15 Investments

Chapter Preview

BASICS OF INVESTMENTS	DEBT INVESTMENTS	EQUITY INVESTMENTS	REPORTING AND ANALYSIS
C1 Short- vs. long-term	Recording debt investments	Recording equity investments	Summary of debt and equity investments
Debt vs. equity	**P1** Trading securities	**P4** Insignificant influence	Comprehensive income
Classification and reporting summary	**P2** Held-to-maturity securities	**P5** Significant influence	**A1** Return on assets components
	P3 Available-for-sale securities	**C2** Controlling influence	
	NTK 15-1, 15-2, 15-3	**NTK 15-4, 15-5**	**NTK 15-6**

Learning Objectives

CONCEPTUAL

C1 Distinguish between debt and equity securities and between short-term and long-term investments.

C2 Describe how to report equity securities with controlling influence.

C3 *Appendix 15A* (ONLINE ONLY) Explain foreign exchange rates and record transactions listed in a foreign currency.

ANALYTICAL

A1 Compute and analyze the components of return on total assets.

PROCEDURAL

P1 Account for debt securities as trading.

P2 Account for debt securities as held-to-maturity.

P3 Account for debt securities as available-for-sale.

P4 Account for equity securities with insignificant influence.

P5 Account for equity securities with significant influence.

Angel Investor

"Build a social capital market"—**CHERYL DORSEY**

©Peter Dressel/Getty Images

NEW YORK—"I received an Echoing Green Fellowship," explains Cheryl Dorsey. "We started a program that Echoing Green funded called the Family Van. It's a mobile health unit that travels through inner-city Boston providing medical services." Cheryl is now president of **Echoing Green** (**EchoingGreen.org**).

"We are angel investors in the social sector, providing seed capital and support to some of the world's best emerging social entrepreneurs," proclaims Cheryl. To date, Echoing Green has invested in over 700 entrepreneurs in 70 countries.

Echoing Green invests in both nonprofit and for-profit organizations. This brings unique accounting challenges. "While nonprofit organizations are awarded grants as their fellowship stipend," explains the Echoing Green website, "we have provided for-profit companies with recoverable grants." These two types of investments must be accounted for differently.

A grant to a nonprofit is given with no expectation of repayment. After the grant is paid to the entrepreneur, it is permanently removed from Echoing Green's financial statements.

However, a "recoverable grant" investment made to for-profit entrepreneurs has the potential for repayment. Given the potential for repayment and future benefit, Echoing Green must track such investments in its financial records.

Cheryl encourages people to start businesses. "Invest in the right person, who has an important idea for social change," asserts Cheryl, "that's a winning strategy."

Sources: *Echoing Green website,* January 2019; *ZDNet,* June 2012; *Change Makers,* March 2011

BASICS OF INVESTMENTS

In prior chapters we covered the reporting of both equity (common and preferred stock) and debt (bonds and notes) from the seller's (also called *issuer* or *investee*) standpoint. **This chapter covers the reporting of both equity and debt from the buyer's (or *investor*) standpoint.**

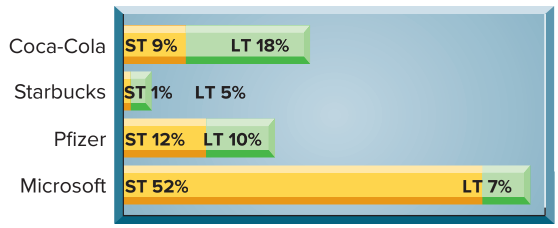
C1 Distinguish between debt and equity securities and between short-term and long-term investments.

Purposes and Types of Investments

Companies make investments for at least three reasons. (1) Companies invest their *extra cash* to earn more income. (2) Some entities, such as mutual funds and pension funds, are set up to earn income from investments. (3) Companies make investments for strategic reasons such as investments in competitors, suppliers, and customers. Exhibit 15.1 shows short-term (ST) and long-term (LT) investments as a percent of total assets for several companies.

EXHIBIT 15.1

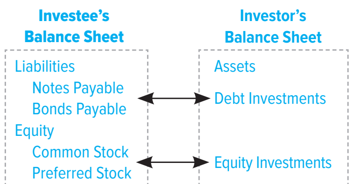
Investments of Selected Companies



Short-Term Investments **Short-term investments,** or *marketable securities,* are investments that (1) management intends to convert to cash within one year or the operating cycle, whichever is longer, and (2) are readily convertible to cash. These investments usually mature between 3 and 12 months. Cash equivalents are not short-term investments because they usually mature within 3 months. Short-term investments are current assets.

Long-Term Investments **Long-term investments** are investments that are not readily convertible to cash or are not intended to be converted into cash in the short term. Long-term investments also include funds designated for a special purpose, such as investments in land or other assets not used in operations. Long-term investments are noncurrent assets.

Debt Securities versus Equity Securities Investments in securities include both debt and equity securities. *Debt securities* reflect a creditor relation such as investments in notes, bonds, and certificates of deposit; they are issued by governments, companies, and individuals. *Equity securities* reflect an owner relation such as investments in shares of stock issued by companies.



Classification and Reporting

Accounting for investments in securities depends on three factors: (1) security type, either debt or equity; (2) the company's intent to hold the security either short term or long term; and (3) the investor's percentage of ownership in the other company's (investee's) equity securities. Exhibit 15.2 identifies six classes of securities using these three factors.

EXHIBIT 15.2

Investments in Securities

Debt Investments			Equity Investments		
Held-to-Maturity	**Trading**	**Available-for-Sale**	**Insignificant Influence**	**Significant Influence**	**Controlling Influence**
Debt securities intended to be held until maturity	Debt securities that are actively traded	Debt securities that are not HTM or Trading	Equity securities with insignificant influence	Equity securities with significant influence	Equity securities with controlling influence

Debt Investments

©Scott Olson/Getty Images

Debt Investments—Basics

This section covers the purchase, sale, and any interest received for **debt investments** (also called *debt securities*).

Recording Acquisition Debt investments are recorded at cost when purchased. Assume that Ling Co. paid $30,000 on July 1, 2019, to buy Dell's 7%, two-year bonds payable with a $30,000 par value. The bonds pay interest semiannually on December 31 and June 30. The entry to record this purchase follows.

Assets = Liabilities + Equity
+30,000
−30,000

July 1, 2019	Debt Investments	30,000	
	Cash		30,000
	Purchased bonds as debt investments.		

Recording Interest Interest revenue for debt investments is recorded when earned. On December 31, 2019, Ling records cash receipt of interest as follows. The $1,050 interest earned from July 1 to December 31 is computed as Principal × Annual rate × Fraction of year.

Assets = Liabilities + Equity
+1,050 +1,050

Dec. 31, 2019	Cash	1,050	
	Interest Revenue		1,050
	Record interest earned ($30,000 × 7% × 6/12).		

Reporting Debt Investments Ling's financial statements at December 31, 2019, report the interest revenue and the investment as shown in Exhibit 15.3.

EXHIBIT 15.3

Financial Statement Presentation of Debt Investments

On the income statement for year 2019:		On the December 31, 2019, balance sheet:	
Interest revenue	**$ 1,050**	**Debt investments**	**$30,000**

Maturity When bonds mature, we record the proceeds (assuming interest was already recorded).

Assets = Liabilities + Equity
+30,000
−30,000

July 1, 2021	Cash	30,000	
	Debt Investments		30,000
	Received cash from matured bonds.		

Point: It is common to add the security name to the account title to track as a subsidiary ledger. For example, the Debt Investments account can be titled Debt Investments (Dell).

The cost of a debt security can be either higher or lower than its maturity value. When the investment is long term, the difference between cost and maturity value is amortized as an adjustment to interest revenue over the remaining life of the security. We assume for simplicity that the cost of a long-term debt security equals its maturity value for all assignments.

DEBT INVESTMENTS—TRADING

P1 Account for debt securities as trading.

Trading securities are *debt* investments that the company actively buys and sells for profit. **Trading securities are *always* current assets.**

The portfolio of trading securities is reported at fair value; this requires a "fair value adjustment" from the cost of the portfolio. A *portfolio* is a group of securities. **Any unrealized gain (or loss) from a change in the fair value of the portfolio of trading securities is reported on the income statement.**

Recording Fair Value TechCom's portfolio of trading securities had a total cost of $11,500 and a fair value of $13,000 on December 31, 2019, the first year it held trading securities. The difference between the $11,500 cost and the $13,000 fair value is a $1,500 gain. It is an **unrealized gain** because it is not yet confirmed by actual sales of securities. The fair value adjustment for trading securities is recorded with an adjusting entry at the end of each period to equal the difference between the portfolio's cost and its fair value. TechCom records this gain as follows.

Point: Fair Value Adj. is a balance sheet account with either a debit balance (Fair value > Cost) or credit balance (Fair value < Cost).

Dec. 31, 2019	Fair Value Adjustment—Trading.	1,500	
	Unrealized Gain—Income		1,500
	Record unrealized gain in trading securities.		

Assets	=	Liabilities	+	Equity
+1,500				+1,500

This adjustment is computed using our three-step adjusting process.

Step 1: Determine what unadjusted balance equals: Fair Value Adj.–Trading = $0.

Step 2: Determine what adjusted balance should equal: Fair Value Adj.–Trading = $1,500 Dr.
Explanation: $13,000 fair value > $11,500 cost; thus Fair Value Adj.–Trading requires a $1,500 debit to be at fair value.

Step 3: Record the $1,500 adjusting entry to get from step 1 to step 2.
Explanation: This means a $1,500 debit to Fair Value Adj.–Trading and a $1,500 credit to Unrealized Gain–Income.

Unadj. bal. is rarely $0; it is $0 here because it's the first year.

Example: If TechCom's trading securities have a cost of $14,800 and a fair value of $16,100 at Dec. 31, 2020, its adjusting entry is

Unreal. Loss—Income. . .	200	
Fair Value Adj.—Trading		200

This is computed as:
$1,500 Beg. Dr. bal. + $200 Cr. = $1,300 End. Dr. bal.

Reporting Fair Value The **unrealized gain (or loss)** is reported in the Other Revenues and Gains (or Expenses and Losses) section on the income statement. Unrealized Gain—Income (or Unrealized Loss—Income) is a *temporary* account that is closed to Income Summary at the end of each period. Fair Value Adjustment—Trading is a *permanent* asset account that adjusts the reported value of the trading securities portfolio from its prior-period fair value to the current period fair value. The total cost of the trading securities portfolio is maintained in one account, and the fair value adjustment is recorded in a separate account. For example, TechCom's investment in trading securities is reported in current assets as follows.

Current Assets		
Debt investments—Trading (at cost)	$11,500	
Fair value adjustment—Trading.	1,500	
Debt investments—Trading (at fair value).		$13,000
or simply		
Debt investments—Trading (at fair value; cost is $11,500)		$13,000

Debt Investments–Trading

Debit		Credit
1/1/2019	0	
Purch.	11,500	
12/31/2019	11,500	

Fair Value Adj.–Trading

Debit		Credit
1/1/2019	0	
Adj.	**1,500**	
12/31/2019	1,500	

Selling Trading Securities When individual trading securities are sold, the difference between the net proceeds (sale price minus fees) and the cost of the individual trading securities sold is recorded as a gain or a loss. **Any prior-period fair value adjustment to the portfolio is *not* used to compute the gain or loss from the sale of individual trading securities.** This is because the balance in the Fair Value Adjustment account is for the entire portfolio, not individual securities. If TechCom sold some of its trading securities that had cost $100 for $120 cash on January 9, 2020, it records the following.

Assets	=	Liabilities	+	Equity
+120				+20
−100				

Jan. 9, 2020	Cash	120	
	Debt Investments—Trading		100
	Gain on Sale of Debt Investments		20
	Sold trading securities costing $100 for $120 cash.		

Point: This is a *realized* $20 gain—realized by actual sale.

A gain is reported in the Other Revenues and Gains section on the income statement, and a loss is reported in Other Expenses and Losses. When the period-end fair value adjustment for the portfolio of trading securities is computed, it excludes the cost and fair value of any securities sold.

NEED-TO-KNOW 15-1

Trading Securities

P1

Berkshire Co. purchases debt investments in trading securities at a cost of $130 on July 1. (This is its first and only purchase of trading securities.) On December 30, Berkshire received $1 of interest from its trading securities. At year-end December 31, the trading securities had a fair value of $140.

a. Prepare the July 1 purchase entry of trading securities.
b. Prepare the December 30 entry for receipt of cash interest.
c. Prepare the December 31 year-end adjusting entry for the trading securities' portfolio.
d. Explain how each account in entry *c* is reported in financial statements.
e. Prepare the January 3 entry when a portion of its trading securities (that had cost $33) is sold for $36.

Solution

a.

July 1	Debt Investments—Trading	130	
	Cash		130
	Record purchase of trading securities.		

b.

Dec. 30	Cash	1	
	Interest Revenue		1
	Record interest received on trading securities.		

c.

Fair Value Adj.–Trading		
Unadj. bal.	0	
Adj.	10	
Dec. 31	10	

Dec. 31	Fair Value Adjustment—Trading	10	
	Unrealized Gain—Income		10
	Record unrealized gain in fair value of trading securities.		

d. **(i)** The $10 debit in the Fair Value Adjustment—Trading account is an adjunct asset account in the balance sheet. It increases the $130 balance of the Debt Investments—Trading account to its $140 fair value.

(ii) The $10 credit for Unrealized Gain is reported in the Other Revenues and Gains section of the income statement.

e.

Jan. 3	Cash	36	
	Gain on Sale of Debt Investments		3
	Debt Investments—Trading		33
	Record sale of trading securities.		

Do More: QS 15-3, QS 15-4, QS 15-5, E 15-2, P 15-1

DEBT INVESTMENTS—HELD-TO-MATURITY

P2

Account for debt securities as held-to-maturity.

Held-to-maturity (HTM) securities are *debt* securities a company intends and is able to hold until maturity. They are reported in current assets if their maturity dates are within one year or the operating cycle, whichever is longer. Otherwise, they are classified as long-term investments.

The cost of a debt security can be either higher or lower than its maturity value. When the investment is long term, the difference between cost and maturity value is amortized over the remaining life of the security. We assume for simplicity that the cost of a long-term HTM debt security equals its maturity value for all assignments.

Recording Acquisition and Interest All HTM securities are recorded at cost when purchased, and interest revenue is recorded when earned—see earlier "basic" entries.

Reporting HTM Securities at Cost The portfolio of HTM securities is usually reported at (amortized) cost, which is explained in advanced courses. **There is *no* fair value adjustment to the portfolio of HTM securities—neither to short-term nor long-term portfolios.**

NEED-TO-KNOW 15-2

Held-to-Maturity Securities

P2

Prepare journal entries to record the following transactions involving short-term debt investments.

a. On May 15, paid $100 cash to purchase Muni's 120-day short-term debt securities ($100 principal), dated May 15, that pay 6% interest (categorized as held-to-maturity securities).

b. On September 13, received a check from Muni in payment of the principal and 120 days' interest on the debt securities purchased in transaction *a*.

Solution

a.

May 15	Debt Investments—HTM	100	
	Cash.		100
	Purchased 120-day, 6% debt securities.		

b.

Sep. 13	Cash	102	
	Debt Investments—HTM		100
	Interest Revenue.		2
	Collect $100 principal plus interest of $100 × 6% × 120/360.		

Do More: QS 15-6, E 15-3

DEBT INVESTMENTS—AVAILABLE-FOR-SALE

P3 Account for debt securities as available-for-sale.

Available-for-sale (AFS) securities are *debt* investments not classified as trading or held-to-maturity securities. If the intent is to sell AFS securities within the longer of one year or the operating cycle, they are classified as short-term investments. Otherwise, they are classified as long-term investments.

Companies adjust the cost of the portfolio of AFS securities for changes in fair value. This is done with a fair value adjustment to its portfolio cost. **Any unrealized gain or loss for the portfolio of AFS securities is *not* reported on the income statement. It is reported in the equity section of the balance sheet** (as part of *comprehensive income,* covered later).

Recording Fair Value Assume that Mitsu Co. had no prior investments in available-for-sale securities other than those purchased in the current period. Exhibit 15.4 shows the cost and fair value of the portfolio of investments on December 31, 2019, the end of its reporting period.

EXHIBIT 15.4

Cost and Fair Value of Available-for-Sale Securities

	Cost	Fair Value	Unrealized Gain (Loss)
Apple bonds	$30,000	$29,050	$ (950)
Intex notes	43,000	45,500	2,500
Total.	$73,000	$74,550	**$1,550**

Example: If fair value in Exhibit 15.4 is $70,000 (instead of $74,550), what entry is made? *Answer:*
Unreal. Loss—Equity . . . 3,000
Fair Value Adj.—AFS . . 3,000

The year-end adjusting entry to record the fair value of the portfolio of investments follows.

Dec. 31, 2019	Fair Value Adjustment—Available-for-Sale	1,550	
	Unrealized Gain—Equity		1,550
	Record adjustment to fair value of AFS securities.		

Assets = Liabilities + Equity
+1,550 +1,550

Point: Unrealized Loss—Equity and Unrealized Gain—Equity are *permanent* (balance sheet) equity accounts.

Reporting Fair Value

Exhibit 15.5 shows the December 31, 2019, balance sheet—it assumes these investments are long term, but they also can be short term. It is also common to combine the cost of investments with the balance in the Fair Value Adjustment account and report the net as a single amount.

EXHIBIT 15.5

Balance Sheet Presentation of Available-for-Sale Securities

Debt Investments–AFS

1/1/2019	0	
Purch.	73,000	
12/31/2019	73,000	

Fair Value Adj.–AFS

1/1/2019	0	
Adj.	**1,550**	
12/31/2019	1,550	

Assets		
Debt investments—Available-for-sale (at cost)	$73,000	
Fair value adjustment—Available-for-sale	1,550	
Debt investments—Available-for-sale (at fair value)		$74,550
or simply		
Debt investments—Available-for-sale (at fair value; cost is $73,000)		$74,550
Equity		
Add unrealized gain on available-for-sale securities*		$ 1,550

Reconciled

*Included under Accumulated Other Comprehensive Income.

Point: Income is increased by selling AFS securities with unrealized gains; income is reduced by selling those with unrealized losses.

Reporting for Next Year

Let's extend this example and assume that at the end of its next year, December 31, 2020, Mitsu's portfolio of long-term AFS securities has an $81,000 cost and an $82,000 fair value. The year-end adjustment is computed using our three-step adjusting process.

Point: Fair Value Adj.—AFS is a permanent account, shown as a deduction or addition to the investment account.

Step 1: Determine what unadjusted balance equals: Fair Value Adj.–AFS = $1,550 Dr. (from Exhibit 15.5).
Step 2: Determine what adjusted balance should equal: Fair Value Adj.–AFS = $1,000 Dr.
Explanation: $82,000 fair value > $81,000 cost; thus Fair Value Adj.–AFS must have a $1,000 Dr. bal. so securities are at fair value.
Step 3: Record the $550 adjusting entry to get from step 1 to step 2.
Explanation: This implies a $550 credit to Fair Value Adj.–AFS (and a $550 debit to Unrealized Gain).

It records the year-end adjustment to fair value as follows.

Assets = Liabilities + Equity
−550 −550

Dec. 31, 2020	Unrealized Gain—Equity	550	
	Fair Value Adjustment—Available-for-Sale		550
	Record adjustment to fair value of AFS securities.		

The effects of the 2019 and 2020 securities transactions are shown in the following T-accounts.

Example: If cost is $83,000 and fair value is $82,000 at Dec. 31, 2020, it records the following adjustment:
Unreal. Gain—Equity 1,550
Unreal. Loss—Equity 1,000
Fair Value Adj.—AFS 2,550

Unrealized Gain—Equity

		Bal. 12/31/19	1,550
Adj. 12/31/20	550		
		Bal. 12/31/20	**1,000**

Fair Value Adjustment—Available-for-Sale

Bal. 12/31/19	1,550		
		Adj. 12/31/20	550
Bal. 12/31/20	**1,000**		

Selling AFS Securities

Accounting for the sale of individual AFS securities is identical to accounting for the sale of trading securities. When individual AFS securities are sold, the difference between the cost of the individual securities sold and the net proceeds (sale price less fees) is recorded as a gain or loss on sale of debt investments.

NEED-TO-KNOW 15-3

Available-for-Sale Securities

P3

Gard Company completes the following transactions related to its short-term debt investments.

May 8 Purchased FedEx notes as a short-term investment in available-for-sale securities for $12,975.
Sep. 2 Sold part of its investment in FedEx notes for $4,475, which had cost $4,325.
Oct. 2 Purchased Ajay bonds for $25,600 as a short-term investment in available-for-sale securities.

Required

1. Prepare journal entries for the transactions.

2. Prepare a year-end adjusting journal entry as of December 31 if the fair values of the debt securities held by Gard are $9,600 for FedEx and $22,000 for Ajay. (This year is the first year Gard Company acquired short-term debt investments.)

Solution

1.

May 8	Debt Investments—AFS	12,975	
	Cash		12,975
	*Purchased **FedEx** notes.*		
Sep. 2	Cash	4,475	
	Gain on Sale of Debt Investment		150
	Debt Investments—AFS		4,325
	*Sold a portion of its **FedEx** notes.*		
Oct. 2	Debt Investments—AFS	25,600	
	Cash		25,600
	*Purchased **Ajay** bonds.*		

2. Computation of unrealized gain or loss, along with the adjusting entry, follows.

Debt Investments in Available-for-Sale Securities	Total Cost	Total Fair Value	Unrealized Gain (Loss)
FedEx	$ 8,650*	$ 9,600	
Ajay	25,600	22,000	
Totals	$34,250	$31,600	$(2,650)

*$12,975 − $4,325

Dec. 31	Unrealized Loss—Equity	2,650	
	Fair Value Adjustment—Available-for-Sale		2,650
	Record unrealized loss in fair value of ST AFS portfolio.		

Debt Investments–AFS

Jan. 1	0		
May 8	12,975	Sep. 2	4,325
Oct. 2	25,600		
Dec. 31 bal.	34,250		

Fair Value Adj.–AFS

Jan. 1	0	Dec. 31 adj.	2,650
		Dec. 31 bal.	2,650

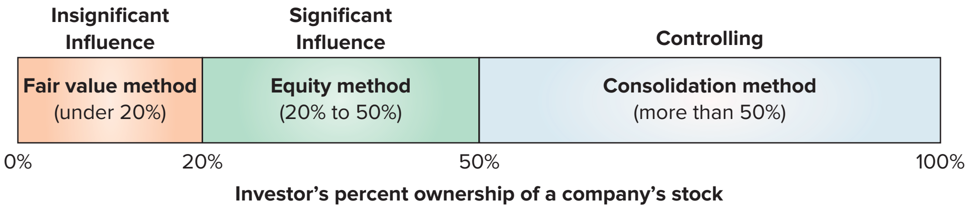
Do More: QS 15-7, QS 15-8, QS 15-9, QS 15-10, E 15-4, E 15-5, E 15-6

Equity Investments

This section covers **equity investments** (also called *equity securities*). Exhibit 15.6 summarizes the accounting for equity investments based on an investor's ownership in the stock. We cover each of these three cases.

EXHIBIT 15.6

Accounting for Equity Investments by Percent of Ownership



EQUITY INVESTMENTS—INSIGNIFICANT INFLUENCE, UNDER 20%

P4

Account for equity securities with insignificant influence.

When an investor has insignificant influence over another company, presumably when it owns less than 20% of voting stock, the stock investment is reported at fair value. Stock investments are classified as short or long term based on managers' intent and the stock's marketability. Any cash dividends are recorded as dividend revenue.

Recording Acquisition Equity investments are recorded at cost when acquired, including any commissions and brokerage fees paid. Assume ITI purchases 100 shares of Lynx common stock for $7,000 on October 10, 2019. After the purchase, ITI has insignificant influence over Lynx. It records this purchase as follows.

Assets = Liabilities + Equity
+7,000
−7,000

Oct. 10	Stock Investments	7,000	
	Cash		7,000
	Purchased 100 shares of Lynx.		

Recording Dividends If ITI receives $10 in dividends on November 1 from its stock investment, it records the following.

Assets = Liabilities + Equity
+10 +10

Nov. 1	Cash	10	
	Dividend Revenue		10
	Record dividend received on stock investments.		

Recording Fair Value The stock investments portfolio is reported at fair value; this requires a "fair value adjustment" from cost of the portfolio. **Any unrealized gain (or loss) from a change in the fair value of this portfolio of stock investments is reported on the income statement.**

Assume ITI's portfolio of stock investments with insignificant influence has a total cost of $7,000 and a fair value of $9,000 on December 31, 2019, the first year it held these securities. The difference between the $7,000 cost and the $9,000 fair value is a $2,000 **unrealized gain.** The fair value adjustment is recorded at the end of each period to equal the difference between the portfolio's cost and its fair value. ITI records this gain as follows.

Assets = Liabilities + Equity
+2,000 +2,000

Dec. 31	Fair Value Adjustment—Stock	2,000	
	Unrealized Gain—Income		2,000
	Record unrealized gain in stock investments.		

This adjustment is computed using our three-step adjusting process.

Unadj. bal. is rarely $0; it is $0 here because it's the first year.

Step 1: Determine what unadjusted balance equals: Fair Value Adj.–Stock = $0.
Step 2: Determine what adjusted balance should equal: Fair Value Adj.–Stock = $2,000 Dr.
Explanation: $9,000 fair value > $7,000 cost; thus Fair Value Adj.–Stock requires a $2,000 debit to be at fair value.
Step 3: Record the $2,000 adjusting entry to get from step 1 to step 2.
Explanation: This means a $2,000 debit to Fair Value Adj.–Stock and a $2,000 credit to Unrealized Gain–Income.

Example: If cost is $10,000 and fair value is $8,500 at Dec. 31, 2020, it records the following adjustment:
Unreal. Loss—Income 3,500
Fair Value Adj.—Stock 3,500

The FVA—Stock Cr. is computed as: $2,000 Beg. Dr. bal. + **$3,500 Cr.** = $1,500 End. Cr. bal.

Reporting Fair Value The **unrealized gain (or loss)** is reported in the Other Revenues and Gains (or Expenses and Losses) section on the income statement. Unrealized Gain (or Loss)—Income is a *temporary* account that is closed to Income Summary at the end of each period. Fair Value Adjustment—Stock is a *permanent* asset account that adjusts the reported value of the stock investments portfolio from its prior-period fair value to the current-period fair value. The total cost of the portfolio is kept in one account, and the fair value adjustment is kept in a separate account. ITI's stock investment is reported in its assets.

Stock Investments

1/1/2019	0	
Purch.	7,000	
12/31/2019	7,000	

Fair Value Adj.–Stock

1/1/2019	0	
Adj.	2,000	
12/31/2019	2,000	

Assets

Stock investments (at cost)	$7,000	
Fair value adjustment—Stock	2,000	
Stock investments (at fair value)		$9,000
or simply		
Stock investments (at fair value; cost is $7,000)		$9,000

Selling Stock Investments When individual stock investments are sold, the difference between the net proceeds (sale price minus fees) and the cost of the individual stocks that are sold is recorded as a gain or a loss. **Any prior-period fair value adjustment to the portfolio is *not* used to compute the gain or loss from the sale of individual stocks.** This is because the balance in the Fair Value Adjustment account is for the entire portfolio, not individual stocks. If ITI sold some of its stock investments that had cost $500 for $800 cash on March 9, 2020, it records the following. A gain is reported in the Other Revenues and Gains section on the income statement and a loss is reported in Other Expenses and Losses.

Mar. 9	Cash	800	
	Stock Investments		500
	Gain on Sale of Stock Investments		300
	Sold stock investments costing $500 for $800 cash.		

Assets = Liabilities + Equity
+800 +300
−500

NEED-TO-KNOW 15-4

Stock Investments with Insignificant Influence (<20%)

P4

Derr Co. purchases stock investments (with insignificant influence) at a cost of $250 on December 15. This is its first and only purchase of such securities. On December 28, Derr received a $15 cash dividend from the stock investments. At year-end December 31, the stock investments had a fair value of $200.

a. Prepare the December 15 purchase entry for stock investments.

b. Prepare the December 28 receipt of cash dividends entry.

c. Prepare the December 31 year-end adjusting entry for the stock investments' portfolio.

d. Explain how each account in entry *c* is reported in financial statements.

e. Prepare the January 3 entry when a portion of its stock investments (that had cost $37) is sold for $40.

Solution

a.

Dec. 15	Stock Investments	250	
	Cash.		250
	Record purchase of stock investments.		

b.

Dec. 28	Cash	15	
	Dividend Revenue.		15
	Record dividend received on stock investments.		

c.

Dec. 31	Unrealized Loss—Income	50	
	Fair Value Adjustment—Stock		50
	Record unrealized loss in stock investments.		

Fair Value Adj.–Stock

Unadj. bal.	0		
		Adj.	50
		Dec. 31	50

d. **(i)** The $50 credit in the Fair Value Adjustment—Stock account is a contra asset account in the balance sheet. It decreases the $250 balance of the Stock Investments account to its $200 fair value.

(ii) The $50 debit for Unrealized Loss is reported in the Other Expenses and Losses section of the income statement.

e.

Jan. 3	Cash	40	
	Gain on Sale of Stock Investments		3
	Stock Investments.		37
	Record sale of stock investments.		

Do More: QS 15-11, QS 15-12, QS 15-13, E 15-7, E 15-8, E 15-9, E 15-10

EQUITY INVESTMENTS—SIGNIFICANT INFLUENCE, 20% TO 50%

P5

Account for equity securities with significant influence.

A long-term investment classified as **equity securities with significant influence** means that the investor has significant influence over the investee. An investor that owns between 20% and 50% of a company's voting stock usually has significant influence. The **equity method** is used for long-term investments in equity securities with significant influence, which is explained in this section.

Recording Acquisition Long-term investments in equity securities with significant influence are recorded at cost when acquired. Micron Co. records the purchase of 3,000 shares (30%) of Star Co. common stock at a total cost of $70,000 on January 1, 2019, as follows.

Assets = Liabilities + Equity
+70,000
−70,000

Jan. 1	Equity Method Investments	70,000	
	Cash		70,000
	Record purchase of 3,000 Star shares.		

Recording Share of Earnings When the investee reports its earnings, the investor records its share of those earnings in its investment account. Assume that Star reports net income of $20,000 for 2019. Micron records its 30% share of those earnings—see entry below. The debit increases Micron's equity in Star. The credit is 30% of Star's net income. Earnings from Equity Method Investments is a *temporary* account (closed to Income Summary at each period-end) and is reported on the investor's (Micron's) income statement. If the investee incurs a net loss instead of net income, the investor records its share of the loss and reduces (credits) its investments account.

Assets = Liabilities + Equity
+6,000 +6,000

Dec. 31	Equity Method Investments	6,000	
	Earnings from Equity Method Investments		6,000
	Record 30% equity in investee's $20,000 earnings.		

Recording Share of Dividends Cash dividends received by an investor from an investee under the equity method are accounted for as a conversion of one asset to another. Dividends reduce the Equity Method Investments account. Assume Star pays a total of $10,000 in cash dividends on its common stock. Micron records its 30% share of these dividends received on January 9, 2020, as follows.

Assets = Liabilities + Equity
+3,000
−3,000

Jan. 9	Cash	3,000	
	Equity Method Investments		3,000
	Record 30% share of $10,000 dividend paid by Star.		

Reporting Investments with Significant Influence The book value of investments under the equity method equals the cost of investments *plus* the investor's share of net income or loss and *minus* its share of dividends. **The Equity Method Investments account is not adjusted to fair value.** After Micron records these transactions, its Equity Method Investments account appears as in Exhibit 15.7. Micron's account balance on January 9, 2020, for its investment in Star is $73,000. This is the investment's cost *plus* Micron's share of Star's earnings *minus* Micron's share of Star's cash dividends.

EXHIBIT 15.7

Investment in Star Common Stock (ledger T-account)

Equity Method Investments			
1/1/2019 Investment acquisition	70,000		
12/31/2019 Share of earnings	6,000		
12/31/2019 Balance	76,000		
		1/9/2020 Share of dividend	3,000
1/9/2020 Balance	73,000		

Selling Investments with Significant Influence When equity method investments are sold, the gain or loss is computed by comparing proceeds from the sale with the book value of the investments on the sale date. If Micron sells all of its Star stock for $80,000 on January 10, 2020, it records the sale as follows.

Assets = Liabilities + Equity
+80,000 +7,000
−73,000

Jan. 10	Cash	80,000	
	Equity Method Investments		73,000
	Gain on Sale of Stock Investments		7,000
	Sold 3,000 shares of stock for $80,000.		

Prepare entries to record the following transactions of Garcia Company.

NEED-TO-KNOW 15-5

Equity Method Investments

P5

2019

Jan. 1 Purchased 400 shares of Lopez Co. common stock for $3,000 cash. Lopez has 1,000 shares of common stock outstanding, and its policies will be significantly influenced by Garcia.
Aug. 1 Lopez declared and paid a cash dividend of $2 per share.
Dec. 31 Lopez reported net income for the year of $2,500.

2020

Aug. 1 Lopez declared and paid a cash dividend of $2.25 per share.
Dec. 31 Lopez reported net income for the year of $2,750.

2021

Jan. 1 Garcia sold 100 shares of Lopez for $1,300 cash.

Solution

Jan. 1, 2019	Equity Method Investments	3,000	
	Cash		3,000
	*Record purchase of investment.**		

*Garcia's investment is 40% of Lopez's stock (400/1,000). Garcia uses the equity method.

Aug. 1, 2019	Cash	800	
	Equity Method Investments		800
	Record receipt of cash dividend (400 × $2).		
Dec. 31, 2019	Equity Method Investments	1,000	
	Earnings from Equity Method Investments		1,000
	Record equity in investee earnings ($2,500 × 40%).		

Aug. 1, 2020	Cash	900	
	Equity Method Investments		900
	Record receipt of cash dividend (400 × $2.25).		
Dec. 31, 2020	Equity Method Investments	1,100	
	Earnings from Equity Method Investments		1,100
	Record equity in investee earnings ($2,750 × 40%).		

Jan. 1, 2021	Cash	1,300	
	Gain on Sale of Stock Investments		450
	Equity Method Investments*		850
	Record sale of investment.		

*Book value (Lopez stock) at 1/1/2021.

Original cost	$3,000
Less 2019 dividends	(800)
Plus share of 2019 earnings	1,000
Less 2020 dividends	(900)
Plus share of 2020 earnings	1,100
Book value at date of sale	$3,400
Book value of shares sold ($3,400 × [100/400])	$ 850

Do More: QS 15-15, E 15-12, E 15-13, E 15-14

EQUITY INVESTMENTS—CONTROLLING INFLUENCE, MORE THAN 50%

C2

Describe how to report equity securities with controlling influence.

A long-term investment classified as **equity securities with controlling influence** means that the investor has a controlling influence over the investee. An investor who owns more than 50% of a company's voting stock has control over the investee. This investor can dominate all other shareholders in electing the corporation's board of directors and has control over the investee's management.

©Tim Greenway/Portland Press Herald/Getty Images

The *consolidation method* is used for long-term investments in equity securities with controlling influence. The investor reports *consolidated financial statements* when owning such securities. The controlling investor is called the **parent** and the investee is called the **subsidiary.** Many companies are parents with subsidiaries. **Amazon** is the parent of Whole Foods Market, Zappos, and other subsidiaries. When a company operates as a parent with subsidiaries, each entity maintains separate accounting records.

Consolidated financial statements show the financial statements of all entities under the parent's control, including all subsidiaries. These statements are prepared as if the business were organized as one entity. The individual assets and liabilities of the parent and its subsidiaries are combined on one balance sheet. Their revenues and expenses also are combined on one income statement, and their cash flows are combined on one statement of cash flows. Preparing consolidated financial statements is covered in advanced courses.

Accounting Summary for Debt and Equity Investments

Exhibit 15.8 summarizes accounting for debt and equity investments.

EXHIBIT 15.8

Accounting for Investments in Securities

Classification	Investments Account Reported at
Short-Term Investment in Securities	
Debt Investments—Held-to-Maturity	**Cost** (without any discount or premium amortization)
Debt Investments—Trading	**Fair value** (with fair value adjustment to income)
Debt Investments—Available-for-Sale	**Fair value** (with fair value adjustment to equity)
Stock Investments—insignificant influence	**Fair value** (with fair value adjustment to income)
Long-Term Investment in Securities	
Debt Investments—Held-to-Maturity	**Cost** (with any discount or premium amortized)
Debt Investments—Available-for-Sale	**Fair value** (with fair value adjustment to equity)
Stock Investments—insignificant influence	**Fair value** (with fair value adjustment to income)
Equity Method Investments—significant influence	Equity method (no fair value adjustment)
Consolidated Investments—controlling influence	Consolidation method (no fair value adjustment)

Computing and Reporting Comprehensive Income

Comprehensive income is all changes in equity during a period except those from owners' investments and dividends. Specifically, comprehensive income is computed by adding *other comprehensive income* to or subtracting it from net income.

Statement of Comprehensive Income	
Net income	**$ #**
Other comprehensive income	**#**
Comprehensive income	**$ #**

Frequently consists of:
Change in value of available-for-sale investment, net of tax
Change in foreign currency translation adjustment
Change in cash flow hedges, net of tax

Other comprehensive income includes **unrealized** gains and losses on available-for-sale securities, foreign currency translation adjustments, and other adjustments. (*Accumulated other comprehensive income* is the cumulative impact for all periods of *other comprehensive income.*) Comprehensive income is reported in financial statements in one of two ways.

1. On a separate *statement of comprehensive income* that follows the income statement.
2. On the lower section of the income statement (as a single continuous *statement of income and comprehensive income*).

GOOGLE

Option 1 is most common. **Google**, for example, reports a statement of comprehensive income following its income statement (see Appendix A).

Components of Return on Total Assets — Decision Analysis

A1 Compute and analyze the components of return on total assets.

A company's **return on total assets** (or *return on assets*) is used to assess financial performance. The return on total assets can be separated into two components, profit margin and total asset turnover, for additional analyses. Exhibit 15.9 shows how these two components determine return on total assets.

EXHIBIT 15.9 Components of Return on Total Assets

Return on total assets = Profit margin × Total asset turnover

$$\frac{\text{Net income}}{\text{Average total assets}} = \frac{\text{Net income}}{\text{Net sales}} \times \frac{\text{Net sales}}{\text{Average total assets}}$$

Profit margin reflects the percent of net income in each dollar of net sales. Total asset turnover reflects a company's ability to produce net sales from total assets. All companies want a high return on total assets. By considering these two components, we can often discover strengths and weaknesses not revealed by return on total assets alone. This improves our ability to assess future performance and company strategy.

Costco's return on total assets and its components are in Exhibit 15.10.

EXHIBIT 15.10 Components of Return on Total Assets for two competitors

	Costco					Walmart
Year	Return on Total Assets	=	Profit Margin	×	Total Asset Turnover	Return on Total Assets
Current Year	7.8%	=	2.1%	×	3.7	7.2%
1 Year Ago	7.2%	=	2.0%	×	3.6	7.5%
2 Years Ago	7.0%	=	2.0%	×	3.5	8.4%

Costco's return on total assets improved over the three-year period. This increase is driven by both an increase in profit margin and in total asset turnover. Costco increased its return on total assets during a time when other retailers like Walmart have struggled. To continue this trend, Costco's management must increase net income while keeping total asset turnover steady or at least at a level where it does not decrease return on total assets.

Decision Maker

Retailer You are an owner of a retail store. The store's recent annual performance reveals (industry norms in parentheses) return on total assets = 11% (11.2%); profit margin = 4.4% (3.5%); and total asset turnover = 2.5 (3.2). What does your analysis reveal? ■ *Answer:* The store's 11% return on assets is similar to the 11.2% industry norm. However, the store's 4.4% profit margin is much higher than the 3.5% norm, but the 2.5 asset turnover is much lower than the 3.2 norm. The poor turnover suggests that this store is less efficient in using assets. It must focus on increasing sales or reducing assets.

NEED-TO-KNOW 15-6

COMPREHENSIVE

Accounting for Equity Securities with Insignificant Influence and for Equity Securities with Significant Influence

The following transactions relate to Brown Company's long-term investments. Brown did not own any long-term investments prior to these transactions. Show (1) the necessary journal entries and (2) the relevant portions of each year's balance sheet and income statement that reflect these transactions for both years.

2019

Sep.	9	Purchased 1,000 shares of Packard common stock for $80,000 cash. These shares represent 30% of Packard's outstanding shares.
Oct.	2	Purchased 2,000 shares of AT&T common stock for $60,000 cash as a long-term investment. These shares represent less than a 1% ownership in AT&T.
	17	Purchased as a long-term investment 1,000 shares of Apple common stock for $40,000 cash. These shares are less than 1% of Apple's outstanding shares.
Nov.	1	Received $5,000 cash dividend from Packard.
	30	Received $3,000 cash dividend from AT&T.
Dec.	15	Received $1,400 cash dividend from Apple.
	31	Packard's net income for this year is $70,000.

[continued on next page]

31 Fair values for the investments in equity securities are Packard, $84,000; AT&T, $48,000; and Apple, $45,000.
31 For preparing financial statements, note the following post-closing account balances: Common Stock, $500,000, and Retained Earnings, $350,000.

2020

Jan. 1 Sold all of the Packard shares for $108,000 cash.
May 30 Received $3,100 cash dividend from AT&T.
June 15 Received $1,600 cash dividend from Apple.
Aug. 17 Sold all of the AT&T stock for $52,000 cash.
19 Purchased 2,000 shares of Coca-Cola common stock for $50,000 cash as a long-term investment. The stock represents less than a 5% ownership in Coca-Cola.
Dec. 15 Received $1,800 cash dividend from Apple.
31 Fair values of the investments in equity securities are Apple, $39,000, and Coca-Cola, $48,000.
31 For preparing financial statements, note the following post-closing account balances: Common Stock, $500,000, and Retained Earnings, $410,000.

PLANNING THE SOLUTION

- Account for the investment in Packard under the equity method.
- Account for the investments in AT&T, Apple, and Coca-Cola as stock investments with insignificant influence.
- Prepare the information for the two years' balance sheets by including the relevant asset and equity accounts, and the two years' income statements by identifying the relevant revenues, earnings, gains, and losses.

SOLUTION

1. Journal entries for 2019.

Sep. 9	Equity Method Investments	80,000	
	Cash		80,000
	Acquired 1,000 shares, a 30% equity in Packard.		
Oct. 2	Stock Investments	60,000	
	Cash		60,000
	Acquired 2,000 shares of AT&T.		
Oct. 17	Stock Investments	40,000	
	Cash		40,000
	Acquired 1,000 shares of Apple.		
Nov. 1	Cash	5,000	
	Equity Method Investments		5,000
	Received dividend from Packard.		
Nov. 30	Cash	3,000	
	Dividend Revenue		3,000
	Received dividend from AT&T.		
Dec. 15	Cash	1,400	
	Dividend Revenue		1,400
	Received dividend from Apple.		
Dec. 31	Equity Method Investments	21,000	
	Earnings from Equity Method Investments		21,000
	Record 30% share of Packard's earnings of $70,000.		
Dec. 31	Unrealized Loss—Income	7,000	
	Fair Value Adjustment—Stock*		7,000
	Record change in fair value of stock investments.		

*Fair value adjustment computations.

	Cost	Fair Value	Unrealized Gain (Loss)
AT&T	$ 60,000	$48,000	$(12,000)
Apple	40,000	45,000	5,000
Total	$100,000	$93,000	$ (7,000)

Required balance of the Fair Value Adjustment—Stock account (credit)	$(7,000)
Existing balance	0
Necessary adjustment (credit)	$(7,000)

Stock Investments

12/31/2018	0	
10/2/2019	60,000	
10/17/2019	40,000	
12/31/2019	100,000	

Fair Value Adj.–Stock

12/31/2018 0		
	Adj.	7,000
	12/31/2019	7,000

2. The December 31, 2019, selected balance sheet items follow.

Assets—Long-term investments	
Stock investments (at fair value; cost is $100,000) . . .	$ 93,000
Equity method investments	96,000
Total long-term investments	$189,000

The relevant income statement items for the year ended December 31, 2019, follow.

Dividend revenue	$ 4,400
Unrealized loss—Income	(7,000)
Earnings from equity method investments	21,000

1. Journal entries for 2020.

Jan. 1	Cash	108,000	
	Equity Method Investments		96,000
	Gain on Sale of Stock Investments		12,000
	Sold 1,000 shares of Packard for cash.		
May 30	Cash	3,100	
	Dividend Revenue.		3,100
	Received dividend from AT&T.		
June 15	Cash	1,600	
	Dividend Revenue.		1,600
	Received dividend from Apple.		
Aug. 17	Cash	52,000	
	Loss on Sale of Stock Investments	8,000	
	Stock Investments		60,000
	Sold 2,000 shares of AT&T for cash.		
Aug. 19	Stock Investments	50,000	
	Cash.		50,000
	Acquired 2,000 shares of Coca-Cola.		
Dec. 15	Cash	1,800	
	Dividend Revenue.		1,800
	Received dividend from Apple.		
Dec. 31	Fair Value Adjustment—Stock*	4,000	
	Unrealized Gain—Income.		4,000
	Record change in fair value of stock investments.		

Packard cost at Jan. 1 is $80,000 − $5,000 + $21,000 = $96,000.

Stock Investments

12/31/2019	100,000	8/17/2020	60,000
8/19/2020	50,000		
12/31/2020	90,000		

Fair Value Adj.–Stock

		12/31/2019	7,000
Adj.	**4,000**		
		12/31/2020	3,000

*Fair value adjustment computations.

	Cost	Fair Value	Unrealized Gain (Loss)
Apple	$40,000	$39,000	$(1,000)
Coca-Cola	50,000	48,000	(2,000)
Total	$90,000	$87,000	$(3,000)

Required balance of the Fair Value Adjustment—Stock account (credit)	$(3,000)
Existing balance (credit)	(7,000)
Necessary adjustment (debit).	$ 4,000

2. The December 31, 2020, balance sheet items follow.

Assets—Long-term investments	
Stock investments (at fair value; cost is $90,000)	$87,000

The relevant income statement items for the year ended December 31, 2020, follow.

Dividend revenue	$ 6,500
Unrealized gain—Income	4,000
Gain on sale of stock investments	12,000
Loss on sale of stock investments	(8,000)

Summary: Cheat Sheet

BASICS OF INVESTMENTS

Short-term investments: Investments that (1) management intends to convert to cash within one year and (2) are readily convertible to cash. Short-term investments are current assets.

Long-term investments: Investments that are not going to be converted into cash in the short term. Long-term investments are noncurrent assets.

Debt securities: Reflect a creditor relation and include notes and bonds.

Equity securities: Reflect an owner relation and include stock.

DEBT INVESTMENTS

Acquiring debt investments:

Debt Investments	30,000	
Cash		30,000

Interest earned and received:

Cash	1,050	
Interest revenue		1,050

Unrealized gain (or loss): A gain (or loss) not yet confirmed by actual sales of securities.

TRADING SECURITIES:

Debt investments that are actively bought and sold for profit. Trading securities are *always* current assets.

Fair value adjustment—Trading securities: Reflects gain (shown here) or loss.

Fair Value Adjustment—Trading	1,500	
Unrealized Gain—Income		1,500

Reporting fair value—Trading securities: An unrealized gain (or loss) from a change in the fair value of the portfolio of trading securities is reported on the income statement under Other Revenues and Gains (or Expenses and Losses). Fair Value Adjustment—Trading is an asset account that adjusts the trading securities portfolio to fair value.

Current Assets		
Debt investments—Trading (at cost)	$11,500	
Fair value adjustment—Trading	1,500	
Debt investments—Trading (at fair value)		$13,000

Selling trading securities: When sale price > cost, record a gain (shown here). When sale price < cost, record a loss. A gain (or loss) is reported in Other Revenues and Gains (or Expenses and Losses) section on the income statement.

Cash	120	
Debt Investments—Trading		100
Gain on Sale of Debt Investments		20

HELD-TO-MATURITY (HTM) SECURITIES:

Debt investments that are held until maturity. They are current assets if their maturity is *within* one year and are long-term investments if their maturity is *over* one year. They are *not* reported at fair value.

Receipt of principal and interest—HTM:

Cash	102	
Debt Investments—HTM		100
Interest Revenue		2

AVAILABLE-FOR-SALE (AFS) SECURITIES:

Debt investments not classified as trading or held-to-maturity. They are current assets if they are to be sold *within* one year and long-term investments if they are to be sold *beyond* one year.

Fair value adjustment—AFS securities: Reflects gain (shown here) or loss.

Fair Value Adjustment—Available-for-Sale	1,550	
Unrealized Gain—Equity		1,550

Reporting fair value—AFS securities: An unrealized gain (or loss) from a change in the fair value of the portfolio of AFS securities is reported in the equity section of the balance sheet (as part of comprehensive income). Fair Value Adjustment—AFS is an asset account that adjusts the AFS securities portfolio to fair value.

Assets		
Debt investments—Available-for-sale (at cost)	$73,000	
Fair value adjustment—Available-for-sale	1,550	
Debt investments—Available-for-sale (at fair value)		$74,550

Selling AFS securities: Identical to selling trading securities.

EQUITY INVESTMENTS

Stock investments (insignificant influence): When a company owns less than 20% of voting stock of another company, it has insignificant influence. Can be classified as short or long term.

Acquiring stock investments (insignificant influence):

Stock Investments	7,000	
Cash		7,000

Dividends received from stock investment (insignificant influence):

Cash	10	
Dividend Revenue		10

Fair value adjustment—Stock (insignificant influence): Reflects gain (shown here) or loss.

Fair Value Adjustment—Stock	2,000	
Unrealized Gain—Income		2,000

Reporting fair value adjustment from stock (insignificant influence): An unrealized gain (or loss) from a change in the fair value of the portfolio of stock investments is reported on the income statement under Other Revenues and Gains (or Expenses and Losses). Fair Value Adjustment—Stock is an asset account that adjusts the stock investments portfolio to fair value.

Assets		
Stock investments (at cost)	$7,000	
Fair value adjustment—Stock	2,000	
Stock investments (at fair value)		$9,000

Selling stock investments: When sale price > cost, record a gain (shown here). When sale price < cost, record a loss. A gain (or loss) is reported in Other Revenues and Gains (or Expenses and Losses) section on the income statement.

Cash	800	
Stock Investments		500
Gain on Sale of Stock Investments		300

Equity method investments: When a company owns between 20% and 50% of voting stock of another company, it has significant influence. Classified as long term.

Acquiring equity method investments:

Equity Method Investments	70,000	
Cash		70,000

Recording share of earnings (equity method): Calculated as percentage of ownership times net income of investee.

Equity Method Investments	6,000	
Earnings from Equity Method Investments		6,000

Recording share of dividends (equity method): Calculated as percentage of ownership times total dividends paid by investee.

Cash	3,000	
Equity Method Investments		3,000

Reporting equity method investments: Equity method investments are not adjusted to fair value. Instead, the account is increased by investee net income and decreased by investee dividends.

Equity Method Investments			
1/1/2019 Investment acquisition	70,000		
12/31/2019 Share of earnings	6,000		
12/31/2019 Balance	76,000		
		1/9/2020 Share of dividend	3,000
1/9/2020 Balance	73,000		

Selling equity method investments: When sale price > book value, record a gain (shown here). When sale price < book value, record a loss.

Cash	80,000	
Equity Method Investments		73,000
Gain on Sale of Stock Investments		7,000

Equity securities with controlling influence: When an investor owns more than 50% of a company's voting stock, it has control over the investee and the *consolidation method* is used. The controlling investor is called the **parent,** and the investee is called the **subsidiary.**

REPORTING AND ANALYSIS

Classification	Investments Account Reported at
Short-Term Investment in Securities	
Debt Investments—Held-to-Maturity	**Cost** (without any discount or premium amortization)
Debt Investments—Trading	**Fair value** (with fair value adjustment to income)
Debt Investments—Available-for-Sale	**Fair value** (with fair value adjustment to equity)
Stock Investments—insignificant influence	**Fair value** (with fair value adjustment to income)
Long-Term Investment in Securities	
Debt Investments—Held-to-Maturity	**Cost** (with any discount or premium amortized)
Debt Investments—Available-for-Sale	**Fair value** (with fair value adjustment to equity)
Stock Investments—insignificant influence	**Fair value** (with fair value adjustment to income)
Equity Method Investments—significant influence	Equity method (no fair value adjustment)
Consolidated Investments—controlling influence	Consolidation method (no fair value adjustment)

Key Terms

Available-for-sale (AFS) securities (541)
Comprehensive income (548)
Consolidated financial statements (548)
Equity method (545)
Equity securities with controlling influence (547)
Equity securities with significant influence (545)
Fair Value Adjustment (539)
Held-to-maturity (HTM) securities (540)
Long-term investments (537)
Other comprehensive income (548)
Parent (548)
Profit margin (549)
Return on total assets (549)
Short-term investments (537)
Subsidiary (548)
Total asset turnover (549)
Trading securities (539)
Unrealized gain (loss) (539, 544)

Multiple Choice Quiz

1. A company purchased $30,000 of 5% bonds for investment purposes on May 1. The bonds pay interest on February 1 and August 1. The amount of interest revenue accrued at December 31 (the company's year-end) is

- **a.** $1,500.
- **b.** $1,375.
- **c.** $1,000.
- **d.** $625.
- **e.** $300.

2. This period, Amadeus Co. purchased its only available-for-sale investment in the notes of Bach Co. for $83,000. The period-end fair value of these notes is $84,500. Amadeus records a

- **a.** Credit to Unrealized Gain—Equity for $1,500.
- **b.** Debit to Unrealized Loss—Equity for $1,500.
- **c.** Debit to Investment Revenue for $1,500.
- **d.** Credit to Fair Value Adjustment—Available-for-Sale for $3,500.
- **e.** Credit to Cash for $1,500.

3. Mozart Co. owns 35% of Melody Inc. Melody pays $50,000 in cash dividends to its shareholders for the period. Mozart's entry to record the Melody dividend includes a

- **a.** Credit to Investment Revenue for $50,000.
- **b.** Credit to Equity Method Investments for $17,500.
- **c.** Credit to Cash for $17,500.
- **d.** Debit to Equity Method Investments for $17,500.
- **e.** Debit to Cash for $50,000.

4. A company has net income of $300,000, net sales of $2,500,000, and total assets of $2,000,000. Its return on total assets equals

a. 6.7%. **b.** 12.0%. **c.** 8.3%. **d.** 80.0%. **e.** 15.0%.

5. A company had net income of $80,000, net sales of $600,000, and total assets of $400,000. Its profit margin and total asset turnover are

	Profit Margin	Total Asset Turnover
a.	1.5%	13.3
b.	13.3%	1.5
c.	13.3%	0.7
d.	7.0%	13.3
e.	10.0%	26.7

ANSWERS TO MULTIPLE CHOICE QUIZ

1. d; $30,000 × 5% × 5/12 = $625
2. a; Unrealized gain = $84,500 − $83,000 = $1,500
3. b; $50,000 × 35% = $17,500
4. e; $300,000/$2,000,000 = 15%
5. b; Profit margin = $80,000/$600,000 = 13.3%
   Total asset turnover = $600,000/$400,000 = 1.5

Icon denotes assignments that involve decision making.

Discussion Questions

1. Under what two conditions should investments be classified as current assets?
2. On a balance sheet, what valuation must be reported for short-term debt investments in trading securities?
3. If a stock investment with insignificant influence costs $10,000 and is sold for $12,000, how should the difference between these two amounts be recorded?
4. Identify the three classes of debt investments and the three classes of equity investments.
5. Under what conditions should investments be classified as current assets? As long-term assets?
6. For investments in available-for-sale debt securities, how are unrealized (holding) gains and losses reported?
7. If a company purchases its only long-term investments in available-for-sale debt securities this period and their fair value is below cost at the balance sheet date, what entry is required to recognize this unrealized loss?
8. On a balance sheet, what valuation must be reported for debt securities classified as available-for-sale?
9. Under what circumstances are long-term investments in debt securities reported at cost and adjusted for amortization of any difference between cost and maturity value?
10. In accounting for investments in equity securities, when should the equity method be used?
11. Under what circumstances does a company prepare consolidated financial statements?
12. Refer to **Apple**'s statement of comprehensive income in Appendix A. What is the amount of *change in foreign currency translation, net of tax effects,* for the year ended September 30, 2017? Is this change an unrealized gain or an unrealized loss? **APPLE**
13. Refer to **Google**'s statement of comprehensive income in Appendix A. What was the amount of its 2017 *change in net unrealized gains (losses)* for its AFS investments? **GOOGLE**
14. Refer to the income statement of **Samsung** in Appendix A. How can you tell that it uses the consolidated method of accounting? **Samsung**

QUICK STUDY

QS 15-1
Distinguishing between short- and long-term investments
C1

Which of the following statements are true of long-term investments?

____ **a.** They can be considered cash equivalents.
____ **b.** They can include assets not used in operations, such as investments in land.
____ **c.** They generally include investments that will mature in 3 to 12 months.
____ **d.** They are reported with noncurrent assets on the balance sheet.
____ **e.** They are always easily sold and therefore qualify as being marketable.
____ **f.** They can include bonds and stocks not intended to be sold in the near future.

QS 15-2
Distinguishing between debt and equity securities
C1

Identify investments as an investment in either debt (D) securities or equity (E) securities.

____ **a.** U.S. Treasury bonds	____ **e.** IBM corporate notes	____ **i.** Chicago municipal bonds
____ **b.** Google stock	____ **f.** German government bonds	____ **j.** Apple stock
____ **c.** Certificate of deposit	____ **g.** Amazon stock	____ **k.** David Bowie bonds
____ **d.** Apple bonds	____ **h.** Costco corporate notes	____ **l.** Facebook stock

Prepare Hertog Company's journal entries to record the following transactions for the current year.

May 7	Purchases Kraft bonds as a short-term investment in trading securities at a cost of $10,300.
June 6	Sells its entire investment in Kraft bonds for $11,050 cash.

QS 15-3
Accounting for debt investments classified as trading P1

Kitty Company began operations in the current year and acquired short-term debt investments in trading securities. The year-end cost and fair values for its portfolio of these debt investments follow. Prepare the journal entry to record the December 31 year-end fair value adjustment for these debt securities.

Trading Securities	Cost	Fair Value
Tesla Bonds	$12,000	$ 9,000
Nike Bonds	20,000	21,000
Ford Bonds	5,000	4,000

QS 15-4
Fair value adjustment to a portfolio of trading securities
P1

Refer to the information in QS 15-4. (1) After the fair value adjustment is made, prepare the assets section of Kitty Company's December 31 classified balance sheet. (2) In which income statement section is the unrealized gain (or loss) on the portfolio of trading securities reported?

QS 15-5
Reporting trading securities on financial statements P1

Prepare Garzon Company's journal entries to record the following transactions for the current year.

Jan. 1	Purchases 6% bonds (as a held-to-maturity investment) issued by PBS at a cost of $40,000, which is the par value.
July 1	Receives first semiannual payment of interest from PBS bonds.
Dec. 31	Receives a check from PBS in payment of principal ($40,000) and the second semiannual payment of interest.

QS 15-6
Accounting for debt investments classified as held-to-maturity
P2

Journ Co. purchased short-term investments in available-for-sale debt securities at a cost of $50,000 cash on November 25. At December 31, these securities had a fair value of $47,000. This is the first and only time the company has purchased such securities.

1. Prepare the November 25 entry to record the purchase of debt securities.
2. Prepare the December 31 year-end adjusting entry for the securities' portfolio.
3. Prepare the April 6 entry when Journ sells 10% of these securities ($5,000 cost) for $6,000 cash.

QS 15-7
Accounting for available-for-sale debt securities
P3

During the current year, Reed Consulting acquired long-term available-for-sale debt securities on July 1 at a $70,000 cost. At its December 31 year-end, these securities had a fair value of $58,000. This is the first and only time the company purchased such securities.

1. Prepare the July 1 entry to record the purchase of these debt securities.
2. Prepare the year-end adjusting entry related to these securities.

QS 15-8
Recording fair value adjustment for available-for-sale debt securities
P3

On December 31, Reggit Company held the following short-term investments in its portfolio of available-for-sale debt securities. Reggit had no short-term investments in its prior accounting periods. Prepare the December 31 adjusting entry to report these investments at fair value.

Available-for-Sale Securities	Cost	Fair Value
Verrizano Corporation bonds	$89,600	$91,600
Preble Corporation notes	70,600	62,900
Lucerne Company bonds	86,500	83,100

QS 15-9
Adjusting available-for-sale debt securities to fair value
P3

Check Unrealized loss, $9,100

Refer to the information in QS 15-9. (1) After the fair value adjustment is made, prepare the assets section of Reggit Company's December 31 classified balance sheet. (2) Is the unrealized gain (or loss) on the portfolio of available-for-sale securities reported on the income statement?

QS 15-10
Reporting available-for-sale securities on financial statements P3

Prepare Riley Company's journal entries to record the following transactions for the current year.

Apr. 18	Purchases 300 common shares of XLT Co. as a short-term investment at a cost of $42 per share. With this stock investment, Riley has an insignificant influence over XLT.
May 30	Receives $1 per share from XLT in dividends.

QS 15-11
Accounting for stock investments P4

QS 15-12
Adjusting stock investments to fair value
P4

Prepare Tiker Company's journal entries to record the following transactions and the adjusting entry to record the fair value of the stock investments portfolio. This is the first and only time the company purchased such securities.

May 9	Purchases 200 shares of Higo stock as a short-term investment at a cost of $30 per share. Tiker has insignificant influence over Higo.
June 2	Sells 20 shares of its investment in Higo stock ($600 cost) at $33 per share.
Dec. 31	The closing market price (fair value) of the Higo stock is $23 per share.

QS 15-13
Reporting stock investments with insignificant influence P4

On May 20, Montero Co. paid $150,000 to acquire 30 shares (4%) of ORD Corp. as a long-term investment. On August 5, Montero sold one-tenth of the ORD shares for $18,000.

1. Prepare entries to record both (*a*) the acquisition and (*b*) the sale of these shares.
2. Should this stock investment be reported at fair value or at cost on the balance sheet?

QS 15-14
Financial statement presentation of investments
C1 P1 P2 P3 P4

Indicate where each of the following items is reported on financial statements. Choose from the following categories: (*a*) current assets, (*b*) long-term investments, (*c*) current liabilities, (*d*) long-term liabilities, (*e*) other revenues and gains, (*f*) other expenses and losses, and (*g*) equity.

____ **1.** Trading securities
____ **2.** Unrealized gain on available-for-sale securities
____ **3.** Held-to-maturity securities (due in 15 years)
____ **4.** Unrealized gain on trading securities
____ **5.** Fair value adjustment—Trading

QS 15-15
Equity method transactions
P5

Rowan Co. purchases 100 common shares (40%) of JBI Corp. as a long-term investment for $500,000 cash on July 1. JBI paid $5,000 in total cash dividends on November 1 and reported net income of $100,000 for the year. Prepare Rowan's entries to record (1) the purchase of JBI shares, (2) the receipt of its share of JBI dividends, and (3) the December 31 year-end adjustment for its share of JBI net income.

QS 15-16
Equity securities with controlling influence C2

Accenture purchases 55% of the voting common stock of JBL. After the purchase, Accenture has a controlling influence over JBL. (1) Which method does Accenture use to account for its investment in JBL? (2) What type of financial statements does Accenture prepare after the acquisition?

QS 15-17
Return on total assets
A1

Fivio Co. reports the following information. (1) Compute return on total assets for the current year and for 1 year ago. (2) Is Fivio more efficient or less efficient in using total assets to produce income in the current year versus 1 year ago?

	A	B	C	D
1		Current Year	1 Year Ago	2 Years Ago
2	Total assets, December 31	$770,000	$340,000	$210,000
3	Net income	55,500	38,400	30,200

QS 15-18
Component return on total assets A1

The return on total assets is the focus of analysts, creditors, and other users of financial statements.

1. How is the return on total assets computed?
2. What does this important ratio reflect?
3. Return on total assets can be separated into two important components. Write the formula to separate the return on total assets into its two basic components.
4. Explain how these components of the return on total assets are helpful to financial statement users for business decisions.

EXERCISES

Exercise 15-1
Debt and equity securities and short- and long-term investments
C1

Complete the following descriptions by filling in the blanks using the terms or phrases *a* through *g*.

a. not intended **b.** not readily **c.** cash **d.** operating cycle **e.** one year **f.** owner **g.** creditor

1. Debt securities reflect a(n) _______ relation such as with investments in notes and bonds.
2. Equity securities reflect a(n) _______ relation such as with investments in shares of stock.
3. Short-term investments are securities that (1) management intends to convert to cash within _______ _______ or the _______ _______, whichever is longer, and (2) are readily convertible to _______.
4. Long-term investments in securities are defined as those securities that are _______ _______ convertible to cash or are _______ _______ to be converted into cash in the short term.

Brooks Co. purchases debt investments as trading securities at a cost of $66,000 on December 27. This is its first and only purchase of such securities. At December 31, these securities had a fair value of $72,000.

1. Prepare the December 27 entry for the purchase of debt investments.
2. Prepare the December 31 year-end fair value adjusting entry for the trading securities' portfolio.
3. Prepare the January 3 entry when Brooks sells a portion of its trading securities (costing $3,000) for $4,000 cash.

Exercise 15-2
Accounting for debt investments classified as trading **P1**

Check (3) Gain, $1,000

Prepare Natura Co.'s journal entries to record the following transactions involving its short-term investments in held-to-maturity debt securities, all of which occurred during the current year.

a. On June 15, paid $1,000 cash to purchase Remed's 90-day short-term debt securities ($1,000 principal), dated June 15, that pay 10% interest.

b. On September 16, received a check from Remed in payment of the principal and 90 days' interest on the debt securities purchased in part *a*.

Exercise 15-3
Accounting for held-to-maturity debt securities
P2

Prepare Krum Co.'s journal entries to record the following transactions involving its short-term investments in available-for-sale debt securities, all of which occurred during the current year.

a. On August 1, paid $50,000 cash to purchase Houtte's 9%, six-month debt securities ($50,000 principal), dated August 1.

b. On October 30, received a check from Houtte for 90 days' interest on the debt securities in part *a*.

Exercise 15-4
Accounting for available-for-sale debt securities
P3

On December 31, Lujack Co. held the following short-term available-for-sale securities. Lujack had no short-term investments prior to the current period. Prepare the December 31 year-end adjusting entry to record the fair value adjustment for these debt securities.

Available-for-Sale Securities	Cost	Fair Value
Nintendo Co. notes	$44,450	$48,900
Atlantic bonds	49,000	47,000
Kellogg Co. notes	25,000	23,200
McDonald's Corp. bonds	46,300	44,800

Exercise 15-5
Fair value adjustment to available-for-sale debt securities
P3

Ticker Services began operations in Year 1 and holds long-term investments in available-for-sale debt securities. The year-end cost and fair values for its portfolio of these investments follow. Prepare journal entries to record each year-end fair value adjustment for these securities.

Portfolio of Available-for-Sale Securities	Cost	Fair Value
December 31, Year 1	$13,000	$15,000
December 31, Year 2	20,000	25,000
December 31, Year 3	23,000	29,000
December 31, Year 4	16,500	19,000

Exercise 15-6
Multiyear fair value adjustments to available-for-sale debt securities
P3

Prepare journal entries to record the following transactions involving the short-term stock investments of Duke Co., all of which occurred during the current year.

a. On March 22, purchased 1,000 shares of RPI Company stock at $10 per share. Duke's stock investment results in it having an insignificant influence over RPI.

b. On July 1, received a $1 per share cash dividend on the RPI stock purchased in part *a*.

c. On October 8, sold 50 shares of RPI stock for $15 per share.

Exercise 15-7
Accounting for stock investments with insignificant influence
P4

Check (*c*) Dr. Cash $750

On December 31, Mars Co. had the following portfolio of stock investments with insignificant influence. Mars had no stock investments in prior periods. Prepare the December 31 adjusting entry to report these investments at fair value.

Stock Investments	Cost	Fair Value
Apple stock	$ 6,000	$ 8,000
Chipotle stock	4,000	1,500
Under Armour stock	12,000	14,000

Exercise 15-8
Fair value adjustment to stock investments with insignificant influence **P4**

Exercise 15-9
Reporting stock investments on financial statements **P4**

Refer to the information in Exercise 15-8. (1) After the fair value adjustment is made, prepare the assets section of Mars Co.'s December 31 classified balance sheet. Assume Mars plans to sell its trading securities within the next six months. (2) In which income statement section is the unrealized gain (or loss) on the portfolio of stock investments reported?

Exercise 15-10
Transactions and fair value adjustments for stock investments with insignificant influence
P4

Carlsville Company began operations in the current year and had no prior stock investments. The following transactions are from its short-term stock investments with insignificant influence. Prepare journal entries to record these transactions. On December 31, prepare the adjusting entry to record the fair value adjustment for the portfolio of stock investments.

July 22	Purchased 1,600 shares of Hunt Corp. at $30 per share.
Sep. 5	Received a $2 cash dividend for each share of Hunt Corp.
Sep. 27	Purchased 3,400 shares of HCA at $34 per share.
Oct. 3	Sold 1,600 shares of Hunt at $25 per share.
Oct. 30	Purchased 1,200 shares of Black & Decker at $50 per share.
Dec. 17	Received a $3 cash dividend for each share of Black & Decker.
Dec. 31	Fair value of the short-term stock investments is $180,000.

Check Dec. 31: Dr. Fair Value Adjustment—Stock, $4,400

Exercise 15-11
Transactions in held-to-maturity, trading, and stock investments
P1 P2 P4

Prepare journal entries to record the following transactions involving both the short-term and long-term investments of Cancun Corp., all of which occurred during the current year.

a. On February 15, paid $160,000 cash to purchase GMI's 90-day short-term notes at par, which are dated February 15 and pay 10% interest (classified as held-to-maturity).

b. On March 22, bought 700 shares of Fran Inc. common stock at $51 cash per share. Cancun's stock investment results in it having an insignificant influence over Fran.

c. On May 15, received a check from GMI in payment of the principal *and* 90 days' interest on the notes purchased in part *a*.

d. On July 30, paid $100,000 cash to purchase MP Inc.'s 8%, six-month notes at par, dated July 30 (classified as trading securities).

e. On September 1, received a $1 per share cash dividend on the Fran Inc. common stock purchased in part *b*.

f. On October 8, sold 30 shares of Fran Inc. common stock for $54 cash per share.

g. On October 30, received a check from MP Inc. for three months' interest on the notes purchased in part *d*.

Exercise 15-12
Accounting for equity method investments
P5

Prepare journal entries to record the following transactions and events of Kodax Company.

Year 1

Jan. 2	Purchased 30,000 shares of Grecco Co. common stock for $411,000 cash. Grecco has 90,000 shares of common stock outstanding, and its activities will be significantly influenced by Kodax.
Sep. 1	Grecco declared and paid a cash dividend of $1.50 per share.
Dec. 31	Grecco announced that net income for the year is $486,900.

Year 2

June 1	Grecco declared and paid a cash dividend of $2.10 per share.
Dec. 31	Grecco announced that net income for the year is $702,750.
Dec. 31	Kodax sold 3,000 shares of Grecco for $71,000 cash.

Exercise 15-13
Classifying investments in securities; recording fair values
C1 P2 P3 P4 P5

The following information shows Carperk Company's individual investments in securities during its current year, along with the December 31 fair values.

a. Investment in Brava Company bonds: $420,500 cost; $457,000 fair value. Carperk intends to hold these bonds until they mature in 5 years.

b. Investment in Baybridge common stock: 29,500 shares; $362,450 cost; $391,375 fair value. Carperk owns 32% of Baybridge's voting stock and has a significant influence over Baybridge.

c. Investment in Duffa bonds: $165,500 cost; $178,000 fair value. This investment is not readily marketable and is not classified as held-to-maturity or trading.

d. Investment in Newton notes: $90,300 cost; $88,625 fair value. Newton notes are not readily marketable and are not classified as held-to-maturity or trading.

e. Investment in Farmers common stock: 16,300 shares; $100,860 cost; $111,210 fair value. This stock is marketable, and Carperk intends to sell it within the year. This stock investment results in Carperk having an insignificant influence over Farmers.

Required

1. Identify whether each investment *a* through *e* should be classified as a short-term or long-term investment. For each investment, indicate in which of the six investment classifications listed in Exhibit 15.2 it should be placed.
2. Prepare a journal entry dated December 31 to record the fair value adjustment for the portfolio of available-for-sale debt securities. Carperk had no available-for-sale debt securities prior to this year.

Check (2) Unrealized gain, $10,825

Exercise 15-14
Prepare assets section of balance sheet
C1 P1 P2 P3 P4 P5

Selected accounts from GermX Co.'s adjusted trial balance for the year ended December 31 follow. Prepare the assets section of a classified balance sheet. *Hint:* Fair Value Adjustment—Trading *increases* trading securities; Fair Value Adjustment—Stock *decreases* stock investments.

Trading securities (at cost)	$ 5,000	Cash	$10,000
Short-term stock investments (at cost)	23,000	Fair value adjustment—Stock	(1,000)
Equity method investments	70,000	Accounts receivable	2,000
Held-to-maturity securities (long-term)	13,000	Fair value adjustment—Trading	500

Exercise 15-15
Equity securities with controlling influence
C2

Wixi Co. has the following equity investments in FSN, DELL, and ATI. (1) Which of these companies are subsidiaries of Wixi? (2) How are individual assets and liabilities of a parent and its subsidiary(ies) reported on a balance sheet?

FSN stock: Wixi owns 70% of the voting common stock and has controlling influence.
DELL stock: Wixi owns 5% of the voting common stock and has insignificant influence.
ATI stock: Wixi owns 30% of the voting common stock and has significant influence.

Exercise 15-16
Preparing a statement of comprehensive income
C2

Use the following information of Prescrip Co. to prepare a calendar year-end statement of comprehensive income.

Total comprehensive income (final total)	$ 9,400	Other comprehensive income (subtotal)	$ (600)
Net income	10,000	Change in foreign currency translation	1,400
Change in value of available-for-sale securities	(2,000)		

Exercise 15-17
Return on total assets
A1

Following are financial data for **Nike** and **Under Armour**. (1) Compute return on total assets for the current year for (*a*) Nike and (*b*) Under Armour. (2) Compute both profit margin and total asset turnover for the current year for (*a*) Nike and (*b*) Under Armour. (3) Which company more efficiently used its assets in the current year?

	Nike		Under Armour	
$ millions	Current Year	1 Year Prior	Current Year	1 Year Prior
Net income	$ 3,760	$ 3,273	$ 257	$ 233
Net sales	32,376	30,601	4,825	3,963
Total assets	21,396	21,597	3,644	2,866

connect

PROBLEM SET A

Problem 15-1A
Recording and adjusting trading debt securities
P1

Kirkland Company had no trading debt securities prior to this year. It had the following transactions this year involving trading debt securities.

Aug.	2	Purchased Verizon bonds for $10,000.
Sep.	7	Purchased Apple bonds for $35,000.
	12	Purchased Mastercard bonds for $20,000.
Oct.	21	Sold some of its Verizon bonds that had cost $2,000 for $2,100 cash.
	23	Sold some of its Apple bonds that had cost $15,000 for $15,400 cash.
Nov.	1	Purchased Walmart bonds for $40,000.
Dec.	10	Sold all of its Mastercard bonds for $18,000 cash.

Required

1. Prepare journal entries to record these transactions.
2. Prepare a table to compare the year-end cost and fair values of its trading debt securities. Year-end fair values: Verizon, $8,500; Apple, $22,000; and Walmart, $39,000.
3. Prepare the adjusting entry to record the year-end fair value adjustment for the portfolio of trading debt securities.

Problem 15-2A
Recording, adjusting, and reporting available-for-sale debt securities

P3

Mead Inc. began operations in Year 1. Following is a series of transactions and events involving its long-term debt investments in available-for-sale securities.

Year 1

Jan. 20	Purchased Johnson & Johnson bonds for $20,500.
Feb. 9	Purchased Sony notes for $55,440.
June 12	Purchased Mattel bonds for $40,500.
Dec. 31	Fair values for debt in the portfolio are Johnson & Johnson, $21,500; Sony, $52,500; and Mattel, $46,350.

Year 2

Apr. 15	Sold all of the Johnson & Johnson bonds for $23,500.
July 5	Sold all of the Mattel bonds for $35,850.
July 22	Purchased Sara Lee notes for $13,500.
Aug. 19	Purchased Kodak bonds for $15,300.
Dec. 31	Fair values for debt in the portfolio are Kodak, $17,325; Sara Lee, $12,000; and Sony, $60,000.

Year 3

Feb. 27	Purchased Microsoft bonds for $160,800.
June 21	Sold all of the Sony notes for $57,600.
June 30	Purchased Black & Decker bonds for $50,400.
Aug. 3	Sold all of the Sara Lee notes for $9,750.
Nov. 1	Sold all of the Kodak bonds for $20,475.
Dec. 31	Fair values for debt in the portfolio are Black & Decker, $54,600, and Microsoft, $158,600.

Required

1. Prepare journal entries to record these transactions and the year-end fair value adjustments to the portfolio of long-term available-for-sale debt securities.
2. Prepare a table that summarizes the (*a*) total cost, (*b*) total fair value adjustment, and (*c*) total fair value of the portfolio of long-term available-for-sale debt securities at each year-end.
3. Prepare a table that summarizes (*a*) the realized gains and losses and (*b*) the unrealized gains or losses for the portfolio of long-term available-for-sale debt securities at each year-end.

Check (2*b*) Fair Value Adj. bal.: 12/31/Year 1, $3,910 Dr.; 12/31/Year 2, $5,085 Dr.
(3*b*) Unrealized Gain at 12/31/Year 3, $2,000

Problem 15-3A
Debt investments in available-for-sale securities; unrealized and realized gains and losses

P3

Stoll Co.'s long-term available-for-sale portfolio at the *start* of this year consists of the following.

Available-for-Sale Securities	Cost	Fair Value
Company A bonds	$535,300	$490,000
Company B notes	159,380	154,000
Company C bonds	662,750	640,940

Stoll enters into the following transactions involving its available-for-sale debt securities this year.

Jan. 29	Sold one-half of the Company B notes for $79,200.
July 6	Purchased Company X bonds for $126,600.
Nov. 13	Purchased Company Z notes for $267,900.
Dec. 9	Sold all of the Company A bonds for $515,000.

The fair values at December 31 are B, $81,000; C, $610,000; X, $118,000; and Z, $278,000.

Required

1. Prepare journal entries to record these transactions, including the December 31 adjusting entry to record the fair value adjustment for the long-term investments in available-for-sale securities.
2. Determine the amount Stoll reports on its December 31 balance sheet for its long-term investments in available-for-sale securities.
3. What amount of gains or losses on transactions relating to long-term investments in available-for-sale debt securities does Stoll report on its income statement for this year?

Check (1) Dec 31: Cr. Unrealized Loss—Equity, $22,550

Problem 15-4A
Recording, adjusting, and reporting stock investments with insignificant influence
P4

Rose Company had no short-term investments prior to this year. It had the following transactions this year involving short-term stock investments with insignificant influence.

Apr.	16	Purchased 3,500 shares of Gem Co. stock at $24 per share.
July	7	Purchased 2,000 shares of PepsiCo stock at $49 per share.
	20	Purchased 1,000 shares of Xerox stock at $16 per share.
Aug.	15	Received a $1.00 per share cash dividend on the Gem Co. stock.
	28	Sold 2,000 shares of Gem Co. stock at $30 per share.
Oct.	1	Received a $2.50 per share cash dividend on the PepsiCo shares.
Dec.	15	Received a $1.00 per share cash dividend on the remaining Gem Co. shares.
	31	Received a $1.50 per share cash dividend on the PepsiCo shares.

Required

1. Prepare journal entries to record the preceding transactions and events.
2. Prepare a table to compare the year-end cost and fair values of Rose's short-term stock investments. The year-end fair values per share are Gem Co., $26; PepsiCo, $46; and Xerox, $13.
3. Prepare an adjusting entry to record the year-end fair value adjustment for the portfolio of short-term stock investments.

Check (2) Cost = $150,000

(3) Dr. Unrealized Loss—Income, $6,000

Analysis Component

4. Explain the balance sheet presentation of the fair value adjustment for Rose's short-term investments.
5. How do these short-term stock investments affect Rose's (*a*) income statement for this year and (*b*) the equity section of its balance sheet at this year-end?

Problem 15-5A
Accounting for long-term investments in stock with significant influence
P5

Selk Steel Co., which began operations in Year 1, had the following transactions and events in its long-term investments.

Year 1

Jan.	5	Selk purchased 60,000 shares (20% of total) of Kildaire's common stock for $1,560,000.
Oct.	23	Kildaire declared and paid a cash dividend of $3.20 per share.
Dec.	31	Kildaire's net income for the year is $1,164,000, and the fair value of its stock at December 31 is $30.00 per share.

Year 2

Oct.	15	Kildaire declared and paid a cash dividend of $2.60 per share.
Dec.	31	Kildaire's net income for the year is $1,476,000, and the fair value of its stock at December 31 is $32.00 per share.

Year 3

Jan.	2	Selk sold 3% (equal to 1,800 shares) of its investment in Kildaire for $54,200 cash.

Required

Prepare journal entries to record these transactions and events for Selk. Assume that Selk has a significant influence over Kildaire with its 20% share of stock.

Problem 15-6A
Accounting for long-term investments in stock without significant influence
P4

Refer to the transactions in Problem 15-5A. Assume that although Selk owns 20% of Kildaire's outstanding stock, circumstances indicate that it does *not* have a significant influence over the investee.

Required

Prepare journal entries to record the preceding transactions and events for Selk.

PROBLEM SET B

Problem 15-1B

Recording and adjusting trading debt securities

P1

Ancore Company had no trading debt securities prior to this year. It had the following transactions this year involving trading debt securities.

July	28	Purchased Target bonds for $30,000.
Aug.	17	Purchased Kroger bonds for $105,000.
	26	Purchased Ford bonds for $60,000.
Sep.	5	Sold some of its Target bonds that had cost $6,000 for $6,300 cash.
	8	Sold some of its Kroger bonds that had cost $45,000 for $46,200 cash.
Oct.	12	Purchased Marshall bonds for $120,000.
Nov.	28	Sold all of its Ford bonds for $54,000 cash.

Required

1. Prepare journal entries to record these transactions.
2. Prepare a table to compare the year-end cost and fair values of Ancore's trading debt securities. Year-end fair values: Target, $25,500; Kroger, $66,000; and Marshall, $117,000.
3. Prepare the adjusting entry to record the year-end fair value adjustment for the portfolio of trading debt securities.

Problem 15-2B

Recording, adjusting, and reporting available-for-sale debt securities

P3

Paris Inc. began operations in Year 1. Following is a series of transactions and events involving its long-term debt investments in available-for-sale securities.

Year 1

Mar.	10	Purchased Apple bonds for $30,600.
Apr.	7	Purchased Ford notes for $56,250.
Sep.	1	Purchased Polaroid bonds for $28,200.
Dec.	31	Fair values for debt in the portfolio are Apple, $33,000; Ford, $54,600; and Polaroid, $29,400.

Year 2

Apr.	26	Sold all of the Ford notes for $51,250.
June	2	Purchased Duracell bonds for $34,650.
June	14	Purchased Sears notes for $25,200.
Nov.	27	Sold all of the Polaroid bonds for $30,600.
Dec.	31	Fair values for debt in the portfolio are Apple, $31,000; Duracell, $32,400; and Sears, $27,600.

Year 3

Jan.	28	Purchased Coca-Cola bonds for $40,000.
Aug.	22	Sold all of the Apple bonds for $25,800.
Sep.	3	Purchased Motorola notes for $84,000.
Oct.	9	Sold all of the Sears notes for $28,800.
Oct.	31	Sold all of the Duracell bonds for $27,000.
Dec.	31	Fair values for debt in the portfolio are Coca-Cola, $48,000, and Motorola, $82,000.

Required

1. Prepare journal entries to record these transactions and events and any year-end fair value adjustments to the portfolio of long-term available-for-sale debt securities.
2. Prepare a table that summarizes the (*a*) total cost, (*b*) total fair value adjustment, and (*c*) total fair value for the portfolio of long-term available-for-sale debt securities at each year-end.
3. Prepare a table that summarizes (*a*) the realized gains and losses and (*b*) the unrealized gains or losses for the portfolio of long-term available-for-sale debt securities at each year-end.

Check (2*b*) Fair Value Adj. bal.: 12/31/Year 1, $1,950 Dr.; 12/31/Year 2, $550 Dr.
(3*b*) Unrealized Gain at 12/31/Year 3, $6,000

Problem 15-3B

Debt investments in available-for-sale securities; unrealized and realized gains and losses

P3

Troy's long-term available-for-sale portfolio at the *start* of this year consists of the following.

Available-for-Sale Securities	Cost	Fair Value
Company R bonds	$559,125	$580,440
Company S notes	308,380	293,250
Company T bonds	147,295	151,800

Troy enters into the following transactions involving its available-for-sale debt securities this year.

Jan.	13	Sold one-fourth of the Company S notes for $72,250.
Apr.	5	Purchased Company V bonds for $133,875.
Sep.	2	Sold all of the Company T bonds for $156,750.
Oct.	30	Purchased Company X notes for $48,750.

The fair values at December 31 are R, $568,125; S, $234,345; V, $134,940; and X, $45,625.

Required

1. Prepare journal entries to record these transactions, including any necessary December 31 adjusting entry to record the fair value adjustment of the long-term investments in available-for-sale securities.
2. Determine the amount Troy reports on its December 31 balance sheet for its long-term investments in available-for-sale securities.
3. What amount of gains or losses on transactions relating to long-term investments in available-for-sale securities does Troy report on its income statement for this year?

Check (1) Dec. 31: Cr. Fair Value Adj—AFS, $690

Problem 15-4B
Recording, adjusting, and reporting stock investments with insignificant influence
P4

Slip Systems had no short-term investments prior to this year. It had the following transactions this year involving short-term stock investments with insignificant influence.

Feb.	6	Purchased 3,400 shares of Nokia stock at $41 per share.
Apr.	7	Purchased 1,200 shares of Dell stock at $39 per share.
June	2	Purchased 2,500 shares of Merck stock at $72 per share.
	30	Received a $1.00 per share cash dividend on the Nokia shares.
Aug.	11	Sold 850 shares of Nokia stock at $46 per share.
	24	Received a $0.10 per share cash dividend on the Dell shares.
Nov.	9	Received a $1.50 per share cash dividend on the remaining Nokia shares.
Dec.	18	Received a $0.15 per share cash dividend on the Dell shares.

Required

1. Prepare journal entries to record the preceding transactions and events.
2. Prepare a table to compare the year-end cost and fair values of the short-term stock investments. The year-end fair values per share are Nokia, $40; Dell, $41; and Merck, $59.
3. Prepare an adjusting entry, if necessary, to record the year-end fair value adjustment for the portfolio of short-term stock investments.

Check (2) Cost = $331,350

(3) Dr. Unrealized Loss—Income, $32,650

Analysis Component

4. Explain the balance sheet presentation of the fair value adjustment to Slip's short-term investments.
5. How do these short-term stock investments affect (*a*) its income statement this year and (*b*) the equity section of its balance sheet at this year-end?

Problem 15-5B
Accounting for long-term investments in stock with significant influence
P5

Brinkley Company, which began operations in Year 1, had the following transactions and events in its long-term investments.

Year 1

Jan.	5	Brinkley purchased 20,000 shares (25% of total) of Bloch's common stock for $200,500.
Aug.	1	Bloch declared and paid a cash dividend of $1.05 per share.
Dec.	31	Bloch's net income for the year is $82,000, and the fair value of its stock is $11.90 per share.

Year 2

Aug.	1	Bloch declared and paid a cash dividend of $1.35 per share.
Dec.	31	Bloch's net income for the year is $78,000, and the fair value of its stock is $13.65 per share.

Year 3

Jan.	8	Brinkley sold 5% (equal to 1,000 shares) of its investment in Bloch for $12,025 cash.

Required

Prepare journal entries to record these transactions and events for Brinkley. Assume that Brinkley has a significant influence over Bloch with its 25% share.

Problem 15-6B
Accounting for long-term investments in stock without significant influence
P4

Refer to the transactions in Problem 15-5B. Assume that although Brinkley owns 25% of Bloch's outstanding stock, circumstances indicate that it does *not* have a significant influence over the investee.

Required

Prepare journal entries to record these transactions and events for Brinkley.

SERIAL PROBLEM

Business Solutions
P1

©Alexander Image/Shutterstock

This serial problem began in Chapter 1 and continues through most of the book. If previous chapter segments were not completed, the serial problem can begin at this point.

SP 15 While reviewing the March 31, 2020, balance sheet of **Business Solutions,** Santana Rey notes that the business has built a large cash balance of $68,057. Its most recent bank money market statement shows that the funds are earning an annualized return of 0.75%. S. Rey decides to make several investments with the desire to earn a higher return on the idle cash balance. Accordingly, in April 2020, Business Solutions makes the following investments in trading securities.

Apr. 16 Purchases Johnson & Johnson bonds for $10,000.
Apr. 30 Purchases Starbucks notes for $4,400.

On June 30, 2020, the fair value of the Johnson & Johnson bonds is $12,000 and the Starbucks notes is $3,800.

Required

1. Prepare journal entries to record the April purchases of trading securities by Business Solutions.
2. On June 30, 2020, prepare the adjusting entry to record any necessary fair value adjustment to its portfolio of trading securities.

GL GENERAL LEDGER PROBLEM

connect

The following **General Ledger** assignments focus on the account for investments in available-for-sale securities and equity method investments.

GL 15-1 General Ledger assignment 15-1 is adapted from Problem 15-4A. Prepare journal entries related to short-term investments in available-for-sale securities, including the adjustment to fair value, if necessary.

GL 15-2 General Ledger assignment 15-2 is adapted from Problem 15-3A. Prepare journal entries related to long-term investments transactions and the related realized and unrealized gains.

Accounting Analysis

COMPANY ANALYSIS

A1 APPLE

AA 15-1 Use **Apple**'s financial statements in Appendix A to answer the following.

1. Compute Apple's return on total assets for the years ended September 30, 2017, and September 24, 2016.
2. Is the change in Apple's return on total assets from part 1 favorable or unfavorable?
3. Recently, Apple acquired 100% of Beats Electronics (Beats by Dre) for $3 billion. Will Apple account for Beats using the equity method or consolidation?

AA 15-2 Key figures for **Apple** and **Google** follow.

COMPARATIVE ANALYSIS
A1

APPLE
GOOGLE

$ millions	Apple			Google		
	Current Year	1 Year Prior	2 Years Prior	Current Year	1 Year Prior	2 Years Prior
Net income	$ 48,351	$ 45,687	$ 53,394	$ 12,662	$ 19,478	$ 16,348
Net sales	229,234	215,639	233,715	110,855	90,272	74,989
Total assets	375,319	321,686	290,345	197,295	167,497	147,461

Required

1. Compute return on total assets for Apple and Google for the two most recent years.
2. Which of these two companies has the better return on total assets for the current year?
3. Compute both profit margin and total asset turnover for Apple and Google for the most recent year.

AA 15-3 Following are selected data from **Samsung**, **Apple**, and **Google**.

GLOBAL ANALYSIS
A1

Samsung
APPLE
GOOGLE

In millions	Samsung			Apple		Google	
	Current Year	One Year Prior	Two Years Prior	Current Year	Prior Year	Current Year	Prior Year
Net income	₩ 42,186,747	₩ 22,726,092	₩ 19,060,144	$ 48,351	$ 45,687	$ 12,662	$ 19,478
Net sales	239,575,376	201,866,745	200,653,482	229,234	215,639	110,855	90,272
Total assets	301,752,090	262,174,324	242,179,521	375,319	321,686	197,295	167,497

Required

1. Compute Samsung's return on total assets for the two most recent years.
2. For the current year, is Samsung's return on total assets better or worse than (*a*) Apple's and (*b*) Google's?
3. For the current year, compute Samsung's profit margin.
4. For the current year, compute Samsung's total asset turnover.

Beyond the Numbers

BTN 15-1 Kasey Hartman is the controller for Wholemart Company, which has numerous long-term investments in debt securities. Wholemart's investments are mainly in five-year bonds. Hartman is preparing its year-end financial statements. In accounting for long-term debt securities, she knows that each long-term investment must be designated as a held-to-maturity or an available-for-sale security. Interest rates rose sharply this past year, causing the portfolio's fair value to substantially decline. The company does not intend to hold the bonds for the entire five years. Hartman also earns a bonus each year, which is computed as a percent of net income.

ETHICS CHALLENGE
P2 P3

Required

1. Will Hartman's bonus depend in any way on the classification of the debt securities? Explain.
2. What criteria must Hartman use to classify the securities as held-to-maturity or available-for-sale?
3. Is there likely any company oversight of Hartman's classification of the securities? Explain.

BTN 15-2 Assume that you are Jolee Company's accountant. Company owner Mary Jolee has reviewed the 2019 financial statements you prepared and questions the $6,000 loss reported on the sale of its investment in Kemper Co. common stock. Jolee acquired 50,000 shares of Kemper's common stock on December 31, 2017, at a cost of $500,000. This stock purchase represented a 40% interest in Kemper. The 2018 income statement reported that earnings from all investments were $126,000. On January 3, 2019, Jolee Company

COMMUNICATING IN PRACTICE
P4

sold the Kemper stock for $575,000. Kemper did not pay any dividends during 2018 but reported a net income of $202,500 for that year. Mary Jolee believes that because the Kemper stock purchase price was $500,000 and was sold for $575,000, the 2019 income statement should report a $75,000 gain on the sale.

Required

Draft a half-page memorandum to Mary Jolee explaining why the $6,000 loss on sale of Kemper stock is correctly reported.

TAKING IT TO THE NET

P1 P2 P3 P4

BTN 15-3 Access the July 28, 2016, 10-K filing (for year-end June 30, 2016) of **Microsoft** (ticker: MSFT) at SEC.gov. Review its note 4, "Investments."

Required

1. How does the "cost-basis" total amount for its investments as of June 30, 2016, compare to the prior year-end amount?
2. Identify at least eight types of investments held by Microsoft as of June 30, 2016.
3. What were Microsoft's unrealized gains and its unrealized losses from its investments for 2016?
4. Was the cost or fair value ("recorded basis") of the investments higher as of June 30, 2016?

TEAMWORK IN ACTION

C2 P1 P2 P3 P4

BTN 15-4 Each team member is to become an expert on a specific classification of long-term investments. This expertise will be used to facilitate other teammates' understanding of the concepts and procedures relevant to the classification chosen.

1. Each team member must select an area for expertise by choosing one of the following classifications of long-term investments.
   - **a.** Held-to-maturity debt securities
   - **b.** Available-for-sale debt securities
   - **c.** Equity securities with significant influence
   - **d.** Equity securities with controlling influence
2. Learning teams are to disperse and expert teams are to be formed. Expert teams are made up of those who select the same area of expertise. The instructor will identify the location where each expert team will meet.
3. Expert teams will collaborate to develop a presentation based on the following requirements. Students must write the presentation in a format they can show to their learning teams in part 4.

   Requirements for Expert Presentation

   - **a.** Write a transaction for the acquisition of this type of investment security. The transaction description is to include all necessary data to reflect the chosen classification.
   - **b.** Prepare the journal entry to record the acquisition.
     [*Note:* The expert team on equity securities with controlling influence will substitute requirements (*d*) and (*e*) with a discussion of the reporting of these investments.]
   - **c.** Identify information necessary to complete the end-of-period adjustment for this investment.
   - **d.** Assuming that this is the only investment owned, prepare any necessary year-end entries.
   - **e.** Present the relevant balance sheet section(s).
4. Re-form learning teams. In rotation, experts are to present to their teams the presentations they developed in part 3. Experts are to encourage and respond to questions.

ENTREPRENEURIAL DECISION

P4

BTN 15-5 Assume that **Echoing Green**, featured in this chapter's opener, makes an investment in **Sustain Inc.,** a sustainability consulting firm. The company purchases 200 shares of Sustain stock for $15,000 cash plus a broker's fee of $500 cash. Sustain has 500 shares of common stock outstanding, and Echoing Green will be able to significantly influence its policies.

Required

1. Prepare the journal entry to record the investment in Sustain on January 1.
2. Sustain declares and pays a dividend of $1,000. Prepare the journal entry to record Echoing Green's receipt of its share of the dividend on July 1.
3. Sustain reports net income of $5,000. Prepare the journal entry to record Echoing Green's share of those earnings on December 31.

HITTING THE ROAD

C2

BTN 15-6 Review financial news sources such as **Yahoo! Finance** (finance.yahoo.com) and **Google Finance** (google.com/finance). Identify a company that has recently purchased 50% or more of another company's outstanding shares and will report consolidated financial statements.

Required

1. Identify whether the acquired company is a supplier, customer, competitor, or unrelated company relative to the purchasing company.
2. What does the purchasing company hope to accomplish with the investment? What is its strategy?