

The Effect of SFAS No. 115 on Financial Statement Analysis

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Abstract

This paper demonstrates the impact that SFAS No. 115, *Accounting for Certain Debt and Equity Securities*, can have on the way financial statements are presented. SFAS No. 115 requires that investment securities be categorized in one of three classifications (i.e., *trading, available for sale* and *held to maturity*), and these classifications result in different valuations for securities. Under SFAS No. 115 two companies with identical securities could appear quite different in terms of financial statement representation depending upon how management decides to categorize the securities. These differences in financial statement representation can impact financial statement ratios and may, in turn, affect investment and credit decisions.

SFAS No. 115, *Accounting for Certain Investments in Debt and Equity Securities* supersedes SFAS No. 12, *Accounting for Marketable Securities*. Under the provisions of SFAS No. 12, investment securities were accounted for either at cost (debt securities) or at the lower of cost or market (equity securities). Thus, under SFAS No. 12, the role of management in accounting for marketable securities was confined to classifying the securities as current or long term. With the advent of SFAS No. 115, management intent as to the disposition of its marketable securities now affects not only the **classification** of debt and equity securities, but their **valuation** as well.

Under the provisions of SFAS No. 115, differences in how marketable securities are classified, and thus valued, can have a significant impact on the financial statements and financial ratios calculated from the statements. In turn, such differences have the potential to affect credit and investment analyses. Hence, management may be tempted to engage in "gains trading" or to take advantage of "accounting by intent" in order to manage trends in financial statement ratios and influence credit or investment decisions.

The remainder of this paper is or-

ganized as follows. In the following section, the provisions of SFAS No. 115 are discussed. Next, an investment in a single debt security is used as an example to demonstrate the differences in financial statement values and key ratios that can result from alternative classifications of the security. Finally, the implications of the new accounting treatments afforded to marketable securities under SFAS No. 115 are discussed.

Review of SFAS No. 115

The scope of SFAS No. 115 covers all equity securities for which there is a readily determinable fair value and all debt securities. The standard requires that such securities be classified into three categories—held to maturity,

trading and available for sale—based on management intent regarding the disposition of the securities. Management determines classification at acquisition, and the appropriateness of the classification is reassessed at each reporting date.

The held-to-maturity category applies only to debt securities that management has the positive intent and ability to hold to maturity. Securities in this category are reported at amortized cost. Unrealized gains and losses from changes in market value are not incorporated into the financial statements.

The trading category contains debt and equity securities that management intends to actively trade in the short term, with the goal of generating revenue by selling the securities when the market value exceeds the fair value.

Table 1
Valuation Requirements by Category

Category	Reported Value	Reporting of Unrealized Gain or Loss
Held to Maturity	Amortized cost	Not reported
Trading	Fair value	Income statement
Available for Sale	Fair value	Separate equity component

Traded securities are reported at fair market value, and any unrealized gains or losses that result from changes in fair value between accounting periods are included in net income. An unrealized gain would result in the recognition of deferred tax liability and an unrealized loss would result in the recognition of a deferred tax asset.

The available-for-sale category is used for securities that do not properly belong in the first two categories. Securities in this category, like those in the trading category, are reported at fair value. However, unlike the treatment for traded securities, unrealized gains and losses for securities in the available-for-sale category are excluded from net income. A separate equity account is established, with the amount of the gain or loss, net of applicable federal income tax, included in that account balance. Hence, this new equity account may either increase or decrease total equity depending upon whether the net effect of changes in fair value is a net gain or a net loss.

The accounting and reporting requirements for each classification of securities are summarized in Table 1. In the next section, an illustration is provided to depict the effects of these alternative classification requirements on financial statement values and ratios.

Example to Illustrate the Financial Statement Effects

Assumptions — Table 2

To demonstrate financial statement differences that result from SFAS No. 115, a simplified illustration based on a single investment in a debt security is presented. Relevant information regarding the purchase of the bond investment and market information utilized in this illustration is presented in Table 2.

As shown in Panel A of Table 2, on Jan. 1, 1995, ABC Company purchases bonds that have a face value of \$100,000 and a 10-year life. The bonds pay interest annually at a stated rate of 10%, so that interest receipts from the investment total \$10,000 each year. Assuming the bonds were purchased at a time when the effective bond interest rate was 8%, the cost of the bonds equates to \$113,420.

Regardless of how the investment is classified, the following journal entry must be made at Dec. 31, 1995, to account for interest revenue and the receipt of the interest payment:

Cash	\$10,000
Interest Revenue	\$9,074
Bond Investment	\$ 926

Consequently, the carrying value of the bonds is reduced to \$112,494 (\$113,420-\$926). Hence, under all three classification alternatives, the carrying value at Dec. 31, 1995, prior to any adjustment is \$112,494.

In an attempt to mirror the current economic trends in the United States bond market, Panel B of Table 2 assumes

Table 2
Assumptions for the Example

PANEL A: Assumptions at January 1, 1995 for the Bond

Date purchased	January 1, 1995
Term	10 years
Face value	\$100,000
Stated rate	10%
Market rate at 1/1/95	8%
Bond price at 1/1/95	\$113,420

PANEL B: Assumptions at December 31, 1995 for the Bond

Market rate at 12/31/95	12%
Carrying value at 12/31/95	\$112,494
Market price at 12/31/95	\$89,344
Holding loss for 1995	\$23,150

PANEL C: Year-End Assumptions
(before 12/31 entries in Panel D)

Operating income	\$50,000
Balance Sheet Information	
Current assets	\$400,000
Long-term assets	\$600,000
Total assets	\$1,000,000
Current liabilities	
Current liabilities	\$210,000
Noncurrent liabilities	\$290,000
Total liabilities	\$500,000
Stockholders' equity	\$500,000
Total equities	\$1,000,000
Outstanding shares	40,000
Earnings per Share and Key Ratios	
Earnings per share	1.25
Debt to Equity	1.00
Current Ratio	1.90

PANEL D: December 31, 1995 Journal Entries for the Bond

To record interest:	Cash	\$10,000
	Interest revenue	\$9,074
	Bond investment	\$926
To mark to market:	Unrealized loss	\$23,150
	Bond investment	\$23,150

that on Dec. 31, 1995, the balance sheet date, interest rates have risen. The market rate of interest has increased to 12 percent. Because of the inverse relationship between changes in interest rates and bond prices, the market value of the bond declines to \$89,344. An unrealized loss in market value of \$23,150 (\$112,494-\$89,344) occurs with the increase in the market rate of interest. If interest rates were to decrease instead of rise on the balance sheet date, the market value of the bond investment would exceed the carrying value of the bond and an unrealized gain would have resulted.

General assumptions regarding the financial statements are presented in Panel C. The information presented does not include the Dec. 31, 1995 journal entries

to account for the bond investment. Also, the beginning balance in the bond investment account of \$113,420 is assumed to be included in the long-term assets of \$600,000. Obviously, the investment would need to be reclassified as a current asset if it were assigned to the trading category.

Finally, the year-end journal entries to account for the bond investment are presented in Panel D. As noted previously, the entry to record the receipt of interest is unaffected by the classification decision. The second entry to mark the investment to market,

Table 3
Comparative Financial Statements and Ratios

Comparative Income Statements for 1995

	Held-to-Maturity	Trading	Available for Sale
Operating net income	\$50,000	\$50,000	\$50,000
Interest revenue	\$9,074	\$9,074	\$9,074
Unrealized holding loss	-0-	(\$23,150)	-0-
Net income	\$59,074	\$35,934	\$59,074

Comparative Balance Sheets at December 31, 1995

	Held-to-Maturity	Trading	Available for Sale
Current assets	\$410,000	\$499,344	\$410,000
Long-term assets	\$599,074	\$486,580	\$575,924
Total assets	\$1,009,074	\$985,924	\$985,924
Current liabilities	\$210,000	\$210,000	\$210,000
Noncurrent liabilities	\$290,000	\$290,000	\$290,000
Total liabilities	\$500,000	\$500,000	\$500,000
Stockholders' Equity	\$509,074	\$485,924	\$485,924
Total equities	\$1,009,074	\$985,924	\$985,924

Comparative EPS and Key Ratios

	Held-to-Maturity	Trading	Available for Sale
Earnings per Share	\$1.48	\$0.90	\$1.48
Debt to Equity	0.98	1.03	1.03
Current Ratio	1.95	2.38	1.95

however, varies depending on the classification category chosen by management.

One factor not incorporated into the discussion of the example concerns deferred taxes. The unrealized holding loss would give rise to a deferred tax asset (DTA) as a debit. The offsetting credit would be deferred tax expense for trading securities, and the newly created equity account for available for sale securities. The DTA would be measured based on enacted tax rates at the time the temporary difference is expected to reverse, and would be clas-

sified consistent with the underlying asset. Additionally, a valuation allowance must be considered for temporary differences that are not expected to reverse.

Because of this complexity, deferred taxes are not incorporated into the discussion of the example, which entails Tables 2 and 3. However, in Appendix A, the comparative financial statements and ratios are restated based on the following assumptions: (1) an enacted present and future tax rate of 34%, (2) there are no other temporary differences giving rise to deferred taxes, and (3) the DTA when the security is classified as trading is included with the current assets and the DTA for the available-for-sale category is included in the long-term assets. Because the unrealized holding loss is not recognized if the

bond investment is classified as held to maturity, there is no related deferred tax asset.

The amount of the DTA is \$7,871, and the numbers changed due to the DTA are presented in bold in Appendix A. The qualitative commentary contained in the discussion of the example is not affected.

**Financial Statement Impact—
Table 3**

In Table 3, comparative financial statements and key ratios are presented. Because of their importance in investment and credit analyses, the im-

fact of SFAS No. 115 on profitability, leverage and liquidity ratios cannot be overlooked. Differences in the classification of securities will affect ratios such as earnings per share (EPS), debt-to-equity and the current ratio and may impact investment and credit decisions which are made based on these ratio amounts.

Income Statement Effects. Focusing on the income statement, the unrealized holding loss is included in net income only if the investment is classified as a trading security. Thus in the scenario presented, the EPS information presented in Table 3, based on 40,000 outstanding shares of stock, is much lower when the security is classified as trading (\$0.90) than with the other two treatment alternatives (\$1.48). Yet, if interest rates were to fall sharply, the

price of the bond would increase and a profit would be realized from selling that security, thus increasing earnings per share. However, if management's intent was to hold the security until maturity, the company would be un-

able to realize this potential profit until the security is sold.

able to realize this potential profit until the security is sold.

On the other hand, if interest rates continue to rise and the price of the bond falls further, the company that classifies the security as trading may decide to simply hold the security longer to not realize the loss. In this situation, management of the company that classifies the security as a trading security has more flexibility with re-

gard to disposition of the security compared to a company that classifies this security as held to maturity, yet reports a lower EPS.

The observable variations in EPS arising from differences in how the security is classified may enable management to engage in "gains trading" in order to manage earnings. For example, if a company's earnings were growing at a rate

of 10 percent per year but found itself short of this mark in the current year, an option available to management is "gains trading." In this scenario, a security which had been previously classified as available for sale but had appreciated substantially in value since the purchase date could be sold. Hence, management could "pad" its earnings in order to meet a desired growth trend by "gains trading." The

"... despite holding identical investment securities, companies can appear different in terms of financial statement representation, depending upon how management decides to categorize the securities."

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reverse scenario also holds true. If a company is experiencing a year of abnormally high earnings, management may find it necessary to dispose of poorly performing securities in order to bring earnings more in line with an established growth trend and to preserve earnings potential in future years.

Balance Sheet Effects. Balance sheet amounts are also impacted by the differences in security classification. When the security is classified as held to maturity, only the entry to record the interest receipt is posted; the holding loss is not recorded. This entry impacts the current assets because cash is received, stockholders' equity because of the interest revenue earned, and long-term assets because of the reduction in the carrying value of the bond investment. In the available-for-sale category, the entry to record the holding loss is included in addition to the entry to record interest revenue. Thus, long-term investments and owner's equity are lowered by \$23,150 when compared to the held-to-maturity category. Finally, the investment is reclassified as current if it is part of the trading category. Therefore, compared to the available-for-sale category, current assets are \$89,344 higher and long-term assets are \$89,344 lower when the security is classified as trading.

These differences in balance sheet amounts impact the debt-to-equity and current ratios as shown in Table 3. The current ratio is much higher if the security is classified as trading. A higher current ratio implies greater solvency, which may be desirable for a firm trying to obtain a loan or acquire supplies. Comparing the ratios for the held-to-maturity and trading categories, the debt-to-equity ratio is lower if the security is classified as held to maturity, implying that the company is less leveraged and, therefore, less risky. Although the differences in the debt-to-equity ratio may appear immaterial because of the numbers used in this example, they could be substantial when a portfolio of real-world securities is involved. Further, even subtle changes

Appendix A
Table 3 Restated to Incorporate Deferred Taxes
(Numbers in Bold are Changed from Table 3)

Comparative Income Statements for 1995

	Held-to- Maturity	Trading	Available for Sale
Operating net income	\$50,000	\$50,000	\$50,000
Interest revenue	\$9,074	\$9,074	\$9,074
Unrealized holding loss	-0-	(\$23,150)	-0-
Deferred tax benefit	-0-	\$7,871	-0-
Net income	\$59,074	\$43,805	\$59,074

Comparative Balance Sheets at December 31, 1995

	Held-to- Maturity	Trading	Available for Sale
Current assets	\$410,000	\$507,215	\$410,000
Long-term assets	\$599,074	\$486,580	\$583,795
Total assets	\$1,009,074	\$993,795	\$993,795
Current liabilities	\$210,000	\$210,000	\$210,000
Noncurrent liabilities	\$290,000	\$290,000	\$290,000
Total liabilities	\$500,000	\$500,000	\$500,000
Stockholders' Equity	\$509,074	\$493,795	\$493,795
Total equities	\$1,009,074	\$993,795	\$993,795

Comparative EPS and Key Ratios

	Held-to- Maturity	Trading	Available for Sale
Earnings per Share	\$1.48	\$1.10	\$1.48
Debt to Equity	0.98	1.01	1.01
Current Ratio	1.95	2.42	1.95

in these ratios can have important ramifications when debt covenants are binding.

With respect to variations in debt-to-equity and current ratios caused by differences in classification of a security, management can utilize "accounting by intent" to help manage trends in these ratios. For instance, assume that a debt agreement has a debt covenant stipulating that the debt-to-equity ratio must be maintained at a level

of 1 to 1 or lower. If the classification category of a security could impact the compliance with this covenant (e.g., the company is in compliance if it classifies the security as held-to-maturity but would not be if the security was classified in either of the other two categories), management's intent may be to classify the security in the manner that would ensure compliance with the debt agreement. Similarly, if management's intent is to raise the current ra-

tio, a strategy could be adopted whereby the security purchased in the example could be classified as trading instead of held to maturity or available for sale in order to categorize the investment as a current asset, rather than a long-term asset, thus increasing the current ratio.

Implications of Financial Statement Effects

The above illustration demonstrates that despite holding identical investment securities, companies can appear different in terms of financial statement representation, depending upon how management decides to categorize the securities. For instance, classification differences can affect key financial ratios such as EPS, the debt-to-equity ratio and the current ratio, financial ratios which are often important in investment and credit decisions.

Loan officers often use ratio benchmarks in making loan decisions that are based on boundary figures of

profitability, leverage and liquidity ratios. Conceivably, how management decides to classify its securities can impact a company's ability to borrow funds. In the illustration, if a critical decision point for lenders was to have a current ratio of at least 2-to-1, the company would have been approved for additional lending if the security were classified as a trading security, but not if it were classified as held to maturity or available for sale. Further, investors focusing heavily on earnings per share may, at first glance, believe that the company in the illustration, which had classified the bond investment as held to maturity or available for sale, is more profitable than the same company classifying the bond investment as a trading security.

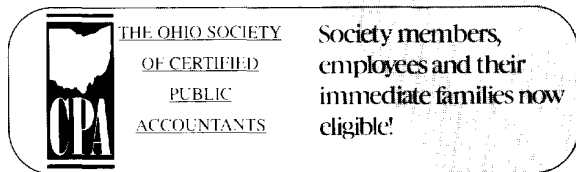
Finally, management may utilize the techniques of "gains trading" and/or "accounting by intent" to meet the goals of demonstrating steady earnings growth and strong ratios. By disposing

of a security classified as available for sale, which has appreciated substantially in value, management may increase the earnings of the company through "gains trading." Management may also engage in "accounting by intent" in order to manage the financial statements and ratios by choosing to classify a security in the category which accomplishes the desired impact. ■

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