Mae** restated its results by \$9 billion.

A **hedge** is a means of protecting against a financial loss. For a derivative to be considered a hedge, it must be "highly effective" in offsetting risk exposure because of changes in fair values or cash flows of the hedged item. The three types of hedges are:

- Fair value hedges
- Cash flow hedges
- Hedges of foreign currency exposures of net investments in foreign operations

**FASB Statement No. 133** requires a different accounting treatment for each type of hedge. Accounting for derivatives can be very complex. To explain the basic issues, we show the accounting for a fair value hedge using an interest-rate swap, and briefly discuss the accounting issues for a cash flow hedge (the third type is beyond the scope of this book). In our examples we use simplifying assumptions (such as a flat yield curve) and facts so that you can understand the basic accounting issues and avoid many real-world complexities regarding valuation.

An **interest-rate swap** is an agreement in which two companies agree to exchange the interest payments on debt over a specified period. The interest payments are based on a principal amount that often is referred to as a **notional** (i.e., imaginary) amount because the swap does not involve an actual exchange of principal at either inception or maturity. An example of a *fair value hedge* is an interest rate swap in which a company *receives* a fixed rate of interest and *pays* a variable rate. An example of a *cash flow hedge* is an interest rate swap in which a company *receives* a variable rate of interest and *pays* a fixed rate.

Although we discuss investments in this chapter, we focus on accounting for a derivative of a financial instrument that is a liability, because they are more common for nonfinancial companies. However, a derivative can result in either an "investment" asset or a liability being recognized by either party, as market conditions change. The other company involved in the original transaction, a bank in our example, has a financial instrument that is an asset.

## FAIR VALUE HEDGE

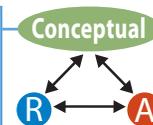
A fair value hedge protects against the risk from changes in value caused by *fixed* terms, rates, or prices. For example, a company with debt that has a fixed interest rate that enters into an interest rate swap to receive a fixed rate of interest and pay a variable rate protects itself against paying a higher than market rate of interest if interest rates decline. Of

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23. FASB Statement of Financial Accounting Standards No. 133, *ibid.*, par 6–9.

course, it will pay a higher rate than the fixed rate if interest rates rise. Another example would be a company that purchases a commodity, such as oil, and agrees to a fixed price contract. It can enter into a futures contract so that if, for example, the purchase price of oil decreases, it pays an above market price for the oil that is offset by the value of the futures contract. In each case, the company has converted a fixed-rate contract (for interest or oil) into a variable-rate contract.

For a fair value hedge, *FASB Statement No. 133* requires a company to recognize in its current *net income* (1) any gain or loss from a change in the fair value of the derivative (fair value hedge), and (2) any gain or loss from the change in the fair value of the financial instrument being hedged, along with any interest revenue or expense. As a result the company reports both the derivative and the financial instrument on its balance sheet at their respective fair values. Note that the FASB is requiring the use of the *fair value method* in the valuation of derivatives *and* the related financial instruments.



To illustrate the accounting for an interest rate swap that is a fair value hedge, suppose that Laki Company has had a \$1 million, 6% bank loan (the financial instrument) from MidAmerica Bank outstanding for several years. On January 1, 2007, when the \$1 million loan (debt) has five years remaining, Laki contracts with Jordan Investment Bank (a swaps dealer) for a five-year interest-rate swap (the derivative) with a \$1 million notional amount. The company agrees to *receive* from Jordan a fixed interest rate of 6% and to *pay* Jordan an interest rate each year that is variable. The variable rate is the LIBOR (London Interbank Offer Rate) interest rate at the beginning of each year. In other words, Laki has converted (“swapped”) its fixed interest rate debt into the variable LIBOR interest rate debt. If the LIBOR interest rate debt is 5.3% at January 1, 2007, the company has converted 6% debt into 5.3% debt for that year. This type is called a “matched” swap because the notional amount is the same as the actual loan amount and the fixed interest rate on the derivative is equal to the fixed interest rate paid on the loan. Therefore, the derivative is an effective hedge of the risk of interest rate changes. We summarize the facts for the loan and swap involving Laki Company, MidAmerica Bank, and Jordan Investment Bank in Example 15-6.

EXAMPLE 15-6 Fair Value Hedge: Interest Rate Swap		
<b>BEFORE SWAP</b>		
<b>Financial Instrument: \$1 Million Loan</b>		
<b>MidAmerica Bank</b>		<b>Laki Company</b>
Note Receivable of \$1 million	← Financial Instrument: Pay Fixed (6%) Interest Rate →	Note Payable of \$1 million
<b>AFTER SWAP</b>		
<b>Financial Instrument: \$1 Million Loan, and Derivative: Matched Interest Rate Swap with \$1 Million Notional Amount</b>		
<b>MidAmerica Bank</b>		<b>Laki Company</b>
Note Receivable of \$1 million	← Financial Instrument: Pay Fixed (6%) Interest Rate →	Note Payable of \$1 million
<b>Jordan Investment Bank</b>		
Interest Rate Swap of \$1 million (notional amount)	← Derivative: Receive Fixed (6%) Interest Rate →	Interest Rate Swap of \$1 million (notional amount)
	← Derivative: Pay LIBOR (Variable) Interest Rate →	

The Laki Company recorded the following journal entry for the financial instrument (the original loan):

**Original Bank Loan**

Cash	1,000,000	
Notes Payable		1,000,000

Laki accounts for the derivative (the fair value hedge) in 2007 and 2008, as follows:

**Interest Payment on Loan: December 31, 2007**

Laki pays MidAmerica the fixed rate of 6% on the \$1 million loan and records this as interest expense, as follows:

Interest Expense	60,000	
Cash		60,000

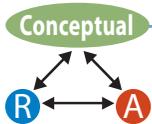
**Interest Rate Swap Payment: December 31, 2007**

Since the LIBOR rate that was set at January 1, 2007 is 5.3%, there is a net payment (settlement) between Laki Company and Jordan Investment Bank. Since Laki owes to Jordan the LIBOR 5.3% rate and receives from Jordan the fixed 6% rate, it receives from Jordan the *net* 0.7% on the notional amount of \$1 million, or \$7,000. Laki records the cash received as a *decrease* to interest expense, as follows:

Cash	7,000	
Interest Expense		7,000

Thus, Laki records a total interest expense of \$53,000 (\$60,000 – \$7,000) in 2007, which is the equivalent of the variable rate of 5.3% on the \$1 million loan.

**Fair Values and Gains and Losses: December 31, 2006**



The fair value method uses market values to recognize the value of derivatives if they are available, such as for futures contracts traded on exchanges. However, many derivatives are forward contracts that are custom-designed for the two entities, and market values are not available for such distinctive contracts, as in this example. In these cases, discounted cash flows are used to value the derivative.

Laki determines the gain or loss for 2007 on the derivative (fair value hedge) by computing the net present value of the future cash flows over the remaining life of the derivative. It is based on the difference between the fixed interest rate contracted in the derivative and the current market fixed interest rate applied to the notional amount for the remaining life of the swap. Note that this rate is typically different than the LIBOR rate that is a short-term variable rate and has no inherent fair value because it can be obtained at any time. Thus, there are three interest rates:

1. The fixed interest rate (6%) on the loan and the derivative.
2. The variable LIBOR interest rate at the beginning of the year that is used to determine the swap payment at the end of the year (5.3% for 2007, and we assume it changes to 6.8% for 2008).
3. The fixed market rate of interest at the end of the year for the remaining life of the loan or derivative (7% for a four-year loan or derivative at December 31, 2007, and we assume it changes to 5.5% for a three-year loan or derivative at December 31, 2008).

We assume that, at December 31, 2007, the fixed market rate of interest for the four-year remaining life of the derivative is 7% (compared to the LIBOR rate of 6.8% that is set at January 1, 2008). Thus, the difference in the fixed interest rates at the end of 2007 is 1% (6% fixed rate – 7% four-year market rate). The \$33,872 value of the derivative is \$10,000 per year (the difference of 1% multiplied by the notional

amount of \$1,000,000) discounted at the current fixed market rate of 7% for the remaining four years, as follows:

$$\begin{aligned}\text{Present value of derivative} &= \$10,000 \times 3.387211 \quad (n = 4, i = 0.07) \\ &= \$33,872\end{aligned}$$

A swap derivative *liability* and *loss* exist because the 7% current market rate is higher than the 6% fixed interest rate that Laki receives on the derivative. Laki records the liability and loss as follows:

<b>Loss in Value of Derivative</b>	<b>33,872</b>	
<b>Liability from Interest Rate Swap</b>		<b>33,872</b>

Since interest rates have changed, the value of the Laki's debt (financial instrument) has also changed. The increase in interest rates decreases the value of the debt. The current value of the debt is computed based on the 7% market rate as follows:

$$\begin{aligned}\text{Present value of principal} &= \$1,000,000 \times 0.762895 \quad (n = 4, i = 0.07) \\ &= \$762,895\end{aligned}$$

$$\begin{aligned}\text{Present value of interest} &= \$60,000 \times 3.387211 \quad (n = 4, i = 0.07) \\ &= \$203,233\end{aligned}$$

$$\begin{aligned}\text{Total present value of debt} &= \$762,895 + \$203,233 \\ &= \$966,128\end{aligned}$$

Laki recognizes the \$33,872 (\$1,000,000 – \$966,128) decrease in the value of the debt and the related *gain* as follows:

<b>Notes Payable</b>	<b>33,872</b>	
<b>Gain in Value of Debt</b>		<b>33,872</b>

The Laki Company reports both the \$33,872 gain in the value of the debt and the \$33,872 loss in value of the derivative in the other items section of its 2007 income statement. There is no net effect because it is an effective hedge. Laki reports the \$33,872 derivative liability and the \$966,128 (\$1,000,000 – \$33,872) value of the note payable on its December 31, 2007 balance sheet. Therefore, its total liability in regard to this debt is \$1,000,000.



#### Interest Payment on Loan: December 31, 2008

Laki pays MidAmerica the fixed rate of 6% on the \$1 million loan and records this as interest expense, as follows:

<b>Interest Expense</b>	<b>60,000</b>	
<b>Cash</b>		<b>60,000</b>

#### Interest Rate Swap Payment: December 31, 2008

We assume that at the beginning of 2008, the LIBOR interest rate is 6.8%. Since Laki pays Jordan the LIBOR 6.8% rate and receives from Jordan the fixed 6% rate, it pays to Jordan the *net* 0.8% on the notional amount of \$1 million, or \$8,000. Laki records the payment as an *increase* in interest expense, as follows:

<b>Interest Expense</b>	<b>8,000</b>	
<b>Cash</b>		<b>8,000</b>

Thus, Laki records a total interest expense of \$68,000 (\$60,000 + \$8,000) in 2008, which is the equivalent of the variable rate of 6.8% on the \$1 million loan.

#### Fair Values and Gains and Losses: December 31, 2008

Laki again determines the gain or loss for 2008 on the derivative (fair value hedge) by computing the net present value of the future cash flows over the remaining life of the

derivative. It is again based on the difference between the fixed interest rate contracted in the derivative and the current market fixed interest rate, applied to the notional amount for the remaining life of the swap. We assume that at December 31, 2008 the three-year fixed interest rate is 5.5%. Thus, the difference in fixed interest rates at the end of 2008 is 0.5% (6% fixed rate – 5.5% three-year market rate). The \$13,490 value of the derivative is \$5,000 per year (the difference of 0.5% multiplied by the notional amount of \$1,000,000) discounted at the current market rate of 5.5% for the remaining three years, computed as follows:

$$\begin{aligned}\text{Present value of derivative} &= \$5,000 \times 2.697933 \quad (n = 3, i = 0.055) \\ &= \$13,490\end{aligned}$$

A swap derivative *asset* and *gain* exist because the current 5.5% market rate is lower than the 6% fixed interest rate that Laki receives on the derivative. So Laki has moved from a \$33,872 liability at the end of 2007 to a \$13,490 asset position at the end of 2008, and has a \$47,362 (\$33,872 + \$13,490) gain which it records as follows:

Liability from Interest Rate Swap	33,872	
Asset from Interest Rate Swap	13,490	
Gain in Value of Derivative		47,362

Again, since interest rates have changed, the value of Laki's debt (financial instrument) has also changed. The decrease in interest rates increases the value of the debt. The current value of the debt is computed based on the 5.5% current market rate as follows:

$$\begin{aligned}\text{Present value of principal} &= \$1,000,000 \times 0.851614 \quad (n = 3, i = 0.055) \\ &= \$851,614\end{aligned}$$

$$\begin{aligned}\text{Present value of interest} &= \$60,000 \times 2.697933 \quad (n = 3, i = 0.055) \\ &= \$161,876\end{aligned}$$

$$\begin{aligned}\text{Total present value of debt} &= \$851,614 + \$161,876 \\ &= \$1,013,490\end{aligned}$$

Laki recognizes the \$47,362 (\$1,013,490 current value – \$966,128 previous value) increase and the related loss as follows:

Loss in Value of Debt	47,362	
Notes Payable		47,362



The Laki Company reports the \$47,362 gain in value of the derivative and the \$47,362 loss in value of the debt in the other items section of its 2008 income statement. There is no net effect for this effective hedge. It reports the \$13,490 derivative asset as a long-term investment and the \$1,013,490 (\$966,128 + \$47,362) value of the note payable on its December 31, 2008 balance sheet. Note that Laki's *net* liability in regard to the debt is still \$1,000,000. Laki would account for the loan and the derivative (fair value hedge) in a similar manner for the years 2009 through 2012.

In summary, the Laki Company has converted a fixed interest rate bank loan into a variable interest rate loan with this interest rate swap. Laki pays a variable net interest rate on this loan and reports the amount each year as interest expense on its income statement. Laki reports the derivative asset or liability and the related financial instrument (note payable) on its balance sheet at their respective fair values. There is no effect from the change in the fair value of this derivative on the income statement because the change in the fair value of the derivative is offset by the change in the fair value of the financial instrument (i.e., an effective hedge of the fixed rate debt). Note that when a hedge is not perfect or is ineffective (e.g., the notional amount is not equal to the actual principal amount), then a net amount is reported on the income statement. The financial reporting reflects Laki's interest rate risk management strategy. Laki discloses the characteristics of its financial instrument and derivative in the notes to its financial statements.

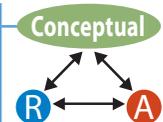
## CASH FLOW HEDGE

A cash flow hedge protects against the risk caused by *variable* prices, costs, rates, or terms that cause future cash flows to be uncertain. A cash flow hedge is a hedge of an expected transaction that will probably occur in the future, but the amount of the transaction has not been fixed. This contrasts with a fair value hedge that protects against the risk from changes in value caused by *fixed* terms, rates, or prices.

For example, a company with a variable rate debt that enters into an interest rate swap to receive a variable rate of interest and pay a fixed rate protects itself against paying a higher rate of interest if interest rates increase. Of course, it will pay a higher rate than the variable rate if interest rates fall. The company has converted a variable rate contract into a fixed rate contract.

For a cash flow hedge, *FASB Statement No. 133* requires a company to recognize in its current *other comprehensive income* any gain or loss from a change in the fair value of the derivative (cash flow hedge). The company reports the derivative at its fair value and the related accumulated other comprehensive income in its stockholders' equity on its ending balance sheet. The company does *not* recognize in its financial statements any change in value of the financial instrument being hedged. When the hedged expected transaction occurs, the company transfers the accumulated other comprehensive income to its current net income.

To illustrate an interest rate swap that is a cash flow hedge, assume the same facts as for the fair value hedge, except that Laki has a 5.3% (for 2007) variable rate \$1 million loan (debt) with MidAmerica Bank that is based on the LIBOR rate. It enters into an interest rate swap with Jordan Investment Bank in which it will receive a variable (5.3% for 2007) interest rate and pay a 6% fixed rate. Since this hedge protects against the risk caused by variable interest rates, it is a cash flow hedge. We summarize the facts for the loan and swap involving Laki Company, MidAmerica Bank, and Jordan Investment Bank in Example 15-7.



### EXAMPLE 15-7 Cash Flow Hedge: Interest Rate Swap

<u>BEFORE SWAP</u>			
<b>Financial Instrument: \$1 Million Loan</b>			
<u>MidAmerica Bank</u>			<u>Laki Company</u>
Note Receivable of \$1 million	← Financial Instrument:	Pay LIBOR (Variable) Interest Rate, Reset Annually	Note Payable of \$1 million
<u>AFTER SWAP</u>			
<b>Financial Instrument: \$1 Million Loan, and Derivative: Matched Interest Rate Swap with \$1 Million Notional Amount</b>			
<u>MidAmerica Bank</u>			<u>Laki Company</u>
Note Receivable of \$1 million	← Financial Instrument:	Pay LIBOR (Variable) Interest Rate	Note Payable of \$1 million
<u>Jordan Investment Bank</u>			<u>Laki Company</u>
Interest Rate Swap of \$1 million (notional amount)	← Derivative:	Receive LIBOR (Variable) Interest Rate	Interest Rate Swap of \$1 million (notional amount)
		Pay Fixed (6%) Interest Rate	

Laki reports this swap at its fair (present) value on the balance sheet and reports any change in the fair value for the period in other comprehensive income. It reports the total change in fair value as accumulated other comprehensive income in the stockholders' equity section of its balance sheet. This type of interest rate swap does not hedge the liability. Instead, it hedges the interest payments. Thus, as Laki makes each interest payment, a hedged expected transaction occurs and Laki must transfer an amount from the accumulated other



comprehensive income to its net income, based on the change in the present value. In this case, Laki must compute the present value of each interest payment separately. Because each payment occurs at a different point on the yield curve, Laki would use a different interest rate to determine its present value. These procedures are beyond the scope of this book.

## SUMMARY

At the beginning of the chapter, we identified several objectives you would accomplish after reading the chapter. The objectives are listed below, each followed by a brief summary of the key points in the chapter discussion.

1. **Explain the classification and valuation of investments.** Trading securities are the investments in debt and equity securities that are purchased and held principally for the purpose of selling them in the near term. Trading securities are valued at their fair values on the balance sheet date. Available-for-sale securities are investments in (a) debt securities that are not classified as held-to-maturity, and (b) debt and equity securities that are not classified as trading securities. Available-for-sale securities are valued at their fair values on the balance sheet date. Held-to-maturity debt securities are investments in debt securities for which the company has the positive intent and ability to hold to maturity. Held-to-maturity securities are valued at their amortized cost on the balance sheet date.
2. **Account for investments in debt and equity trading securities.** Investments in debt and equity trading securities are initially recorded at cost and then recorded at fair value. Unrealized holding gains and losses are included in net income of the period, and interest and dividend revenue, as well as realized gains and losses on sales, are included in net income of the current period.
3. **Account for investments in available-for-sale debt and equity securities.** Investments in available-for-sale debt and equity securities are initially recorded at cost and then recorded at fair value. Unrealized holding gains and losses are reported as a component of other comprehensive income of the period, and interest and dividend revenue, as well as realized gains and losses on sales, are included in net income of the current period. The cumulative net unrealized holding gains or losses are reported in the accumulated other comprehensive income section of stockholders' equity.
4. **Account for investments in held-to-maturity debt securities, including amortization of bond premiums and discounts.** Investments in held-to-maturity debt securities are initially recorded at cost and then recorded at amortized cost. Unrealized holding gains and losses are not recorded, and interest and dividend revenue, as well as realized gains and losses on sales (if any), are included in net income of the current period.
5. **Understand transfers and impairments.** The transfer of a security between categories is accounted for at the fair value at the time of the transfer. Depending on the classification of the security transferred, the unrealized gain or loss is either eliminated or established. An impairment occurs when there is an other than temporary decline below the amortized cost of a debt security classified as available for sale or held to maturity. The company writes down the amortized cost of the security to the fair value and includes the amount of the write-down in net income as a realized loss.
6. **Understand disclosures of investments.** For trading securities, a company must disclose the change in the net unrealized holding gain or loss that is included in each income statement. For available-for-sale securities, a company must disclose for each balance sheet date the aggregate fair value, gross unrealized holding gains and gross unrealized holding losses, and amortized cost by major security types. For each income statement period, the company must disclose (1) the proceeds from the sales and the gross realized gains and losses on those sales as well as the basis on which cost was determined, (2) the gross gains and gross losses included in net income from transfers of securities from this category into the trading category, and (3) the change in the net unrealized holding gain or loss included as a separate component of other comprehensive income. For held-to-maturity securities a company must disclose for each balance sheet date the aggregate fair value, gross unrealized holding gains, gross unrealized holding losses, and amortized cost by major security types. For any sales or transfers from this category, the disclosures must include the amortized cost, the related realized or unrealized gain or loss, and the circumstances leading to the decision to sell or transfer security.
7. **Explain the conceptual issues regarding investments in marketable securities.** The use of fair value creates a relevant value because it reflects the liquidity of the securities. The value is also reliable because the fair value is available on a securities exchange. The following points reflect the major controversies: (1) the fair value is required for trading and available-for-sale securities whereas amortized cost is required for held-to-maturity securities; (2) fair value is not required for certain liabilities; (3) unrealized holding gains and losses are reported in net income for trading securities but in other comprehensive income for available-for-sale securities; and (4) the classification of securities is based on management intent.
8. **Account for investments using the equity method.** An investor company uses the equity method when it is able to exercise significant influence over the operating and financial policies of an investee. The company initially records its investment at cost and records income and an increase in the carrying value of the asset at an amount based on its percentage ownership in the investee. The investor company records dividends received as reductions in the carrying value of the investment account. The investor must also eliminate any intercompany transactions and recognize any additional depreciation expense.

9. **Describe additional issues for investments.** Additional issues for investments include accounting for investments in nonmarketable securities, stock dividends and stock splits, stock warrants, convertible bonds, the cash surrender value of life insurance, and investments in funds.
10. **Account for derivatives of financial instruments (Appendix).** A derivative derives its value from an underlying financial instrument. A hedge is a means of protecting against a financial loss. The two types of hedges discussed in the Appendix are fair value hedges and cash flow hedges. A *fair value hedge* protects against the risk from changes in value caused by fixed terms, rates, or prices. A company recognizes in its current net income (1) any gain or loss from a change in the fair value of the derivative (fair value hedge), and (2) any gain or loss from the change in the fair value of the financial instrument being hedged, along with any interest revenue or expense. As a result the company reports both the derivative and the financial instrument on its balance sheet at their respective fair values.

A *cash flow hedge* protects against the risk caused by variable prices, costs, rates, or terms that cause future cash flows to be uncertain. A cash flow hedge is a hedge of an expected transaction that will probably occur in the future, but the amount of the transaction has not been fixed. A company recognizes in its current other comprehensive income any gain or loss from a change in the fair value of the derivative (cash flow hedge). The company reports the derivative at its fair value and the related accumulated other comprehensive income in its stockholders' equity on its ending balance sheet.

## ANSWERS TO REAL REPORT QUESTIONS

### Real Report 15-1 Answers

1. Other comprehensive income for 2004 included any change in the unrealized gains and losses from securities that are classified as available-for-sale. The total pretax unrealized gains and losses for Intel for 2003 and 2004 are shown below:

(in millions)	2004	2003	Net Change
Gross Unrealized Gain	\$118	\$56	\$ 62
Gross Unrealized Loss	(56)	(1)	(55)
Net Unrealized Gain			\$ 7

Intel's other comprehensive income for 2004 would include the pretax net unrealized gain of \$7 million.

2. Accumulated other comprehensive income would include the cumulative unrealized gains and losses for the available for sale securities. At December 25, 2004, Intel has a cumulative pretax gross unrealized gain of \$62 million (\$118 million gross unrealized gain less \$56 million gross unrealized loss).
3. On its income statement for 2004, Intel reported a net gain of \$52 million from the sale of marketable securities classified as available-for-sale. A \$268 million unrealized gain was reported on the 2004 income statement related to trading securities. An impairment loss of \$117 million (which included losses on non-marketable securities) was also reported on the 2004 income statement.

## QUESTIONS

**Q15-1** Why do companies purchase securities of other corporations?

**Q15-2** What are the three categories of investments in debt and equity securities when there is no significant influence?

**Q15-3** Provide brief definitions for the following terms: (a) *debt security*, (b) *equity security*, and (c) *fair value*.

**Q15-4** Identify the accounting methods a company uses for investments of 20% or more in the voting common stock of the investee.

**Q15-5** Briefly summarize the accounting for an investment in trading securities.

**Q15-6** Briefly summarize the accounting for an investment in available-for-sale securities.

**Q15-7** Briefly summarize the accounting for an investment in debt securities held to maturity.

**Q15-8** Briefly describe how to determine and record any subsequent increases or decreases in the fair value of an investment in available-for-sale securities.

**Q15-9** Briefly describe how to determine and record the gain or loss on the sale of an investment in available-for-sale securities.

**Q15-10** When are investments in bonds held to maturity purchased at a premium? How does the amortization of a premium under the effective interest method affect interest revenue?

**Q15-11** When are investments in bonds held to maturity purchased at a discount? How does the amortization of a discount under the effective interest method affect interest revenue?

**Q15-12** Briefly describe the two methods available to determine interest revenue and account for premiums and discounts on investments in bonds held to maturity.

**Q15-13** Briefly describe how to record the transfer of an investment in a debt security (a) from the held-to-maturity category to the available-for-sale category, and (b) from the available-for-sale category to the held-to-maturity category.

**Q15-14** Show the balance sheet disclosures of an investment in available-for-sale securities that a company classifies as current and has a fair value in excess of cost.

**Q15-15** Discuss the rationale behind the use of the equity method for an investment in common stock.

**Q15-16** Briefly describe the accounting for an investment in common stock under the equity method.

**Q15-17** Identify the facts and circumstances that would preclude an investor from using the equity method, even if it owns more than a 20% investment in an investee.

**Q15-18** Discuss the appropriate accounting treatment to use when (a) an investor acquires enough additional common stock during a year to change from using the fair value method to using the equity method, and (b) an investor using the equity method sells enough common stock so that its portion of ownership falls below 20%.

**Q15-19** Why is the cash surrender value of a life insurance policy on which the company is the beneficiary carried as an investment? How does the company determine the increase in this amount and the amount of insurance expense determined each year?

**Q15-20** What is a fund? Distinguish between a fund and an appropriation of retained earnings.

## MULTIPLE CHOICE (AICPA Adapted)

Select the best answer for each of the following.

**M15-1** On its December 31, 2006 balance sheet, Fay Company appropriately reported a \$2,000 credit balance in its Allowance for Change in Value of Investment. There was no change during 2007 in the composition of Fay's portfolio of marketable equity securities held as available for sale. Pertinent data are as follows:

Security	Cost	Market Value at 12/31/07
A	\$ 60,000	\$ 63,000
B	45,000	40,000
C	80,000	78,500
Totals	<u>\$185,000</u>	<u>\$181,500</u>

What amount of loss on these securities should be included in Fay's income statement for the year ended December 31, 2007?

- a. \$0
- b. \$1,500
- c. \$3,500
- d. \$5,500

**M15-2** A security in a portfolio of available-for-sale securities is transferred to the trading category. The security should be transferred between the corresponding portfolios at

- a. The book value at date of transfer if higher than the fair value at date of transfer
- b. The fair value at date of transfer, regardless of its cost
- c. Its cost, regardless of the fair value at date of transfer
- d. The lower of its cost or fair value at date of transfer

**M15-3** On April 1, 2007, Aldrich Company purchased as an available-for-sale security \$200,000 face value, 9% U.S. Treasury notes for \$198,500, which included accrued interest of \$4,500. The notes mature July 1, 2008, and pay interest semiannually on January 1 and July 1. The notes were sold on December 1, 2007 for \$206,500, which included accrued

interest of \$7,500. Aldrich uses straight-line amortization. In its income statement for the year ended December 31, 2007, what amount should Aldrich report as a gain on the sale of the available-for-sale security?

- a. \$1,800
- b. \$5,000
- c. \$6,500
- d. \$8,000

**M15-4** When the market value of a company's portfolio of available-for-sale securities is lower than its cost, the difference should be

- a. Accounted for as a liability
- b. Disclosed and described in a note to the financial statements but not accounted for
- c. Accounted for as a valuation allowance deducted from the asset to which it relates
- d. Accounted for as an addition in the shareholders' equity section of the balance sheet

**M15-5** On January 2, 2007, Portela, Inc. bought 30% of the outstanding common stock of Bracero Corporation for \$258,000 cash. Portela accounts for this investment by the equity method. At the date of acquisition of the stock, Bracero's property, plant, and equipment had a fair value in excess of its book value of \$150,000. Bracero's property, plant, and equipment has a remaining life of 10 years. Bracero's net income for the year ended December 31, 2007 was \$180,000. During 2007, Bracero declared and paid cash dividends of \$20,000. On December 31, 2007, Portela should have carried its investment in Bracero in the amount of

- a. \$258,000
- b. \$301,500
- c. \$306,000
- d. \$312,000

**M15-6** Cash dividends declared out of current earnings were distributed to an investor. How will the investor's

investment account be affected by those dividends under each of the following accounting methods?

	Fair Value Method	Equity Method
a.	Decrease	No effect
b.	No effect	Decrease
c.	Decrease	Decrease
d.	No effect	No effect

**M15-7** During 2007, Anthony Company purchased securities as a long-term investment and classified them as available for sale. Pertinent data are as follows:

Security	Cost	Market Value at 12/31/07
A	\$ 20,000	\$ 18,000
B	40,000	30,000
C	90,000	93,000
Totals	<u>\$150,000</u>	<u>\$141,000</u>

The amount of the holding gain or loss included in Anthony's year-end balance sheet should be

- a. \$0  
b. \$3,000
- c. \$9,000  
d. \$12,000

**M15-8** For an available-for-sale securities portfolio included in noncurrent assets, which of the following should be included in net income of the period?

- a. Realized gains during the period  
b. Unrealized losses during the period

- c. Accumulated changes in the valuation allowance  
d. Increases in the valuation allowance during the period

**M15-9** In 2006, Cromwell Corporation bought 30,000 shares of Fleming Corporation's listed stock for \$300,000 and classified the investment as available for sale. In 2007, the market value declined to \$200,000. In 2008, the market value of the Fleming stock rose to \$230,000 and the stock was sold. How much should Cromwell record as a realized gain or loss in its determination of net income for 2008?

- a. \$0  
b. \$30,000 gain
- c. \$70,000 loss  
d. \$100,000 loss

**M15-10** On January 1, 2007, Weaver Company purchased as held-to-maturity debt securities \$500,000 face value of Park Corporation's 8% bonds for \$456,200. The bonds were purchased to yield 10% interest and pay interest annually. The bonds mature on January 1, 2012. Weaver uses the effective interest method of amortization. What amount should Weaver report on its December 31, 2007 balance sheet as an investment in held-to-maturity debt securities?

- a. \$450,580  
b. \$456,200
- c. \$461,820  
d. \$466,200

## EXERCISES

**E15-1 Trading Securities** Midwest Bank invests in trading securities. At the beginning of December 2007, the bank held no trading securities. During December of 2007, it entered into the following trading securities transactions:

- Dec. 10 Purchased 500 shares of C Company common stock for \$76 per share  
Dec. 21 Purchased 800 shares of D Company common stock for \$34 per share

At the end of December, the C Company common stock had a quoted market price of \$79 per share and the D Company common stock had a quoted market price of \$33 per share.

### Required

- Prepare journal entries to record the preceding information.
- What is the unrealized holding gain or loss and where is it reported in the 2007 financial statements?
- Show how the bank reports the trading securities on its December 31, 2007 balance sheet.

**E15-2 Trading Securities** Southeast Bank invests in trading securities and prepares quarterly financial statements. At the beginning of the fourth quarter of 2007, the bank held as trading securities 200 shares of Company E common stock that had originally cost \$5,500. At that time, these securities had a fair value of \$5,200. During the fourth quarter, the bank engaged in the following trading securities transactions:

- Oct. 26 Purchased 300 shares of Company F common stock for \$35 per share  
Nov. 26 Sold 200 shares of Company E common stock for \$25 per share  
Dec. 10 Purchased 400 shares of Company G common stock for \$41 per share

On December 31, 2007 the quoted market prices of the shares were as follows: E, \$52 per share; F, \$38 per share; and G, \$40 per share.

**Required**

1. Prepare journal entries to record the preceding information for the fourth quarter.
2. Show what the bank reports on its fourth quarter 2007 income statement for these trading securities.
3. Show how the bank reports these trading securities on its balance sheet at the end of the fourth quarter of 2007.

**E15-3 Long-Term Investments** On December 31, 2006 Marsh Company held 1,000 shares of X Company common stock in its portfolio of long-term investments in available-for-sale securities. The stock had cost \$15 per share and has a current market value of \$13 per share. The December 31, 2006 balance sheet showed the following:

*Assets*

Long-term investment in available-for-sale securities	\$ 15,000
Less: Allowance for change in value of investment	<u>(2,000)</u>
	\$ 13,000

*Stockholders' Equity*

Unrealized decrease in value of available-for-sale securities	\$ (2,000)
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During 2007 the company acquired as long-term investments 900 shares of Y Company common stock for \$18 per share and 800 shares of Z Company common stock for \$22 per share. At the end of 2007 the respective market values per share were: X—\$14, Y—\$17, and Z—\$20.

**Required**

Record the purchase of the investments in 2007 and the adjusting entry on December 31, 2007, and show the respective December 31, 2007 balance sheet accounts.

**E15-4 Available-for-Sale Securities** At the beginning of 2007 Ace Company had the following portfolio of investments in available-for-sale securities (common stock):

Security	Cost	12/31/06 Fair Value
A	\$20,000	\$25,000
B	<u>30,000</u>	<u>29,000</u>
Totals	<u>\$50,000</u>	<u>\$54,000</u>

During 2007 the following transactions occurred:

- |         |   |
|---------|---|
| May 3   | Purchased C securities (common stock) for \$13,500  |
| July 16 | Sold all of the A securities for \$25,000   |
| Dec. 31 | Received dividends of \$800 on the B and C securities, for which the following information was available: |

Security	12/31/07 Fair Value
B	\$32,000
C	15,500

**Required** 

1. Prepare journal entries to record the preceding information.
2. What is the balance in the Unrealized Increase/Decrease account on December 31, 2007?

**E15-5 Available-for-Sale Securities** At the end of 2006 Terry Company prepared the following schedule of investments in available-for-sale securities (common stock):

Security	Cost	12/31/06 Fair Value	Cumulative Change in Fair Value
M	\$37,000	\$34,200	\$(2,800)
N	<u>42,000</u>	<u>43,100</u>	<u>1,100</u>
Totals	<u>\$79,000</u>	<u>\$77,300</u>	<u>\$(1,700)</u>

During 2007, the following transactions occurred:

- |         |  |
|---------|--|
| June 8  | Purchased O securities (common stock) for \$50,000   |
| Oct. 11 | Sold all of the M securities for \$35,400  |
| Dec. 31 | Received dividends of \$900 on the N and O securities, and the following year-end total market values were available: N common stock, \$43,900; O common stock, \$49,600 |

**Required**

1. Prepare journal entries to record the preceding information.
2. Show how the preceding items are reported on the December 31, 2007 balance sheet of the Terry Company. Assume all investments are noncurrent.

**E15-6 Purchase of Bonds Between Interest Dates** On March 31, 2007 the Brodie Corporation acquired bonds with a par value of \$400,000 for \$425,800. The bonds are due December 31, 2012, carry a 12% annual interest rate, pay interest on June 30 and December 31, and are being held to maturity. The accrued interest is included in the acquisition price of the bonds. The company uses straight-line amortization.

**Required**

1. Prepare journal entries for Brodie to record the purchase of the bonds and the first two interest receipts.
2. If the company failed to separately record the interest at acquisition, explain the errors that would occur in the company's financial statements (no calculations are required).

**E15-7 Amortizing a Discount on a Bond Investment** On January 1, 2007 the Kelly Corporation acquired bonds with a face value of \$500,000 for \$483,841.79, a price that yields a 10% effective annual interest rate. The bonds carry a 9% stated rate of interest, pay interest semiannually on June 30 and December 31, are due December 31, 2010 and are being held to maturity.

**Required**

Prepare journal entries to record the purchase of the bonds and the first two interest receipts using:

1. The straight-line method of amortization.
2. The effective interest method of amortization.

**E15-8 Purchase, Discount Amortization, and Sale of Bond Investment** On November 1, 2006 the Reid Corporation acquired bonds with a face value of \$700,000 for \$673,618.61. The bonds carry a stated rate of interest of 10%, were purchased to yield 11%, pay interest semiannually on April 30 and October 31, were purchased to be held to maturity, and are due October 31, 2011. On November 1, 2007, in contemplation of a major acquisition, the bonds were sold for \$700,000. Reid Corporation is on a fiscal year accounting period ending October 31. The company uses the effective interest method.

**Required** 

Prepare journal entries to record the purchase of the bonds, the interest receipts on April 30, 2007 and October 31, 2007, and the sale of the bonds.

**E15-9 Investment Discount Amortization Schedule** On January 1, 2007 Rodgers Company purchased \$200,000 face value, 10%, three-year bonds for \$190,165.35, a price that yields a 12% effective annual interest rate. The bonds pay interest semiannually on June 30 and December 31.

**Required**

1. Record the purchase of the bonds.
2. Prepare an investment interest revenue and discount amortization schedule, using the effective interest method.
3. Record the receipts of interest on June 30, 2007 and June 30, 2009.

**E15-10 Investment Premium Amortization Schedule** On January 1, 2007 Lynch Company acquired 13% bonds with a face value of \$50,000. The bonds pay interest on June 30 and December 31 and mature on December 31, 2009. Lynch Company paid \$51,229.35, a price that yields a 12% effective annual interest rate.

**Required**

1. Record the purchase of the bonds.
2. Prepare an investment interest revenue and premium amortization schedule using the effective interest method.
3. Record the receipts of interest on June 30, 2007 and December 31, 2009.

**E15-11 Purchase, Premium Amortization, and Sale of Bond Investment** The Glover Corporation purchased bonds with a face value of \$300,000 for \$307,493.34 on January 1, 2007. The bonds carry a face rate of interest of 12%, pay interest semiannually on June 30 and December 31, were purchased to be held to maturity, are due December 31, 2009, and were purchased to yield 11%. On January 1, 2008, in contemplation of a major acquisition, the bonds were sold for \$300,000. The company uses the effective interest method.

**Required**

Prepare journal entries to record the purchase of the bonds, the first two interest receipts, and the sale of the bonds.

**E15-12 Transfer Between Categories** On December 31, 2006 the Leslie Company held an investment in bonds of Kaufmann Company which it categorized as being held to maturity. At that time, the 8%, \$100,000 face value bonds had a carrying value of \$107,023.56 and were being amortized using the effective interest method based on a yield of 7%. Interest on these bonds is paid annually each December 31.

On December 31, 2007, after recording the interest earned, the Leslie Company decided to reclassify the Kaufmann bonds to its available-for-sale category in anticipation of a major restructuring. At that time, the ending quoted market price for the bonds was 105.

#### Required

Prepare the journal entries on December 31, 2007 to record the interest earned and the reclassification.

**E15-13 Equity Method** The Miller Corporation acquired 30% of the outstanding common stock of the Crowell Corporation for \$160,000 on January 1, 2007 and obtained significant influence. The purchase price of the shares was equal to their book value. During 2007, the following information is available for Crowell:

Mar. 31	Declared and paid a cash dividend of \$50,000
June 30	Reported semiannual earnings of \$120,000 for the first half of 2007
Sept. 30	Declared and paid a cash dividend of \$50,000
Dec. 31	Reported semiannual earnings of \$140,000 for the second half of 2007

#### Required

1. Prepare journal entries for Miller to reflect the preceding information.
2. What is the balance in Miller's investment account on December 31, 2007? (Show your computations.)

**E15-14 Equity Method** On January 1, 2007 the Field Company acquired 40% of the North Company by purchasing 8,000 shares for \$144,000 and obtained significant influence. On the date of acquisition, Field calculated that its share of the excess of the fair value over the book value of North's depreciable assets was \$15,000, and that the purchased goodwill was \$12,000. At the end of 2007, North reported net income of \$45,000 and paid dividends of \$0.70 per share. Field Company depreciates its depreciable assets over a 12-year remaining life.

#### Required

Prepare all the journal entries of Field Company to record the preceding information for 2007.

**E15-15 Equity Method** On January 1, 2007 Jones acquires a 30% interest in Fink Company by purchasing 3,000 of its 10,000 common shares for \$16 per share and obtains significant influence. On the date of acquisition, the net assets of Fink Company were as shown here:

	Book Value	Fair Value
Nondepreciable assets (for example, land)	\$ 15,000	\$ 25,000
Depreciable assets (10-year remaining life)	<u>90,000</u>	<u>115,000</u>
	<u>\$105,000</u>	<u>\$140,000</u>
Liabilities	\$ 10,000	\$ 15,000

During 2007 Fink Company earned income of \$22,000 and paid dividends of \$6,000.

#### Required

Prepare all journal entries on Jones Company's books to record the acquisition, dividends, and income from the investment in Fink Company. Show supporting calculations.

**E15-16 Convertible Bonds** On January 1, 2006 the Taylor Corporation purchased \$20,000 of the Kalanda Corporation's 12% convertible bonds for \$19,760. The bonds pay interest semiannually each December 31 and June 30 and are due December 31, 2010. Each \$1,000 bond is convertible into 15 shares of the Kalanda Corporation's \$10 par common stock. Taylor uses the straight-line method of discount amortization. At the end of 2006 and 2007, the quoted market price of the bonds was not materially different from the amortized cost. On July 1, 2008 Taylor exchanged all of the bonds for Kalanda common stock. At that time the market value of the common stock was \$72 per share.

#### Required

Prepare whatever entries are necessary to record the acquisition and conversion of the Kalanda bonds.

**E15-17 Receipt of Stock Dividends** On March 2, 2007 the Dawson Corporation acquired 5,000 common shares, representing a 1% interest in the Foreman Corporation, for \$60,000. On May 1, 2007 Foreman issued a 20% stock dividend, and on December 31, 2007 the market value was \$10 per share. On February 1, 2008 Dawson sold 1,500 shares for \$12 per share.

#### Required

Prepare journal entries for Dawson to record the acquisition, stock dividend, and sale of the shares.

**E15-18 Cash Surrender Value of Life Insurance** The Westford Corporation purchases life insurance policies on its officers, and these policies all carry a cash surrender value clause. At the beginning of 2007, Westford paid \$13,300 in life insurance premiums for one year. During 2007 the cash surrender value of the policies increased from \$98,450 to \$103,900. At the beginning of 2008 the corporation's vice president lost his life in an automobile accident. The policy carried on this officer paid \$50,000, and the cash surrender value of the policy was \$6,480.

**Required**

Prepare journal entries to record the preceding information on the Westford Corporation's books.

**E15-19 Sinking Funds Entries** The following information is available concerning the Nunan Corporation's sinking fund:

Jan. 1, 2007	Established a sinking fund to retire an outstanding bond issue by contributing \$425,000
Feb. 3, 2007	Purchased securities for \$400,000
July 30, 2007	Sold securities originally costing \$48,000 for \$45,000
Dec. 31, 2007	Collected dividends and interest on the remaining securities in the amount of \$49,000; the securities had a market value of \$355,000 at this time
Dec. 31, 2008	Collected dividends and interest on the remaining securities in the amount of \$40,000
Dec. 31, 2008	Paid sinking fund expenses of \$4,500
Dec. 31, 2008	Sold the remaining securities in the fund for \$360,000
Dec. 31, 2008	Retired an outstanding bond issue of \$500,000 with the cash from the fund and transferred the remaining fund balance back to the cash account

**Required**

Prepare journal entries to record the preceding transactions for the Nunan Corporation.

**E15-20 Derivatives (Appendix)** Anglar Company has a \$3 million 7% bank loan from Castle Rock Bank. On January 1, 2007, when the \$3 million loan has three years remaining, Anglar contracts with Susan Investment Bank to enter into a three-year interest-rate swap with a \$3 million notional amount. Anglar agrees to receive from Susan a fixed interest rate of 7% and to pay Susan an interest amount each year that is variable based on the LIBOR interest rate at the beginning of the year. The interest payments are made at year-end. The applicable interest rate on the swap is reset each year after the annual interest payment is made. The LIBOR interest rate is 6.6% at the beginning of 2007. The three-year fixed interest rate is 8% at December 31, 2007.

**Required**

1. Prepare the journal entries of Anglar for the bank loan and derivative for 2007.
2. Prepare the appropriate disclosures in Anglar's financial statements for 2007.

## PROBLEMS

**P15-1 Trading Securities** The investment manager of 4th National Bank invests some of the bank's financial resources in trading securities. During the last quarter of 2007 the following transactions occurred in regard to these trading securities:

Nov. 5	Purchased 200 shares of M Company common stock at \$86 per share
Nov. 19	Purchased 300 shares of P Company preferred stock at \$63 per share
Nov. 29	Sold 100 shares of M Company common stock at \$89 per share
Dec. 15	Purchased 400 shares of T Company common stock at \$37 per share
Dec. 17	Sold 100 shares of P Company preferred stock at \$62 per share

On December 31, 2007 the market values of the shares were as follows: M, \$87 per share; P, \$61 per share; and T, \$37.25 per share. The bank held no trading securities at the beginning of the last quarter of 2007.

**Required**

1. Prepare journal entries to record the preceding information.
2. Show what the bank reports on its fourth quarter 2007 income statement for these trading securities.
3. Show how the bank reports these trading securities on its December 31, 2007 balance sheet.

**P15-2 Trading Securities** The 8th State Bank prepares interim financial statements and follows an investment strategy of investing in trading securities. At the beginning of the third quarter of 2007, the bank held the following portfolio of trading securities:

Security	Cost	June 30, 2007 Fair Value
100 shares of G Company common stock	\$ 2,900	\$ 2,800
600 shares of O Company common stock	<u>12,000</u>	<u>12,600</u>
Totals	<u>\$14,900</u>	<u>\$15,400</u>

During the third quarter of 2007, the bank entered into the following trading securities transactions:

July 2	Received dividends of \$1.50 per share on the G Company common stock
July 14	Sold 600 shares of O Company common stock for \$20 per share

Aug. 9	Purchased 300 shares of P Company common stock for \$36 per share
Aug. 24	Sold 100 shares of G Company common stock for \$30 per share
Sept. 17	Purchased 500 shares of U Company common stock for \$22 per share

On September 30, 2007 the P Company common stock had a quoted market price of \$36.50 per share and the U Company common stock had a quoted market price of \$21 per share.

#### Required

1. Prepare journal entries to record the preceding information.
2. Show what the bank reports on its third-quarter 2007 income statement for these trading securities.
3. Show how the bank reports these trading securities on its September 30, 2007 balance sheet.

**P15-3 Available-for-Sale Securities** Holly Company invests its excess cash in marketable securities. At the beginning of 2007 it had the following portfolio of investments in available-for-sale securities:

Security	Cost	12/31/06 Fair Value
400 shares of I Company common stock	\$ 8,400	\$ 9,400
700 shares of O Company common stock	<u>23,100</u>	<u>21,700</u>
Totals	<u>\$31,500</u>	<u>\$31,100</u>

During 2007, the following transactions occurred:

Mar. 31	Purchased U Company 8% bonds with a face value of \$10,000 for \$10,000 plus accrued interest; interest is payable on the bonds each June 30 and December 31
May 17	Sold 200 shares of O Company common stock for \$30 per share
June 30	Received the semiannual interest on the U Company bonds
Oct. 12	Sold 100 shares of I Company common stock for \$24 per share
Dec. 31	Received the semiannual interest on the U Company bonds and dividends of \$1 per share and \$1.50 per share on the I and O Company common stock, respectively

The December 31 closing market prices were as follows: I Company common stock, \$25 per share; O Company common stock, \$31 per share; U Company 8% bonds, 101.

#### Required

1. Prepare journal entries to record the preceding information.
2. Show what is reported on the Holly Company's 2007 income statement.
3. Assuming the investment in I Company stock is considered to be a current asset and the remaining investments are non-current, show how all the items are reported on the December 31, 2007 balance sheet of the Holly Company.
4. If GAAP required that unrealized holding gains and losses on available-for-sale securities be included in income, how much would Holly recognize in 2007?

**P15-4 Investments in Equity Securities** The Noonan Corporation prepares quarterly financial statements and invests its excess funds in marketable securities. At the end of 2006 Noonan's portfolio of investments available for sale consisted of the following equity securities:

Security	Number of Shares	Cost Per Share	Fair Value Per Share
Keene Company	500	\$60	\$60
Sachs, Inc.	800	43	44
Bacon Company	400	70	72

During the first half of 2007, Noonan engaged in the following investment transactions:

Jan. 6	Sold one-half of the Sachs shares for \$45 per share
Feb. 3	Purchased 700 shares of Jackson Corporation common stock for \$45 per share
Mar. 31	Dividends of \$2,500 were received on the investments, and the following information is available on market prices:

Security	Fair Value Per Share
Keene Company	\$59
Sachs, Inc.	45
Bacon Company	70
Jackson Corporation	43

- Apr. 14 Purchased 300 shares of Quinn Company preferred stock for \$52 per share  
 May 11 Sold the remainder of the Sachs shares for \$42 per share  
 June 30 Dividends of \$2,800 were received on investments, and the following information is available:

<u>Security</u>	<u>Fair Value Per Share</u>
Keene Company	\$62
Bacon Company	69
Jackson Corporation	46
Quinn Company	50

**Required**

- Record Noonan's investment transactions for January 6 through June 30, 2007.
- Show the items of income or loss from investment transactions that Noonan reports for each of the first and second quarters of 2007.
- Show how the preceding items are reported on the first and second quarter 2007 ending balance sheets, assuming that management expects to dispose of the Keene and Sachs securities within the next year.

**P15-5 Temporary Available-for-Sale Investments** Manson Incorporated reported the following current asset on its December 31, 2006 balance sheet:

Temporary investment in available-for-sale securities (at cost)	\$63,475
Less: Allowance for change in value of investment	<u>(2,980)</u>
Temporary investment in available-for-sale securities (at fair value)	\$60,495

An analysis of Manson's temporary investments on December 31, 2006 reveals the following:

<u>Equity Security</u>	<u>Cost</u>	<u>Fair Value</u>
400 shares of Turben Company, common	\$14,275	\$13,590
500 shares of Cook Corp., common	12,650	13,175
700 shares of Hill Corp., common	17,450	18,180
200 shares of Web Engines, preferred	<u>19,100</u>	<u>15,550</u>
Totals	<u>\$63,475</u>	<u>\$60,495</u>

During 2007 the following transactions related to Manson's temporary investments occurred:

- Jan. 6 Received a \$265 dividend on the Turben Company common  
 Mar. 31 Received the semiannual dividend of \$500 on the Web Engines preferred

On March 31, 2007 the following information is available concerning Manson's temporary investments:

<u>Equity Security</u>	<u>Fair Value</u>
Turben Company	\$13,470
Cook Corp.	13,765
Hill Corp.	18,940
Web Engines	15,500

- June 30 Received a \$375 dividend on the Cook Corp. common and a \$700 dividend on the Hill Corp. common

On June 30, 2007 the following information is available concerning Manson's temporary investments:

<u>Equity Security</u>	<u>Fair Value</u>
Turben Company	\$13,300
Cook Corp.	14,125
Hill Corp.	19,300
Web Engines	15,400

- July 6 Sold the Turben Company common for \$13,750  
 Sept. 29 Received the semiannual dividend of \$500 on the Web Engines preferred

On September 30, 2007 the following information is available concerning Manson's temporary investments:

<u>Equity Security</u>	<u>Fair Value</u>
Cook Corp.	\$14,230
Hill Corp.	19,500
Web Engines	15,900

- Nov. 2 Sold the Hill Corp. common for \$19,780  
 Dec. 30 Received a \$375 dividend on the Cook Corp. common

On December 31, 2007, the following information is available:

<u>Equity Security</u>	<u>Fair Value</u>
Cook Investment Corp.	\$14,280
Web Engines	16,400

#### Required

1. Assuming Manson prepares quarterly financial statements, prepare journal entries to record the preceding information.
2. Show the items of income or loss from temporary investment transactions that Manson reports for each quarter of 2007?
3. Show how Manson's temporary investments are reported on the balance sheet on March 31, 2007; June 30, 2007; September 30, 2007; and December 31, 2007.

**P15-6 Investment in Available-for-Sale Bonds** The following information relates to the Starr Company's Investment in Available-for-Sale Bonds account for 2007:

- Jan. 1 Purchased \$30,000 face value of Bradford Company 8% bonds at 97 to yield 10%; interest on the bonds is payable each June 30 and December 31  
 Jan. 1 Purchased \$40,000 face value of Morris Company 10% bonds at 101 to yield 9.8%; interest on the bonds is payable each June 30 and December 31

On June 30, collected the interest and the following information is available:

<u>Security</u>	<u>Fair Value</u>
Bradford Company 8%	97.2
Morris Company 10%	102.0

- July 1 Purchased \$25,000 face value of Whipple Corporation 11% bonds at 92 to yield 12%; interest on the bonds is payable each June 30 and December 31  
 Nov. 30 Sold the Whipple bonds at 91 plus accrued interest

On December 31, collected the interest, sold the Morris bonds at 102, and the following information is also available:

<u>Security</u>	<u>Fair Value</u>
Bradford Company 8%	96

#### Required

1. Prepare journal entries to record the previous information for 2007. Use the effective interest method and round all amounts to the nearest *dollar*. Assume that Starr prepares semiannual financial statements.
2. Show the items of income or loss from investment transactions that Starr reports for each 2007 semiannual income statement.
3. Show how the investment items are reported on each of the 2007 semiannual balance sheets, assuming that management expects to dispose of all investments within one year of purchase.

**P15-7 Temporary Investments in Available-for-Sale Bonds and Equity Securities** During 2007 the Dana Company decided to begin investing its idle cash in marketable securities. The information contained below relates to Dana's 2007 marketable security transactions:

- Feb. 3 Purchased 3,000 shares of Blair Company common stock for \$12 per share  
 Apr. 1 Purchased \$20,000 face value of Solomon Inc. 12% bonds at par plus accrued interest; interest on the bonds is payable each June 30 and December 31  
 June 30 Received the semiannual interest on the Solomon bonds and a \$0.25 per share dividend on the Blair common  
 Sept. 1 Purchased 4,000 shares of Woodman Corporation common for \$22 per share  
 Nov. 1 Purchased \$30,000 face value of Edwards Company 11% bonds at par plus accrued interest; interest on the bonds is payable each June 1 and December 1  
 Dec. 1 Received the interest on the Edwards bonds and sold the bonds at 101  
 Dec. 30 Received a \$0.25 dividend per share on the Blair common and sold all the shares for \$35,300  
 Dec. 31 Received the interest on the Solomon bonds

On December 31, the following information is available concerning the year-end market prices:

<u>Security</u>	<u>Quoted Market</u>
Solomon 12% bonds	101
Woodman common	\$23

**Required**

1. Record Dana's transactions in temporary investments for 2007.
2. Show the items of income or loss on temporary investments Dana reports on its 2007 income statement.
3. Show the carrying value of Dana's Temporary Investment account on its December 31, 2007 balance sheet.

**P15-8 Investments, Petty Cash, Bank Reconciliation** During the first quarter of 2007 the Payne Corporation entered into the following transactions:

Jan.	1	Acquired 150 shares of Block Corporation common stock for \$20 per share, 200 shares of Bridle Corporation common stock for \$30 per share, and 100 shares of Alpha Corporation common stock for \$25 per share. These are the only shares the company owns and all are classified as securities available for sale.
Feb.	1	Purchased 12% A Company bonds with a face value of \$20,000 at par, plus accrued interest. Interest on the bonds is payable February 28 and August 31 each year, and the bonds are due August 31, 2010. Also purchased 10% B Company bonds with a face value of \$12,000 at par, plus accrued interest. Interest on the bonds is payable March 31 and September 30, and the bonds are due September 30, 2013. These are the only bonds the company owns and all are classified as securities available for sale.
Feb.	1	Established a petty cash fund for incidental expenditures at \$500.
Feb.	28	Received the semiannual interest on the A Company bonds.
Feb.	28	A count of cash on hand indicated that \$125.50 remained in the petty cash fund. A sorting of petty cash vouchers disclosed that \$110.00 was spent for postage, \$170.65 was spent for office supplies, \$45.00 was spent for transportation, and \$43.50 was spent for miscellaneous items. The fund was replenished.
Mar.	31	Received first quarter dividends of \$1,500 and the semiannual interest on the B Company bonds. On this date, the aggregate fair value of Payne's securities available for sale is \$42,600.
Mar.	31	A count of cash on hand indicated that \$230.50 remained in the petty cash fund. A sorting of petty cash vouchers disclosed that \$140.00 was spent for postage, \$75.30 was spent for office supplies, and \$54.20 was spent for miscellaneous items. The fund was replenished.

The bank statement and the accounting records of the Payne Corporation for the month of March 2007 indicated that the cash collected from the dividends and the B Company bond interest was deposited on March 31 but did not appear on the March bank statement. There were no other deposits in transit. The bank statement showed a balance on March 31 of \$13,459.75, which included collection of a \$1,500 note and \$100 of interest by the bank for the Payne Corporation. Also listed was a \$20 bank service charge and a \$75.60 NSF check returned by the bank. The cash balance per the accounting records on March 31 was \$11,689.95, which included checks totaling \$2,365.40 that had not yet cleared the bank.

**Required**

1. Prepare journal entries to record the preceding transactions of the Payne Corporation for the first quarter of 2007.
2. Prepare a bank reconciliation for Payne for March 31, 2007.
3. Prepare any journal entries necessary to adjust Payne's books on March 31, 2007.

**P15-9 Premium Amortization on Bond Investment and Partial Sale of the Investment Using the Effective Interest Method** On January 1, 2007 the Hyde Corporation purchased bonds with a face value of \$300,000 for \$308,373.53. The bonds are due June 30, 2010, carry a 13% stated interest rate, and were purchased to yield 12%. Interest is payable semiannually on June 30 and December 31. On March 31, 2008, in contemplation of a major acquisition, the company sold one-half the bonds for \$159,500 including accrued interest; the remainder were held until maturity.

**Required**

Prepare the journal entries to record the purchase of the bonds, each interest payment, the partial sale of the investment on March 31, 2008, and the retirement of the bond issue on June 30, 2010.

**P15-10 Bond Investment Discount Amortization Schedule** The Tudor Company acquired \$500,000 of Carr Corporation bonds for \$487,706.69 on January 1, 2007. The bonds carry an 11% stated interest rate, pay interest semiannually on January 1 and July 1, were issued to yield 12%, and are due January 1, 2010.

**Required** 

1. Prepare an investment interest revenue and discount amortization schedule using:
  - a. The straight-line method
  - b. The effective interest method
2. Prepare the July 1, 2009 journal entries to record the interest revenue under both methods.

**P15-11 Discount Amortization on Bonds Purchased Between Interest Dates** On October 1, 2006 the Jenkins Corporation bought bonds with a face value of \$200,000 for \$199,175, which included accrued interest. The bonds are due December 31, 2008 and carry a face rate of interest of 10.5%. Interest on the bonds is payable semiannually on June 30 and December 31. The company uses the straight-line method to amortize the discount.

**Required**

1. Prepare journal entries to record the purchase of the bonds, each interest receipt, and the retirement of the issue on December 31, 2008.
2. If the company failed to separately record the interest at acquisition, explain the errors that would occur in the company's financial statements (no calculations are required).

**P15-12 Bond Investment Premium Amortization Schedule** The Mercer Corporation acquired \$400,000 of the Park Company's bonds on June 30, 2006 for \$409,991.12. The bonds carry a 12% stated interest rate, pay interest semiannually on June 30 and December 31, were issued to yield 11%, and are due June 30, 2009.

**Required**

1. Prepare an investment interest revenue and premium amortization schedule, using:
  - a. The straight-line method
  - b. The effective interest method
2. Prepare journal entries to record the December 31, 2006 and December 31, 2008 interest receipts using both methods.

**P15-13 Discount Amortization on Bond Investment and Partial Sale of Investment Using Effective Interest Method** On January 1, 2007 the Mark Corporation purchased bonds with a face value of \$500,000 for \$475,413.60. The bonds are due December 31, 2009, carry a 10% stated rate, and were purchased to yield 12%. Interest is payable semiannually on June 30 and December 31. On January 1, 2009, in contemplation of a major acquisition, one-fourth of the bonds were sold for \$127,000. The remainder were held until maturity.

**Required** 

Prepare journal entries to record the purchase of the bonds, each interest payment, the partial sale of the investment on December 31, 2008, and the retirement of the bond issue on December 31, 2009.

**P15-14 Comparison of Fair Value and Equity Methods** On January 1, 2006 Snow Corporation purchased 20% of the 200,000 outstanding shares of common stock of Garvey Company for \$4.00 per share as a long-term investment. The purchase price of the shares was equal to their book value. The following information is available about Garvey Company for 2006 and 2007:

End of 2006	Reported net income	\$80,000
	Cash dividends declared and paid	\$30,000
	Market value of shares	\$3.80 per share
End of 2007	Reported net income	\$90,000
	Cash dividends declared and paid	\$35,000
	Market value of shares	\$4.25 per share

**Required**

1. Prepare journal entries to record this information, assuming:
  - a. The fair value method is used by Snow
  - b. The equity method is used by Snow
2. Assume 10,000 of the Garvey shares are sold on January 4, 2008 by Snow for \$4.25 per share. Prepare the journal entry for this sale, assuming:
  - a. Snow is using the fair value method
  - b. Snow is using the equity method

**P15-15 Application of Equity Method** On January 1, 2007 Doe Company purchased 3,000 of the 10,000 common shares outstanding of the Ray Company for \$15 per share and obtained significant influence. Doe amortizes its patents over 10 years. The December 31, 2006 condensed balance sheet of the Ray Company is shown here:

Current assets	\$ 10,000	Liabilities	\$ 50,000
Fixed assets (net)	100,000	Common stock, no par	30,000
Patents (net)	<u>40,000</u>	Retained earnings	<u>70,000</u>
	<u>\$150,000</u>		<u>\$150,000</u>

Doe Company was unable to determine the fair value of the Ray Company identifiable net assets shown on the preceding balance sheet. It did, however, determine that Ray Company uses the straight-line method (no residual value) to depreciate its fixed assets and to amortize its patents over 20 years and 10 years, respectively. At the end of 2007 Ray Company disclosed the following condensed income statement and retained earnings statement for 2007:

Revenues	\$ 100,000	Beginning retained earnings	\$ 70,000
Expenses	<u>(60,000)</u>	Add: Net income	<u>32,000</u>
Operating income	\$ 40,000		\$ 102,000
Extraordinary loss	<u>(8,000)</u>	Less: Cash dividends	<u>(20,000)</u>
Net income	<u>\$ 32,000</u>	Ending retained earnings	<u>\$ 82,000</u>

**Required**

Prepare all the 2007 journal entries that Doe should make related to this investment. Show and label all supporting calculations.

**P15-16 Recording Investments Under the Equity Method** The Harper Corporation acquired 80,000 of the 200,000 outstanding shares of the Moore Corporation on April 1, 2007 for \$400,000 and obtained significant influence. The following information concerning the Moore Corporation is available on the date of acquisition:

	Book Value	Fair Value
Depreciable assets (remaining life, 15 years)	\$ 600,000	\$ 700,000
Other assets	<u>500,000</u>	<u>450,000</u>
Total	<u>\$1,100,000</u>	<u>\$1,150,000</u>
Liabilities	\$ 300,000	\$ 320,000
Common stock	250,000	
Retained earnings	<u>550,000</u>	
Total	<u>\$1,100,000</u>	

Subsequently, Moore Corporation paid a cash dividend of \$40,000 on August 31, 2007 and reported annual income from operations of \$125,000 and extraordinary income (earned in the third quarter) of \$30,000 on December 31, 2007.

**Required**

1. Prepare journal entries for Harper to record the preceding information.
2. What is the balance in Harper's investment account on December 31, 2007? (Show all computations.)
3. Prepare Harper's net cash flow from operating activities section of its 2007 statement of cash flows under the indirect method, assuming the equity investment income is the only income Harper reports. Ignore income taxes.

**P15-17 Equity Method and Subsequent Sale** On January 1, 2007 the Easton Corporation acquired 30% of the outstanding common shares of Feeley Corporation for \$140,000, and 25% of the outstanding common shares of Holmes Company for \$82,500 and obtained significant influence in both situations. On this date the financial statements of Feeley and Holmes disclosed the following information:

	Feeley	Holmes
Current assets	\$190,000	\$140,000
Long-term assets	<u>370,000</u>	<u>180,000</u>
	<u>\$560,000</u>	<u>\$320,000</u>
Liabilities	\$120,000	\$ 90,000
Common stock (no par)	200,000	150,000
Retained earnings	<u>240,000</u>	<u>80,000</u>
	<u>\$560,000</u>	<u>\$320,000</u>

During 2007 Feeley reported a loss of \$70,000 and paid dividends of \$40,000; Holmes reported income of \$45,000 and paid dividends of \$28,000. On January 1, 2008 Feeley sold all the Holmes shares for \$90,000. Assume the company records both investments under the equity method and considers that any difference between each purchase price and the respective book value of the net assets acquired is goodwill.

**Required**

Prepare journal entries to record (1) the purchase of the Feeley and Holmes shares, (2) the recognition of investment income, (3) the receipt of investee dividends, and (4) the sale of the Holmes shares.

**P15-18 Change to Equity Method** On January 1, 2007 Lion Company paid \$600,000 for 10,000 shares of Wolf Company's voting common stock, which was a 10% interest in Wolf. Lion does not have the ability to exercise significant influence over the operating and financial policies of Wolf. Lion received dividends of \$1.00 per share from Wolf on October 2, 2007. Wolf reported net income of \$400,000 for the year ended December 31, 2007 and the ending market price of its shares was \$63.

On July 2, 2008 Lion paid \$1,950,000 for 30,000 additional shares of Wolf Company's voting common stock, which represents a 30% investment in Wolf. The fair values of all of Wolf's assets, net of liabilities, were equal to their book values of \$6,500,000. As a result of this transaction, Lion has the ability to exercise significant influence over the operating and financial policies of Wolf. Lion received dividends of \$1.00 per share from Wolf on April 2, 2008 and \$1.35 per share on October 1, 2008. Wolf reported net income of \$500,000 for the year ended December 31, 2008, and \$200,000 for the 6 months ended December 31, 2008.

**Required** 

1. For the Lion Company show the dividend revenue for 2007, as well as the December 31, 2007 unrealized increase in value of available-for-sale securities and carrying value of the investment account.
2. Assuming that Lion Company issues comparative financial statements for 2007 and 2008, show the investment income for 2007 and 2008, as well as the December 31, 2007 and 2008 carrying value of the Investment account.

**P15-19 Cash Surrender Value of Life Insurance** On January 1, 2006 Kehoe Corporation insured the lives of its president, vice president, controller, and treasurer for \$100,000 each. The annual premium on each policy is \$4,200, payable on January 1 of each year, and the cash surrender values for the policies increase by 4% of the annual premiums paid. Premium payments were made on the scheduled date by the Kehoe Corporation through 2008, and the following dividends were received at the end of the year on each policy: 2006, \$450; 2007, \$575; 2008, \$550. On February 1, 2009 the treasurer died and Kehoe Corporation collected the face value of his policy plus 11 months' premium.

#### Required

Prepare journal entries to record the preceding information for the years 2006 through 2009. (Round calculation to the nearest dollar.)

**P15-20 Derivatives (Appendix)** Danburg Company has a \$5 million 9% bank loan outstanding with its local bank. On January 1, 2007, when the loan has four years remaining, Danburg contracts with Bradford Investment Bank to enter into a four-year interest-rate swap with a \$5 million notional amount. Danburg agrees to receive from Bradford a fixed interest rate of 9% and to pay Bradford an interest amount each year that is variable based on the LIBOR interest rate at the beginning of the year. The interest payments are made at year-end. The applicable interest rate on the swap is reset each year after the annual interest payment is made. The LIBOR interest rate is 8.6% and 9.5% at the beginning of 2007 and 2008, respectively. The three-year fixed interest rate is 10% at December 31, 2007, and the two-year rate is 8% at December 31, 2008.

#### Required

1. Prepare the journal entries of Danburg for the bank loan and derivative for 2007 and 2008.
2. Prepare the appropriate disclosures in Danburg's financial statements for 2007 and 2008.

## CASES

### COMMUNICATION

#### C15-1 Realized and Unrealized Losses: Temporary Investments

*FASB Statement No. 115* changed accounting principles with respect to certain marketable securities. An important part of this *Statement* is the distinction between investments categorized as trading, available for sale, or held to maturity.

#### Required

1. What types of securities are covered by this *Statement*?
2. Explain how the distinction between the three categories is made.
3. Discuss the distinction between realized and holding gains and losses on investments in debt and equity securities.
4. Explain how a company discloses realized and holding gains and losses on investments in equity securities on its financial statements.

#### C15-2 Investments in Securities

Cane Company has two portfolios of investments in marketable equity securities. It classifies one as trading securities and the other as available-for-sale securities. Cane does not have the ability to exercise significant influence over any of the companies in either portfolio. It sold some securities from each portfolio during the year. The company reclassified one of the securities in the available-for-sale category to the trading category when its fair value was less than cost. At the beginning and end of the year, the aggregate cost of each portfolio exceeded its aggregate market value by different amounts.

#### Required

1. Explain how Cane measures and reports the income statement effects of the securities sold during the year from each portfolio.
2. Explain how Cane accounts for the security which it reclassified.
3. Explain how Cane reports the effects of investments in each portfolio on its balance sheet as of the end of the year and on its income statement for the year. Do not discuss the securities sold.
4. Explain gains trading. Can Cane use gains trading on either portfolio? Does gains trading raise ethical issues?

#### C15-3 Investments in Securities

*FASB Statement No. 115* was issued to change accounting methods and procedures with respect to investments in debt and equity securities. An important part of the *Statement* concerns the distinction between trading securities, available-for-sale securities, and held-to-maturity securities.

#### Required

1. Explain why a company invests in debt and equity securities.
2. Explain what factors a company should consider in determining which investments it should classify in each of the three categories, and how these factors affect the accounting treatment for unrealized gains and losses.

### C15-4 Equity Method

**AICPA Adapted** The most common method of accounting for unconsolidated subsidiaries is the equity method.

#### Required

Answer the following questions with respect to the *equity* method.

1. Under what circumstances does a company apply the equity method?
2. At what amount does a company record the initial investment and what events subsequent to the initial investment (if any) change this amount?
3. How does a company recognize investment earnings under the equity method, and how does it determine the amount?

### C15-5 Investments in Equity Securities

**AICPA Adapted** Walker Company has an investment portfolio of equity securities available for sale. Walker does not own more than 5% of the outstanding voting stock for any of the securities in the portfolio. At the beginning of the year, the aggregate market value of the portfolio exceeded its cost. It received cash dividends on these securities during the year. It sold none of the securities in the portfolio during the year. At the end of the year, the aggregate cost of the portfolio exceeded its market value. The decline in the market price of the securities in the portfolio is attributable to general market decline.

During this year, Walker purchased for cash 35% of the outstanding voting stock of Sipe Company. It received cash dividends on this investment from Sipe during the year, and Sipe reported its earnings after the acquisition date to Walker.

#### Required

1. Explain how Walker reports on its balance sheet and income statement the effects of its investment in the securities available for sale portfolio for the year.

2. Explain how Walker reports on its balance sheet and income statement the effects of its investment in Sipe for the year.

### C15-6 Various Investments

**AICPA Adapted** Houston Company has a portfolio of investments in available-for-sale securities that it classifies as a noncurrent asset. Houston owns less than 5% of the outstanding voting stock of each company's securities in the portfolio. At the beginning of the year, the aggregate market value of the portfolio exceeded its aggregate cost. Houston received cash dividends on these securities during the year. All cash dividends received represent distribution of earnings subsequent to Houston's acquisition of these securities. Houston sold some of the securities in the portfolio during the year. At the end of the year, the aggregate cost of the portfolio exceeded its aggregate market value.

Houston also owns 40% of the outstanding voting stock of Joy Company. The remainder of Joy's outstanding voting stock is widely dispersed among unrelated investors.

#### Required

1.
  - a. Explain how Houston reports the income statement effects of the cash dividends received during the year on the securities in the available-for-sale portfolio.
  - b. Explain how Houston reports the income statement effects of the securities sold during the year.
2. Explain how Houston reports the effect of ownership of the portfolio of securities available for sale in its balance sheet as of the end of the year and on its income statement for the year. Do *not* discuss the cash dividends or the securities sold.
3. Identify the method of accounting that Houston uses for its 40% investment in the outstanding voting stock of Joy. Why is this method appropriate?

## CREATIVE AND CRITICAL THINKING

### C15-7 Available-for-Sale Securities

**AICPA Adapted** The following are four *unrelated* situations involving investments in available-for-sale securities:

#### Situation I

A portfolio of available-for-sale securities with an aggregate fair value in excess of cost includes one particular security whose fair value has declined to less than one-half of the original cost. The decline in value is considered to be other than temporary.

#### Situation II

The statement of financial position of a company does not classify assets and liabilities as current and noncurrent. The portfolio of available-for-sale securities includes securities normally considered current that have a net cost in excess of fair value of \$2,000. The remainder of the portfolio has a net fair value in excess of cost of \$5,000.

#### Situation III

An available-for-sale security, whose fair value is currently less than cost, is reclassified as a trading security.

#### Situation IV

A company's portfolio of available-for-sale securities consists of the common stock of one company. At the end of the prior year, the fair value of the security was 50% of original cost, and the effect was properly reflected in an allowance account. However, at the end of the current year, the fair value of the security had appreciated to twice the original cost.

#### Required

Explain the effect on classification, carrying value, and earnings for each of the preceding situations.

### C15-8 Change in Percent Ownership

**AICPA Adapted** For the past five years, Herbert has maintained an investment (properly accounted for and reported upon) in Broome amounting to a 10% interest in the voting common stock of Broome. The purchase price was \$700,000 and the underlying net equity in Broome at the date of purchase was \$620,000. On January 2 of the current year, Herbert purchased an additional 15% of the voting common

stock of Broome for \$1,200,000; the underlying net equity of additional investment at January 2 was \$1,000,000. Broome has been profitable and has paid dividends annually since Herbert's initial acquisition.

#### Required

Discuss how this increase in ownership affects the accounting for and reporting upon the investment in Broome. Include in your discussion adjustments, if any, to the amount shown prior to the increase in investment to bring the amount into conformity with generally accepted accounting principles. Also include how the company would report in current and subsequent periods.

### C15-9 Investments in Stocks and Bonds

**AICPA Adapted** Victoria Company has investments in equity securities classified as trading and available for sale. At the beginning of the year, the aggregate market value of each portfolio exceeded its cost. During the year, Victoria sold some securities from each portfolio. At the end of the year, the aggregate cost of each portfolio exceeded its market value.

Victoria also has investments in bonds classified as held to maturity, all of which were purchased for face value. During the year, some of these bonds held by Victoria were called prior to their maturity by the bond issuer. Three months before the end of the year, additional similar bonds were purchased for face value plus two months' accrued interest.

#### Required

- Explain how Victoria accounts for the sale of securities from each portfolio.
  - Explain how Victoria accounts for each equity securities portfolio at year-end.
- Explain how Victoria accounts for the disposition prior to their maturity of the long-term bonds called by their issuer.
- Explain how Victoria reports the purchase of the additional similar bonds at the date of the acquisition.

### C15-10 Analyzing Coca-Cola's Investments Disclosures

Refer to the financial statements and related notes of The Coca-Cola Company in Appendix A of this book.

#### Required

- Was the fair value of the company's available-for-sale securities higher or lower than the cost at the end of 2004? By how much?
- Is the fair value of the company's held-to-maturity securities different from their cost at December 31, 2004? At December 31, 2003?
- Explain why the company has cost method investments.
- If the company included the assets and liabilities of its equity investments in its December 31, 2004 balance sheet instead of using the equity method, determine whether the effects on the assets, liabilities, and debt ratio would be material.



### C15-11 Ethics and Investments

You are an accountant for the Davanzo Company. The president of the company calls you into her office and says, "I want to ask you about two issues. First, we need to sell one of our investments to raise \$1 million because I think I have found a better investment. We could sell the shares of Company X, which are currently worth \$1 million even though they originally cost us \$400,000. But I don't want to sell them, because the company seems to be getting better all the time. Or we could sell the shares in that dog, Company Z. These shares are also worth \$1 million, but they cost us \$1.5 million and I hate to admit we made such a big mistake. And then there's that loss. I don't want to report that. I am going to use the \$1 million to buy about 20% of the shares of Company M, but I seem to remember that there is some accounting rule that might affect how much we buy. I was also wondering about buying some of Company M's convertible preferred stock so we can convert that into a large ownership position in the future. Let me know what you think." You are aware that Company M is a new company that is not yet listed on the stock market, has been making losses, and is expected to continue making losses for a few more years.

#### Required

From financial reporting and ethical perspectives, discuss the issues raised by this situation.