

## Marketable Security

### Chapter 10 Marketable Securities

**Marketable securities** – Stocks, bonds and other financial instruments that organizations hold in lieu of cash. These are also referred to in the financial statements as short-term investments



#### Reasons for Holding Marketable Securities

There are many reasons why an entity would hold marketable securities, including:

- Earning a higher rate of return than the one available in a bank account (i.e., cash).
- The securities market is usually quite liquid, so such investments can be readily converted into cash.
- Management of these investments does not require ongoing operational decisions. Rather, just a decision as to whether to buy or to sell is necessary.



#### Two Types of Investments

**Debt securities** - These are bonds issued by corporations, municipalities, and the U.S. government .

**Equity securities** – An entity's ownership of other companies' common stocks.

#### Characteristic of Debt Securities

Debt securities possess two important characteristics:

**Maturity date** – The “buyer/seller” agreement specifies a date on which the obligation will be repaid in full.

**“Upper bound”**– Regularly scheduled payments of principal repayment and interest results in a clear delineation of the total cash to be received.



#### Characteristic of Equity Securities

These two characteristics as they apply to equity securities are different:

**Maturity date** - These securities have no maturity date (i.e., they can be bought or sold as appropriate).

**“Upper bound”** - These securities can earn an unlimited return in excess of the initial investment price. They also can result in a loss of some or all of the investment.



## Economic Premise of Marketable Securities

The economic premise supporting marketable securities investments is simple....The combination of interest and dividend payments coupled with increases in market value will generate “expected” future cash inflows. Like any expectation, the projected outcome may not be realized! Hence, losses (i.e., cash outflows) are also possible.



## GAAP Treatment of Marketable Securities

How marketable securities are treated for financial statement reporting (GAAP) depends on how the security is classified:

- **Trading** – Debt or equity securities the entity intends to use in generating trading profits.
- **Available-for-sale** – Debt or equity securities that are neither “trading” nor “held-to-maturity”.
- **Held-to-maturity** – Debt securities the entity intends to hold for their full term.



## Trading Securities

GAAP treatment of “trading” securities follows economic valuation. Market values for this category are determined at each balance sheet date.

- **Increases in book value** are recorded on the **income statement** as unrealized holding gains on marketable securities - trading.
- **Decreases in book value** are recorded on the **income statement** as unrealized holding losses on marketable securities - trading.



## Example: Trading Securities

Assume on January 1, 2004, Rhody purchases \$1,000 of trading marketable securities for cash. What is the journal entry Rhody must make to reflect the acquisition of the securities?



## Example: Trading Securities

The journal entry to record the purchase of the securities is:

Marketable securities-trading	1,000	
Cash		1,000



## Example: Trading Securities

Assume on December 31, 2004, the market value of the securities is \$1,100. What is the journal entry that Rhody needs to make to reflect the change in the value of the securities?



### Example: Trading Securities

The journal entry to record increase in the value of the marketable securities is:

Marketable securities-trading	100	
Unrealized gain on marketable securities – trading		100

**Note:** The unrealized gain on marketable securities - trading is an **income statement** account



### Example: Trading Securities

The journal entry to record the sale of the securities is:

Cash	1,150	
Marketable securities-trading		1,100
Gain on marketable securities – trading		50



### Example: Available-For-Sale Securities

Assume on January 1, 2004, Rhody purchases \$1,000 of available-for-sale marketable securities for cash. What is the journal entry Rhody must make to reflect the acquisition of the securities?



### Example: Trading Securities

Assume on July 31, 2002, Rhody sells the securities for \$1,150. What is the journal entry that Rhody needs to make to reflect the sale of the securities?

### Available-For-Sale Securities

GAAP treatment of “available-for-sale” securities is more involved. It treats holding gains and losses as equity (i.e., balance sheet) adjustments, NOT income statement adjustments.

- **Increases in book value** are recorded on the **balance sheet** as unrealized holding gains on marketable securities – available-for-sale.
- **Decreases in book value** are recorded on the **balance sheet** as unrealized holding losses on marketable securities – available-for-sale.



### Example: Available-For-Sale Securities

The journal entry to record the purchase of the securities is exactly the same as for trading securities:

Marketable securities-available for sale	1,000	
Cash		1,000



### Example: Available-For-Sale Securities

Assume on December 31, 2004, the market value of the securities is \$1,100. What is the journal entry that Rhody needs to make to reflect the change in the value of the securities?



### Example: Available-For-Sale Securities

The journal entry to record increase in the value of the marketable securities is:

Marketable securities-available for sale	100
Unrealized gain on marketable securities –available for sale	100

**Note:** The unrealized gain on marketable securities – available-for-sale is a **balance sheet** account



### Available-For-Sale Securities

Available-for-sale “balance sheet” valuations reflect market values. They are shown in the stockholders’ equity section as a component of other accumulated comprehensive income.



### Example: Available-For-Sale Securities

Assume on July 31, 2005, Rhody sells the securities for \$1,150. What is the journal entry that Rhody needs to make to reflect the sale of the securities?



### Example: Available-For-Sale Securities

The journal entry to record the sale of the securities is:

Cash	1,150
Unrealized gain on marketable securities – available-for-sale	100
Marketable securities-available for sale	1,100
Gain on marketable security – available-for-sale	150



### Available-For-Sale Securities

Note that the debit to unrealized gain on marketable securities – available-for-sale of \$100 is needed to remove this account from the balance sheet. The credit to marketable securities-available for sale for \$1,100 reflects the removal of the marketable securities at their fair market value. The credit to gain on marketable security – available-for-sale of \$150 is an income statement account that reflects the total gain on the securities since their original purchase.



## Held-To-Maturity Securities

GAAP values “held-to-maturity” securities at their respective economic values, assuming events progress exactly as expected. GAAP describes this valuation as amortized cost. It uses historical cost and the expected rate of return at the time of the security purchase.

The supporting rationale lies in the fact that the entity will hold the asset until its final maturity. As a result, temporary fluctuations in market value are not an issue.



## Example: Held-To-Maturity Securities

Assume on January 1, 2004, Rhody purchases \$1,000 of marketable securities for cash. The security is expected to return 8% per year. What is the journal entry Rhody must make to reflect the acquisition of the securities?



## Example: Held-To-Maturity Securities

The journal entry to record the purchase of the securities is:

Marketable securities - held to maturity	1,000	
Cash		1,000



## Example: Held-To-Maturity Securities

Assume on December 31, 2004, the market value of the securities is \$1,100. What is the journal entry that Rhody needs to make to reflect the change in the value of the securities?



## Example: Held-To-Maturity Securities

Regardless of the 12/31/04 market value, the security will be valued at its expected economic value of \$1,080 (i.e., \$1,000 X 1.08). The journal entry to record the increase in the value of the marketable securities is:

Marketable securities - held to maturity securities	80	
Interest revenue		80

**Note:** For held-to-maturity securities, the balance sheet will only by chance reflect the market value of the security.



## Recap: Marketable Securities

We have seen that GAAP's treatment of marketable securities ranges from duplicating economic valuation (i.e., trading securities) to historical cost valuation (i.e., held-to-maturity securities), with available-for-sale securities falling between these extremes. Although the balance sheet presentation of available-for-sale securities parallels “market-to-market,” unrealized gains and losses are NOT included in the income statement. Only increases (decreases) in marketable securities classified as trading securities are reflected in the income statement.



## Comprehensive Income

GAAP's inconsistency is not isolated to marketable securities. Its treatment of other accounting issues is akin to the aforementioned available-for-sale securities. As a result, an additional accounting statement has been introduced that is more in line with economics, the Statement of Comprehensive Income. This statement is either shown as part or with the income statement (Merck) or as part of stockholders' equity (Pfizer).



## Comprehensive Income

Briefly, this statement adjusts an entity's net income for items that "by-pass" the income statements, such as:

- Foreign currency translations,
- Net unrealized holding gains/losses related to available-for-sale securities, and
- Adjustments for policyholder liabilities



## Quick (Acid-Test ) Ratio

The current ratio is often supplemented with the quick ratio (acid-test) to measure a company's immediate short-term ability to pay obligations

$$\text{Quick Ratio} = \frac{\text{Cash} + \text{Marketable Securities} + \text{Net Receivables}}{\text{Current Liabilities}}$$



## Quick Ratio

While an ideal current ratio is 2 to 1 (\$2 of current assets for every \$1 of current liabilities) and an adequate current ratio is 1.50 to 1, an ideal quick ratio is 1.50 to 1, with an acceptable quick ratio being 1.25 to 1. A ratio less than this indicates a potential cash flow problem that will require the company to secure short-term financing. This additional debt will only exacerbate the problem. In addition, debt requires the payment of interest, which, while tax deductible, lowers net income.

