

THE MOVE TOWARD FAIR VALUE

[Supplement to Chapter 1]

In your study of accounting you've learned that the historical cost principle is the basis of measurement for most assets and liabilities. Often overlooked, though, is that there are over 40 instances in GAAP in which assets or liabilities are required or permitted to be measured at fair value. The FASB recently issued two Standards related to using fair value in financial statements. The first of these, *SFAS No. 157*, establishes a framework for measuring fair value whenever fair value is called for in applying generally accepted accounting principles.¹ The second, *SFAS No. 159*, gives a company the option to report some or all of its *financial* assets and liabilities at fair value.² Let's look closer at the content of these two important Standards.

Fair Value Defined. *SFAS No. 157* doesn't change the number of situations in which fair value is used, but defines fair value and provides improved guidance for how to measure it. Here's how *SFAS No. 157* defines fair value:

Fair value definition

The price that would be received to sell assets or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

SFAS No. 157 provides improved guidance to companies when measuring fair value.

A key aspect of this definition is its focus on the perspective of "market participants." For instance, if a company buys a competitor's patent, not intending to use it but merely to keep the competitor from using it, the company still will have to assign a value to the asset because a market participant would find value in using the patent.

Fair value can be measured using:
1. Market approaches
2. Income approaches
3. Cost approaches

SFAS No. 157 indicates three types of valuation techniques that can be used to measure fair value. "Market approaches" base valuation on market information. For example, the value of a share of a company's stock that's not traded actively could be estimated by multiplying the earnings of that company by the "P/E" ("price of shares / earnings") multiples of similar companies. "Income approaches" estimate value by first estimating future amounts (for example, earnings or cash flows) and then mathematically converting those amounts to a single present value. You will see how to apply such techniques when you study time value of money concepts. "Cost approaches" determine value by estimating the amount that would be required to buy or construct an asset of similar quality and condition. The firm can use one or more of these valuation approaches, depending on availability of the data, and should try to use them consistently unless changes in circumstances require a change in approach.

To increase consistency and comparability in applying this definition, the Standard provides a hierarchy that prioritizes the inputs companies should use when determining fair value. The priority is based on three broad preference

¹ "Fair Value Measurements," *Statement of Financial Accounting Standards No. 157* (Norwalk, Conn.: FASB, 2006).

² "The Fair Value Option for Financial Assets and Financial Liabilities," *Statement of Financial Accounting Standards No. 159* (Norwalk, Conn.: FASB, 2007).

levels. The higher the level (Level 1 is the highest), the more preferable the input. The Standard encourages companies to strive to obtain the highest level input available for each situation. Graphic 1 describes the type of inputs and provides an example for each level.

The Standard also expands the amount of information companies must disclose about the use of fair value to measure assets and liabilities. The additional disclosures include a description of the inputs used to measure fair value. For recurring fair value measurements that rely on significant *unobservable* inputs (within Level 3 of the fair value hierarchy), companies should disclose the effect of the measurements on earnings (or changes in net assets) for the period.

You are not yet familiar with some of the examples mentioned in Graphic 1, but as you progress through your Intermediate Accounting course, you will encounter many instances in which we use fair value for valuation purposes. Refer back frequently to this discussion and speculate on the level of input that would be available to a company in these situations. When a company has the option to measure financial assets or liabilities at fair value (discussed next), we address the choices available to the company in those situations.

Graphic 1
Fair value
hierarchy

Fair Value Hierarchy		
Level	Inputs	Example
1 Most Desirable	Quoted market prices in active markets for identical assets or liabilities.	In Chapter 12 you will learn that certain investments in marketable securities are reported at their <i>fair values</i> . Fair value in this case would be measured using the quoted market price from the NYSE, NASDAQ, or other exchange on which the security is traded.
2	Inputs other than quoted prices that are <i>observable</i> for the asset or liability. These inputs include quoted prices for <i>similar</i> assets or liabilities in active or inactive markets and inputs that are derived principally from or corroborated by observable related market data.	In Chapter 10 we discuss how companies sometimes acquire assets with consideration other than cash. In any noncash transaction, the controlling valuation principle is that each element of the transaction is recorded at its <i>fair value</i> . If one of the assets in the exchange is a building, for instance, then quoted market prices for similar buildings recently sold could be used to value the building or, if there were no similar buildings recently exchanged from which to obtain a comparable market price, valuation could be based on the price per square foot derived from observable market data.
3 Least Desirable	<i>Unobservable</i> inputs that reflect the entity's own assumptions about the assumptions market participants would use in pricing the asset or liability developed based on the best information available in the circumstances.	Asset retirement obligations (AROs), discussed in Chapter 10, are measured at <i>fair value</i> . Neither level 1 nor level 2 inputs would be possible in most ARO valuation situations. Fair value would be estimated using level 3 inputs to include the expected cash flows estimated using the entity's own data if there is no information that indicates that market participants would use different assumptions. This level 3 input would be used in a present value calculation together with other inputs such as the credit-adjusted risk free interest rate.

SFAS No. 159 gives a company the option to value financial assets and liabilities at fair value rather than at historical cost.

SFAS No. 159 doesn't require a company to change the way it currently values any of its assets or liabilities. It does, however, give them the *option* to value some or all of its financial assets and liabilities at fair value. If a company chooses to value a financial asset or financial liability at fair value, then future changes in fair value are reported as gains and losses in the income statement.

What differentiates financial assets and liabilities from, say, buildings or land? Financial assets and liabilities are cash and other assets and liabilities that convert directly into known amounts of cash. Included are investments in stocks and bonds of other entities, notes receivable and payable, bonds payable and derivative securities.³ Some of these financial assets and liabilities currently are *required* under GAAP to be reported at fair value. For example, in Chapter 12 you will learn that investments in the stock of other corporations that are designated as either "trading securities" or "securities available for sale" must be valued at fair value.

Now, under *SFAS No. 159*, a company can *choose* to report its other financial instruments at fair value as well. If the fair value option is chosen, changes in fair value of the instrument would be reported as gains and losses in the income statement. Liabilities, too, can be reported at fair value. For instance, a company can choose to report bonds payable at fair value rather than at amortized original issue price as described in Chapter 14.

If a company elects the fair value option, it's not necessary that the company elect the option to report *all* of its financial instruments at fair value or even all instruments of a particular type at fair value. Companies can "mix and match" on an instrument-by-instrument basis. However, a company is not allowed to switch methods once a method is chosen.

The FASB's objective for issuing this Standard is to improve financial reporting by providing companies a way to reduce volatility in reported earnings without having to comply with complex hedge accounting standards. It also helps in the convergence with international accounting standards we discuss in Chapter 1 as the IASB also has adopted a fair value option for financial instruments.

It is not expected that many companies will employ the fair value option. In a 2007 survey of CFOs and controllers, only 14 percent said they plan to make use of the option.⁵ However, many believe that this is just the first step in the FASB's fair value agenda that could lead to future standards requiring fair value measurement not only for financial assets and liabilities, but for certain non-

There is a strong contingent who believe that fair value is the best measure to use in financial reporting. The FASB and IASB have agreed to long-term objectives for accounting for financial instruments that include a requirement that they be measured at fair value. The recent run of elective fair value standards will provide investors with an important training ground for understanding how fair value accounting is going to change the results we see ...⁴

³ The standard does not apply to certain specified financial instruments, including pension obligations and assets or liabilities arising from leases.

⁴ "FAS No. 159 Adoptions Raise Concerns – The Fair Value Option," Bear Stearns (May 8, 2007).

⁵ "Few CFOs Will Use Fair Value Option," *SmartPros.com* (April 20, 2007).

financial assets as well.

The move toward fair value is controversial. Proponents of fair value cite its relevance and are concerned that historical cost information may not be useful for many types of decisions. Opponents of fair value are concerned that estimates of fair value are not sufficiently reliable, particularly when based on inputs from level 3 in the fair value hierarchy (see Graphic 1), and that managers may exploit the unverifiability of such inputs to bias earnings. They argue that accounting should emphasize the conservatism principle, only recognizing gains and other increases in fair value that have been realized in transactions or are virtually certain to exist.⁶

Let's take a closer look at how the fair value option impacts accounting for investments and bonds payable.

FAIR VALUE OPTION FOR FINANCIAL ASSETS

[Supplement to Chapter 12]

FVO for Investment Securities

TS already are accounted for at fair value, so there is no need to choose the fair value option for them.

As discussed above, the FASB recently issued *SFAS No. 159*, which permits companies to elect to account for most financial assets and liabilities at fair value, with unrealized gains and losses recognized in net income in the period in which they occur. That accounting approach should sound familiar – it's the same approach we use to account for trading securities as illustrated in Chapter 12.

Choosing the fair value option for HTM and AFS investments just requires reclassifying those investments as TS.

Here's how the fair value option works for these investments. When a security that qualifies for held-to-maturity or available-for-sale treatment is purchased, the company makes an irrevocable decision about whether to elect the fair value option. The company can elect the fair value option for some securities and not for identical others – it is entirely up to the company. If the fair value option is elected for a security that would normally be accounted for as held-to-maturity or available-for-sale, the company classifies that security as a trading security, and that's how it appears in the financial statements.⁷ Note, though, that the fair value option is irrevocable. If a company elects the fair value option and later on believes that the fair value of an investment will likely decline, it can't change the decision and no longer use fair value accounting.

On page 571 of Chapter 12, the adjustment to fair value is illustrated for two investment securities, Investment in Millington shares and Investment in Bartlett shares. It's pointed out that companies that invest in trading securities typically record fair value adjustments directly to the investment accounts rather than indirectly using a valuation account because the investments turn over quickly. That's not the case, though, for a company electing the fair value

⁶ Watts, R. L., "Conservatism in Accounting Part I: Explanations and Implications" *Accounting Horizons* (September 2003), pp. 207-221.

⁷ "The Fair Value Option for Financial Assets and Financial Liabilities," *Statement of Financial Accounting Standards No. 159* (Norwalk, Conn.: FASB, 2007), paragraph 29.

Choosing the fair value option for HTM or AFS investments requires accounting for them as trading securities.

option for investments other than trading securities. In those situations, then, it's more appropriate to adjust the investment accounts indirectly with a valuation allowance (or contra) account. By this approach, when the fair value of the Investment in Millington shares increases from \$30 million to \$35 million, we would increase the asset indirectly with a debit to a valuation account:

	(\$ in millions)
Fair value adjustment (\$35 – 30)	5
Unrealized holding gain	5

Similarly, when the fair value of the Investment in Bartlett shares falls from \$20 million to \$19 million, we would reduce the investment to its fair value with a credit to the valuation account:

	(\$ in millions)
Unrealized holding loss	1
Fair value adjustment (\$19 – 20)	1

The investing company would recognize both the unrealized gain and the unrealized holding loss in the income statement.

Why allow the fair value option? Recall that a primary reason for creating the available-for-sale approach is to allow companies to avoid excess earnings volatility that would result from reporting in earnings the fair value changes of only part of a hedging arrangement. As described in Appendix A of the textbook, other accounting rules apply to hedging arrangements that involve derivatives, but those rules are very complex and do not cover all forms of hedging arrangements. The fair value option simplifies this process by allowing companies to choose whether to use fair value for most financial assets and liabilities. Thus, when a company enters into a hedging arrangement, it just has to make sure to elect the fair value option for all of the assets and liabilities in the hedging arrangement, and fair value changes of those assets and liabilities will be included in earnings.

Fair Value Disclosures for Investment Securities

The footnotes must also include disclosures that are designed to help financial statement users understand the quality of the inputs used to determine fair values and to identify parts of the financial statements that are affected by those fair value estimates. For example, the notes should include the level of the fair value hierarchy in which all fair value measurements fall. For fair value measurements that use unobservable inputs (level 3 of the fair value hierarchy), the notes need to provide information about the effect of fair value measurements on earnings, including a reconciliation of beginning and ending balances of the investment that identifies:

- Total gains or losses for the period (realized and unrealized) and where those amounts are included in earnings or shareholders' equity
- Purchases and sales

Extensive footnote disclosure helps financial statement users assess the quality of fair value measurements and understand where they affect the financial statements.

- Transfers in and out of Level 3 of the fair value hierarchy (e.g., because of changes in the observability of inputs used to determine fair values).
- For instruments accounted for under the fair-value option, an estimate of the gains or losses included in earnings that are attributable to changes in instrument-specific credit risk.

For annual financial statements, the disclosures should also describe the valuation techniques used to measure fair value.

FVO for Investments Otherwise Accounted For By the Equity Method

We learned in the previous section that *SFAS No. 159* allows a fair value option with respect to investments that normally would be accounted for using the held-to-maturity or available-for-sale approaches (“insignificant-influence investments”). Electing the fair value option for those investments is simple – the investments are reclassified as trading securities and accounted for in that manner.

SFAS No. 159 also allows the fair value option for investments that otherwise would be accounted for under the equity method. As with insignificant-influence investments, the company makes an irrevocable decision about whether to elect the fair value option and can make that election for some securities and not for others. The company carries the investment at fair value in the balance sheet and includes unrealized gains and losses in earnings. The company also must include all the disclosures that are required when it elects the fair value option for insignificant influence investments.

However, investments that otherwise would be accounted for under the equity method but for which the fair value option has been elected are not reclassified as trading securities. Instead, these investments are shown on their own line in the balance sheet or are combined with equity method investments with the amount at fair value shown parenthetically. Still, they are reported at fair value with changes in fair value reported in earnings as if they were trading securities. Also, all of the disclosures that are required when reporting fair values as well as some of those that would be required under the equity method still must be provided.⁸

If the fair value option is chosen, the investment is shown at fair value in the balance sheet, and unrealized holding gains and losses are recognized in the income statement. However, exactly how a company complies with those broad requirements is up to the company. One alternative is to account for the investment using entries similar to those that would be used to account for *trading securities* as we discussed in the previous section. A second alternative is to do all of the accounting entries during the period under *the equity method* as described in Chapter 12, and then record a fair value adjustment at the end of

If the fair value option is chosen for investments otherwise accounted for by the equity method, the amount that is reported at fair value is clearly indicated.

⁸ “The Fair Value Option for Financial Assets and Financial Liabilities,” *Statement of Financial Accounting Standards No. 159* (Norwalk, Conn.: FASB, 2007), paragraph 18.f.

the period to comply with *SFAS No. 159*. Recall that the equity method means (a) increasing the investment account for the investor's share of the investee's income and (b) reducing the investment account for dividends received. Because of those two adjustments, the investment account will have a different balance than if the "trading security" alternative is used. As a result the adjustment from that balance (book value) to fair value will be a different amount. Regardless of which alternative the company uses to account for the investment during the period, though, the same fair value is reported in the balance sheet at the end of the period, and the total amount shown on the income statement (the fair value adjustment amount plus the investment revenue recorded).

Additional Consideration

To see how a firm using the equity method accounts for an investment for which they have selected the fair value option, let's consider Illustration 12-4 on page. 578 of Chapter 12, in which American Capital purchases 25% of Embassy Message on January 2 for \$200 million. The T-account on p. 580 demonstrates that equity-method accounting resulted in a balance of \$217 million for that investment on December 31. Assume the market value of Embassy Message is \$920 million on that date. Under that assumption, American Capital's 25% investment would have a fair value of 25% of \$920 million, or \$230 million. So, to account for the investment under the fair value option, American Capital would need to make the following adjustment to increase the investment from \$217 million to \$230 million:

	(\$ in millions)
Fair value adjustment	\$13
Unrealized holding gain	\$13

If you look at all of the equity method transactions described in Illustration 12-4, you'll see that the total amount of earnings associated with the investment under this alternative would equal \$36 million:

	(\$ in millions)
Investor's share of investee income	\$25
Additional depreciation adjustment	(2)
Unrealized gain from adjustment to fair value	<u>13</u>
Increase in earnings	\$36

If American Capital instead had accounted for this investment using the fair value method for the whole year, rather than using the equity method during the year and adjusting to fair value at the end, the total increase in earnings would again equal \$36 million:

	(\$ in millions)
Investment revenue (dividends)	\$ 6
Unrealized gain from adjustment to fair value	<u>30</u>
Increase in earnings	\$36

A concern with fair value accounting is that management has much discretion over fair values, and may not be able to estimate fair values accurately.

These alternative approaches are just different ways of achieving the same amount of income shown in the income statement and the same fair value reported for the investment in the balance sheet. The fair value option requires that an entity disclose where those changes are reported in the income statement.

DECISION MAKERS' PERSPECTIVE

Of particular concern is that a company could use the discretion inherent in fair value estimation to “manage earnings” with respect to trading securities or other investments for which they have elected the fair-value option. Particularly for level 3 inputs of the fair value hierarchy, management has much discretion over fair value estimates. Even if management is trying to provide the most accurate fair value estimate possible, they may be uncertain about the accuracy of any estimate they provide. The FASB has required additional footnote disclosure about the quality of inputs associated with estimates of fair value, but financial statement users need to know to look for those disclosures, and still might not be able to assess fully the extent to which discretion has affected fair value estimates.

FAIR VALUE OPTION FOR LIABILITIES

[Supplement to Chapter 14]

SFAS No. 159 gives a company the option to value financial assets and liabilities at fair value.

Companies are not required to, but have the option to, value some or all of their financial assets and liabilities at fair value. This choice is permitted by *SFAS No. 159*, “The Fair Value Option for Financial Assets and Financial Liabilities.” In the previous section, we saw examples of the option being applied to financial assets - specifically, companies reporting their investments in securities at fair value. Now, we see how liabilities, too, can be reported at fair value.

How does a liability’s fair value change? Remember that there are two sides to every investment. For example, if a company has an investment in **General Motors’** bonds, that investment is an asset to the investor, and the same bonds are a liability to General Motors. So, the same market forces that influence the fair value of an investment in debt securities (interest rates, economic conditions, risk, etc.) influence the fair value of liabilities. For bank loans or other debts that aren’t traded on a market exchange, the mix of factors will differ, but in any case, changes in the current market rate of interest will be the major contributor to changes in fair value.

Changes in interest rates cause changes in the fair value of liabilities.

DETERMINING FAIR VALUE

For an example, we revisit the Masterwear Industries bonds that sold at a discount in Illustration 14-2 on page 666. Now, suppose it's six-months later, June 30 is the end of Masterwear's fiscal year, and the market rate of interest has fallen to 11%. A decline in market interest rates means bond prices rise. Let's say that checking market prices in the Wall Street Journal indicates that the fair value of the Masterwear bonds on June 30, 2009, is \$714,943. Referring to the amortization schedule on page 668, we see that on the same date, with 5 periods remaining to maturity, the present value of the bonds – their price – would have been \$671,297 if the market rate still had been 14% (7% semi-annually).

Additional Consideration

If the bonds are not traded on a market exchange, their fair market value would not be readily observable. In that case, the next most preferable way to determine fair value according to *SFAS No. 157* would be to calculate the fair value as the present value of the remaining cash flows discounted at the current interest rate. If the rate is 11% (5.5% semi-annually), as we're assuming now, that present value would be \$714,943:

	Present Values
Interest	\$ 42,000 x 4.27028* = \$179,352
Principal	\$700,000 x 0.76513† = <u>535,591</u>
Present value of the bonds	\$714,943

*Present value of an ordinary annuity of \$1: n = 5, i = 5.5%.

†Present value of \$1: n = 5, i = 5.5%.

When the bonds were issued, Masterwear had a choice – report this liability (a) at its amortized initial measurement throughout the term to maturity or (b) at its current fair value on each reporting date. Had the company *not* elected the fair value option, on June 30 it would report the \$671,297 we calculated earlier for the amortization schedule. On the other hand, if Masterwear had elected the fair value option, it would report the bonds at their current fair value, \$714,943.

REPORTING CHANGES IN FAIR VALUE

If a company chooses the option to report at fair value, then it must report changes in fair value in the income statement. In our example, Masterwear would report the increase in fair value from \$666,633 to \$714,943, or \$48,310. Note, though, that part of the change is due to the unpaid interest we discussed earlier. Here's a recap.

At June 30, 2009, the interest that accrued during the first six months was \$46,664, but only \$42,000 of that was paid in cash; so the debt balance increased by the \$4,664 unpaid interest. We recorded the following entry:

Bonds Payable
less: Discount
Carrying Value

Interest expense	46,664
Discount on bonds payable	4,664
Cash	42,000

Amortizing the discount in this entry increased the book value of the liability by \$4,664 to \$671,297:

January 1 book value and fair value	\$666,633
Increase from discount amortization	<u>4,664</u>
June 30 book value (amortized initial amount)	\$671,297

Comparing that amount with the fair value of the bonds on that date provides the amount needed to adjust the bonds to their fair value.

When the fair value option is elected, we report changes in fair value in the income statement.

June 30 fair value	\$714,943
June 30 book value (amortized initial amount)	<u>671,297</u>
Fair value adjustment needed	\$ 43,646

Rather than increasing the bonds payable account itself, though, we instead adjust it indirectly with a credit to a valuation allowance (or contra) account:

Unrealized holding loss	43,646
Fair value adjustment (\$714,943 – 671,297)	43,646

Masterwear must recognize the unrealized holding loss in the June 30, 2009, income statement. Notice that the effect on earnings is:

Interest expense	\$46,664
Unrealized holding loss	<u>43,646</u>
Net decrease in earnings	\$90,310

The new carrying value of the bonds is now the fair value:

The *credit* balance in the fair value adjustment *increases* the carrying value; the discount reduces it.

Bonds payable	\$700,000
Plus: Fair value adjustment	43,646
Less: Discount (\$33,367 – 4,664)	<u>(28,703)</u>
Carrying value, June 30	\$714,943

Suppose the fair value at June 30, 2009, had been \$650,000 instead of \$714,943. In that case, Masterwear would record a *reduction* in the liability from \$671,297 to \$650,000, or \$21,297. The entry would be:

Fair value adjustment (\$671,297 – 650,000)	21,297
Unrealized holding gain	21,297

The effect on earnings in the second scenario is:

Interest expense	\$46,664
Unrealized holding gain	<u>(21,297)</u>
Net decrease in earnings	\$25,367

The *debit* balance in the fair value adjustment *reduces* the carrying value, as does the discount.

The new carrying value of the bonds is the fair value:

Bonds payable	\$700,000
Less: Fair value adjustment	(21,297)
Less: Discount (\$33,367 – 4,664)	<u>(28,703)</u>
Carrying value, June 30	\$650,000

The outstanding balance in the last column of the amortization schedule at any date up to and including the balance at maturity will be the bonds payable less the discount (for instance \$671,297 at June 30, 2009 on page 668). But the amount we report in the balance sheet at any reporting date, the fair value, will be that outstanding balance from the amortization schedule plus or minus the fair value adjustment. That's the \$714,943 or the \$650,000 in the two scenarios above.

MIX AND MATCH

Remember from our discussions earlier that if a company elects the fair value option, it's not necessary that the company elect the option to report all of its financial instruments at fair value or even all instruments of a particular type at fair value. They can "mix and match" on an instrument-by-instrument basis. So Masterwear, for instance, might choose to report these bonds at fair value but all its other liabilities at their amortized initial measurement. However, the company must make the election when the item originates, in this case when the bonds are issued, and is not allowed to switch methods once a method is chosen.

National Penn Bank Shares elected the option to report one of its liabilities (bonds) at fair value and accordingly reported the change in its fair value as a gain in its 2007 income statement. Here's an excerpt from a disclosure note describing that election:

Electing the Option to Report a Liability at Fair Value – National Penn Bank Shares

Real World Financials

11. FAIR VALUE MEASUREMENTS (in part)

The Company early adopted SFAS No. 159 as of January 1, 2007 and elected the fair value option for one discreet financial instrument ... Specifically, the fair value option was applied to the Company's only fixed rate subordinated debt liabilities with a cost basis of \$65.2 million. This subordinated debt has a fixed rate of 7.85% and a maturity date of September 30, 2032 with a call provision after September 30, 2007. The Company believes that by electing the fair value option for this financial instrument, it will ... provide more comparable accounting treatment for this long-term fixed rate debt with the Company's long-term fair valued assets for which the debt is a funding instrument, such as the long-term municipal bonds held in the Company's investment portfolio. ...The Company recorded a gain of \$151,000 in non-interest income for the change in fair value of the subordinated debt for the three months ended March 31, 2007.

Questions

Q 1

Determining fair value

Chapter 1

Briefly describe the inputs that companies should use when determining fair value. Organize your answer according to preference levels, from highest to lowest priority.

Q 2

Determining fair value

Chapter 12

What accounting standard governs determination of the fair value of an investment? Does the standard distinguish between fair values that are readily determinable from a securities exchange versus needing to be calculated based on the company's own assumptions? Explain how a user will know about the reliability of the inputs used to determine fair value.

Q 3

Fair value option

Chapter 12

What is the effect of a company electing the fair value option with respect to a held-to-maturity or an available-for-sale investment?

Q 4

Fair value option

Chapter 12

What is the effect of a company electing the fair value option with respect to an investment that normally would be accounted for using the equity method?

Q 5

Fair value option

Chapter 14

Cordova Tools has bonds outstanding during a year in which the market rate of interest has risen. If Cordova has elected the fair value option for the bonds, will it report a gain or a loss on the bonds for the year? Explain.

Brief Exercises

BE 1

Fair value option; available-for-sale securities

Chapter 12

S&L Financial buys and sells securities that it typically classifies as available-for-on sale. On December 27, 2009, S&L purchased Coca-Cola common shares for \$875,000 and sold the shares on January 3, 2010, for \$880,000. At December 31, the shares had a fair value of \$873,000. When S&L purchased the Coca-Cola shares, management decided to elect the fair value option for this investment. What pretax amounts did S&L include in its 2009 and 2010 earnings as a result of this investment?

BE 2

Fair value option; equity method investments

Chapter 12

Turner Company purchased 40% of the outstanding stock of ICA Company for \$10,000,000 on January 2, 2009. Turner elects the fair value option to account for the investment. During 2009, ICA earns \$750,000 of income and on December 30 pays a dividend of \$500,000. On December 31, 2009, the fair value of Turner's investment has increased to \$11,500,000. What journal entries would Turner make to account for this investment during 2009?

BE 3

Reporting bonds at fair value

Chapter 14

AI Tool and Dye issued 8% bonds with a face amount of \$160 million on January 1, 2009. The bonds sold for \$150 million. For bonds of similar risk and maturity the market yield was 9%. Upon issuance, AI elected the option to report these bonds at their fair value. On June 30, 2009, the fair value of the bonds was \$145 million as determined by their market value on the NASDAQ. Will AI report a gain or will it report a loss when adjusting the bonds to fair value? If the change in fair value is attributable to a change in the interest rate, did the rate increase or decrease?

Exercises

E 1

Fair value option applied to held-to-maturity investments

Chapter 12

[This is a variation of exercise 12-1 focusing on the fair value option.]

Tanner-UNF Corporation acquired as a long-term investment \$240 million of 6% bonds, dated July 1, on July 1 2009. Company management has the positive intent and ability to hold the bonds until maturity, but when the bonds were acquired they decided to elect the fair value option for accounting for their investment. The market interest rate (yield) was 8% for bonds of similar risk and maturity. Tanner-UNF paid \$200 million for the bonds. The company will receive interest semiannually on June 30 and December 31. As a result of changing market conditions, the fair value of the bonds at December 31, 2009, was \$210 million.

Required:

1. How would this investment be classified on Tanner-UNF's balance sheet, as held-to-maturity securities, trading securities, available-for-sale securities, significant-influence investments, or other? Explain.
2. Prepare the journal entry to record Tanner-UNF's investment in the bonds on July 1, 2009.
3. Prepare the journal entries by Tanner-UNF to record interest on December 31, 2009, at the effective (market) rate.
4. Prepare any journal entry necessary to recognize fair value changes as of December 31, 2009.
5. At what amount will Tanner-UNF report its investment in the December 31, 2009, balance sheet? Why?
6. Suppose Moody's bond rating agency downgraded the risk rating of the bonds motivating Tanner-UNF to sell the investment on January 2, 2010, for \$190 million. Prepare the journal entry to record the sale.

E 2

Fair value option applied to available-for-sale securities

Chapter 12

[This is a variation of exercise 12-7 focusing on the fair value option.]

On January 2, 2009, Sanborn Tobacco, Inc. bought 5% of Jackson Industry's capital stock for \$90 million as a temporary investment. Sanborn realized that these securities would normally be classified as available-for-sale, but elected the fair value option to account for the investment. Jackson Industry's net income for the year ended December 31, 2009, was \$120 million. The fair value of the shares held by Sanborn was \$98 million at December 31, 2009. During 2009, Jackson declared a dividend of \$60 million.

Required:

1. Would this investment be classified on Sanborn's balance sheet, as held-to-maturity securities, trading securities, available-for-sale securities, equity method investments, or other? Explain.
2. Prepare all appropriate journal entries related to the investment during 2009.
3. Indicate the effect of this investment on 2009 income before taxes.

[This is a variation of exercise 12-14 focusing on the fair value option.]

As a long-term investment at the beginning of the fiscal year, Florists International purchased 30% of Nursery Supplies, Inc.'s 8 million shares for \$56 million. The fair value and book value of the shares were the same at that time. The Company realizes that this investment would typically be accounted for under the equity method, but instead chooses the fair value option. During the year, Nursery Supplies earned net income of \$40 million and distributed cash dividends of \$1.25 per share. At the end of the year, the fair value of the shares is \$52 million.

Required:

1. Would this investment be classified in Florists' balance sheet, as held-to-maturity securities, trading securities, available-for-sale securities, significant-influence investments, or other? Explain.
2. Prepare all appropriate journal entries related to the investment during 2009.
3. Indicate the effect of this investment on 2009 income before taxes.

E 4

Reporting bonds at fair value

Chapter 14

Federal Semiconductors issued 11% bonds, dated January 1, with a face amount of \$800 million on January 1, 2009. The bonds sold for \$739,814,813 and mature in 2028 (20 years). For bonds of similar risk and maturity the market yield was 12%. Interest is paid semiannually on June 30 and December 31. Federal determines interest at the effective rate. Federal elected the option to report these bonds at their fair value. On December 31, 2009, the fair value of the bonds was \$730 million as determined by their market value in the over-the-counter market.

Required:

1. Prepare the journal entry to adjust the bonds to their fair value for presentation in the December 31, 2009, balance sheet.
2. Assume the fair value of the bonds on December 31, 2010, had risen to \$736 million. Prepare the journal entry to adjust the bonds to their fair value for presentation in the December 31, 2010, balance sheet.

E 5
Reporting bonds at
fair value

Chapter 14

On January 1, 2009, Rapid Airlines issued \$200 million of its 8% bonds for \$184 million. The bonds were priced to yield 10%. Interest is payable semiannually on June 30 and December 31. Rapid Airlines records interest at the effective rate and elected the option to report these bonds at their fair value. On December 31, 2009, the fair value of the bonds was \$188 million as determined by their market value in the over-the-counter market.

Required:

1. Prepare the journal entry to record interest on June 30, 2009 (the first interest payment).
2. Prepare the journal entry to record interest on December 31, 2009 (the second interest payment).
3. Prepare the journal entry to adjust the bonds to their fair value for presentation in the December 31, 2009, balance sheet.

E 6
Reporting bonds at
fair value;
calculate fair value

Chapter 14

On January 1, 2009, Essence Communications issued \$800,000 of its 8% bonds for \$700,302. The bonds were priced to yield 10%. Interest is payable semiannually on June 30 and December 31. Essence Communications records interest at the effective rate and elected the option to report these bonds at their fair value. On December 31, 2009, the market interest rate for bonds of similar risk and maturity was 9%. The bonds are not traded on an active exchange.

Required:

1. Using information provided, estimate the fair value of the bonds at December 31, 2009.
2. Prepare the journal entry to record interest on June 30, 2009 (the first interest payment).
3. Prepare the journal entry to record interest on December 31, 2009 (the second interest payment).
4. Prepare the journal entry to adjust the bonds to their fair value for presentation in the December 31, 2009, balance sheet.

Problems

P 1

Fair value option;
bond investment;
effective interest

Chapter 12

[This problem is a variation of the preceding problem, modified to cause the investment to be accounted for under the fair value option.]

Fuzzy Monkey Technologies, Inc. purchased as a long-term investment \$80 million of 8% bonds, dated January 1, on January 1, 2009. Management intends to have the investment available for sale when circumstances warrant. When management purchased the bonds, they elected to account for them under the fair value option. For bonds of similar risk and maturity the market yield was 10%. The price paid for the bonds was \$66 million. Interest is received semiannually on June 30 and December 31. Due to changing market conditions, the fair value of the bonds at December 31, 2009, was \$70 million.

Required:

1. Prepare the journal entry to record Fuzzy Monkey's investment on January 1, 2009.
2. Prepare the journal entry by Fuzzy Monkey to record interest on June 30, 2009 (at the effective rate).
3. Prepare the journal entries by Fuzzy Monkey to record interest on December 31, 2009 (at the effective rate).
4. At what amount will Fuzzy Monkey report its investment in the December 31, 2009, balance sheet? Why? Prepare any entry necessary to achieve this reporting objective.
5. How would Fuzzy Monkey's 2009 statement of cash flows be affected by this investment?
6. How would your answers to requirements 1-5 differ if management had the intent and ability to hold the investments until maturity?

P 2

Fair value option;
equity method
investments

Chapter 12

[This problem is a variation of problem P 12-9 focusing on the fair value option.]

On January 4, 2009, Runyan Bakery paid \$324 million for 10 million shares of Lavery Labeling Company common stock. The investment represents a 30% interest in the net assets of Lavery and gave Runyan the ability to exercise significant influence over Lavery's operations. Runyan chose the fair value option to account for this investment. Runyan received dividends of \$2.00 per share on December 15, 2009, and Lavery reported net income of \$160 million for the year ended December 31, 2009. The market value of Lavery's common stock at December 31, 2009, was \$31 per share. On the purchase date, the book value of Lavery's net assets was \$800 million and:

- a. The fair market value of Lavery's depreciable assets, with an average remaining useful life of six years, exceeded their book value by \$80 million.
- b. The remainder of the excess of the cost of the investment over the book value of net assets purchased was attributable to goodwill.

Required:

1. Prepare all appropriate journal entries related to the investment during 2009, assuming Runyan accounts for this investment under the fair value option, and simply accounts for the Lavery investment in a manner similar to what they would use for trading securities.
2. What would be the effect of this investment on Runyan's 2009 net income?

[This problem is an expanded version of problem P12-10 that considers alternative ways in which a firm might apply the fair value option to account for significant-influence investments that would normally be accounted for under the equity method.]

P 3

Fair value
option; equity
method
investments

Chapter 12

SFAS No. 159 indicates that companies can choose the fair value option for investments that otherwise would require the equity method. If the fair value option is chosen, the investment is shown at fair value in the balance sheet, and unrealized holding gains and losses are recognized in the income statement. However, exactly how a company complies with those broad requirements is up to the company. This problem requires you to consider alternative ways in which a company might apply the fair value option for significant-influence investments.

On January 4, 2009, Runyan Bakery paid \$324 million for 10 million shares of Lavery Labeling Company common stock. The investment represents a 30% interest in the net assets of Lavery and gave Runyan the ability to exercise significant influence over Lavery's operations. Runyan chooses the fair value option to account for this investment. Runyan received dividends of \$2.00 per share on December 15, 2009, and Lavery reported net income of \$160 million for the year ended December 31, 2009. The market value of Lavery's common stock at December 31, 2009, was \$31 per share. On the purchase date, the book value of Lavery's net assets was \$800 million and:

- a. The fair market value of Lavery's depreciable assets, with an average remaining useful life of six years, exceeded their book value by \$80 million.
- b. The remainder of the excess of the cost of the investment over the book value of net assets purchased was attributable to goodwill.

Required:

1. Prepare all appropriate journal entries related to the investment during 2009, assuming Runyan elects the fair value option for this investment and simply accounts for the Lavery investment in a manner similar to the way the company would account for trading securities. Indicate the effect of these journal entries on 2009 net income and show the amount at which the investment is carried in the December 31, 2009, balance sheet.
2. Prepare all appropriate journal entries related to the investment during 2009, assuming Runyan accounts for this investment under the fair value option, but assuming that Runyan uses equity method accounting to account for Lavery's income and dividends, and then does a fair value adjustment that allows them to comply with SFAS No. 159. Indicate the effect of these journal entries on 2009 net income, and show the amount at which the investment is carried in the December 31, 2009, balance sheet. (Note: you should find the same total 2009 income effect and same carrying value in the balance sheet for requirements 1 and 2.)

P 4

Fair value
option; held-to-
maturity
investments

Chapter 12

On January 2, 2009, Ithaca Corp. purchased Cortland Inc. bonds that have a face value of \$150,000. The Cortland bonds have a stated interest rate of 6%. Interest is paid semiannually on June 30 and December 31, and the bonds mature in 10 years. For bonds of similar risk and maturity, the market yield on particular dates is as follows:

January 2, 2009	7%
June 30, 2009	8%
December 31, 2009	7%

Required:

1. Calculate what Ithaca paid for the Cortland bonds on January 2, 2009 (ignoring brokerage fees), and prepare a journal entry to record the purchase.
2. Prepare all appropriate journal entries related to the bond investment during 2009, assuming Ithaca accounts for the bonds as a held-to-maturity investment. Assume Ithaca computes interest revenue as the effective interest rate times the outstanding balance.
3. Prepare all appropriate journal entries related to the bond investment during 2009, assuming that Ithaca chose the fair value option when the bonds were purchased and that Ithaca adjusts to fair value semi-annually. Assume Ithaca computes interest revenue as the effective interest rate times the outstanding balance.

P 5

Determine bond
price; record
interest; report
bonds at fair value

Chapter 14

On January 1, 2009, NFB Visual Aids issued \$800,000 of its 20-year, 8% bonds. The bonds were priced to yield 10%. Interest is payable semiannually on June 30 and December 31. NFB Visual Aids records interest at the effective rate and elected the option to report these bonds at their fair value. On December 31, 2009, the fair value of the bonds was \$668,000 as determined by their market value in the over-the-counter market.

Required:

1. Determine the price of the bonds at January 1, 2009, and prepare the journal entry to record their issuance.
2. Prepare the journal entry to record interest on June 30, 2009 (the first interest payment).
3. Prepare the journal entry to record interest on December 31, 2009 (the second interest payment).
4. Prepare the journal entry to adjust the bonds to their fair value for presentation in the December 31, 2009, balance sheet.

P 6
Report bonds at
fair value;
quarterly reporting

Chapter 14

Appling Enterprises issued 8% bonds with a face amount of \$400,000 on January 1, 2009. The bonds sold for \$331,364 and mature in 2028 (20 years). For bonds of similar risk and maturity the market yield was 10%. Interest is paid semiannually on June 30 and December 31. Appling determines interest at the effective rate. Appling elected the option to report these bonds at their fair value. The fair values of the bonds at the end of each quarter during 2009 as determined by their market values in the over-the-counter market were the following:

March 31	\$350,000
June 30	340,000
October 31	335,000
December 31	342,000

Required:

1. By how much will Appling's earnings be increased or decreased by the bonds (ignoring taxes) in the March 31 *quarterly* financial statements.
2. By how much will Appling's earnings be increased or decreased by the bonds (ignoring taxes) in the June 30 *quarterly* financial statements.
3. By how much will Appling's earnings be increased or decreased by the bonds (ignoring taxes) in the October 31 *quarterly* financial statements.
4. By how much will Appling's earnings be increased or decreased by the bonds (ignoring taxes) in the December 31 *annual* financial statements.