



This is “In a Set of Financial Statements, What Information Is Conveyed about Shareholders’ Equity?”, chapter 16 from the book [Business Accounting \(index.html\)](#) (v. 2.0).

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## Chapter 16

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### **In a Set of Financial Statements, What Information Is Conveyed about Shareholders' Equity?**

#### **Video Clip**

[\(click to see video\)](#)

*In this video, Professor Joe Hoyle introduces the essential points covered in [Chapter 16 "In a Set of Financial Statements, What Information Is Conveyed about Shareholders' Equity?"](#).*

## 16.1 Selecting a Legal Form for a Business

### LEARNING OBJECTIVES

At the end of this section students should be able to meet the following objectives:

1. Describe the three primary legal forms available for a business in the United States.
2. Discuss the advantages and disadvantages of incorporating a business rather than maintaining it as a sole proprietorship or partnership.
3. Explain the double taxation that is inherent in operating a corporate organization.
4. Describe the impact that issuing capital stock has on a corporation.

### Creating a Corporation

*Question: In the United States, businesses and other organizations must operate as one of three legal forms. Over the decades, a number of variations of these legal forms have been allowed, each with its own particular characteristics. For example, limited liability companies (LLC) and limited liability partnerships (LLP) are hybrids that exhibit characteristics of both partnerships and corporations and are permitted to exist in certain states. A **proprietorship**<sup>1</sup> has a single owner whereas a **partnership**<sup>2</sup> is started and owned by two or more parties. In both of these cases, establishing the business is often an unstructured process. For example, a partnership can be created by a mere handshake or other informal agreement.*

1. A business created, owned, and operated by a single individual; business is not legally separate from its owner; it is also referred to as a sole proprietorship.
2. An unincorporated business created, owned, and operated by more than one individual; the business is not legally separate from its owners.
3. An organization that has been formally recognized by the state government as a separate legal entity so that it can sell ownership shares to raise money for capital expenditures and operations.

*The third legal form of organization is a **corporation**<sup>3</sup>, which is brought into existence by means of a formal request made to a state government. Incorporation creates a separate entity, one that is owned by a group of stockholders. The number of owners is usually not relevant in the operation of a corporation. Because corporations are the dominant legal form (at least monetarily) in the United States, they have been the primary emphasis throughout this text. Numerically, more proprietorships and partnerships do exist but virtually every business of any size operates as a corporation. How is a corporation established, and what characteristics make it attractive?*

Answer: Organizers only need to satisfy the incorporation process in one state regardless of their entity's size. To start, they submit articles of incorporation to that government along with any other necessary information. A list of the typical contents of the articles of incorporation can be found at "Articles of Incorporation," [http://en.wikipedia.org/wiki/Articles\\_of\\_Incorporation](http://en.wikipedia.org/wiki/Articles_of_Incorporation). Rules, regulations, and requirements vary significantly so that these procedures are more complicated in some states than others. For example, many well-known businesses are incorporated in Delaware because of the traditional ease of the laws in that state.

After necessary documents have been filed and all other requirements met, the state government issues a corporate charter that recognizes the organization as a legal entity separate from its owners. This separation of the business from its owners is what differentiates a corporation from a partnership or proprietorship. Following incorporation in one state, the entity is then allowed to operate in any other state.

As mentioned in an earlier chapter, ownership of a corporation is physically represented by shares of stock that are issued to raise funds. In general, these shares are referred to as capital stock and the owners as shareholders or stockholders. For example, by December 31, 2010, **Nucor Corporation** had issued approximately 375 million of these shares to its stockholders. Unless restricted contractually, capital stock can be exchanged freely. After being issued by a corporation, shares can be resold dozens or even hundreds of times. Operations are usually unaffected by these ownership changes. Information about the current market price of most stocks as well as considerable other information about thousands of businesses can be found at sites such as <http://www.google.com/finance> and <http://www.yahoo.com/finance>.

Thus, a corporation is able to continue in existence even after owners die or decide to switch to other investments. In partnerships and proprietorships, capital stock does not exist. Consequently, transfer of an ownership interest is much more complicated. Partnerships and proprietorships often operate only for as long as the original owners are willing and able to continue being actively involved.

As a result of the legal separation of ownership and business, shareholders have no personal liability for the debts of the corporation. When money is loaned to a corporation, especially one that is either new or small, the lender might require the owners to guarantee the debt personally. Unless such a guarantee is made, the debt is that of the corporation and not the members of the ownership. An owner of a share of **Nucor Corporation** is not responsible for any of the liabilities of that company. Thus, the maximum loss a shareholder can suffer is the amount contributed to the corporation (or paid to a previous owner) in acquiring capital

stock. The **limited liability**<sup>4</sup> offered by a corporation is one of the primary reasons for its popularity.

In contrast, the owners of a partnership or proprietorship are liable personally for all business debts. No separation exists between the business and ownership. For example, a partner or proprietor could invest \$1,000 but wind up losing almost any amount of money if funds are borrowed by the business that cannot be repaid. Such potential losses are especially worrisome in a partnership because of the legal concept of **mutual agency**<sup>5</sup> where each partner serves as an agent for the entire organization. Thus, a partner can obligate the partnership and, if the debt is not paid when due, the creditor can seek redress from any partner. This possibility of unlimited losses typically restricts the number of potential investors because most people have a strong preference for being able to quantify the amount of risk they face.

## The Double Taxation of Corporations

*Question: Ownership shares of most corporations can be transferred. Thus, the life of an incorporated business can extend indefinitely as one owner leaves and another arrives. Caswell-Massey Co. is a perfect example. It has been in operation now for over 250 years. According to the corporate Web site (<http://www.caswellmassey.com/about/about.aspx>), "Before there was the United States of America, there was Caswell-Massey, the original purveyor of the finest personal care products and accessories and America's oldest operating retailer. The company was founded in Newport, Rhode Island, by Scottish-born Dr. William Hunter in 1752."*

*Investors are able to move into and out of corporate investments quickly. In addition, the availability of limited liability restricts potential losses to the amounts invested. These characteristics help explain the immense popularity of the corporate form in the United States. However, a significant number of partnerships and proprietorships continue to be created each year. If no problems existed, incorporation would be the only practical option. What disadvantages are associated with the corporation form?*

*Answer: Incorporation is often a time-consuming and costly legal process. However, in most states, proprietorships and partnerships can be created informally with little effort. Owners of many small businesses may feel that the creation of a corporation is more trouble than it is worth. Furthermore, corporations are often more susceptible to a plethora of government regulations.*

4. A legal characteristic associated with the ownership of a corporation whereby the maximum amount of money that can be lost is the owner's capital investment; an attribute of a corporation that does not exist with the ownership of proprietorships or partnerships.

5. A characteristic of a partnership whereby any partner can obligate other partners to an agreement without their direct consent; does not have a parallel in corporate ownership.

The most obvious problem associated with corporations is the **double taxation**<sup>6</sup> of income. As noted, proprietorships and partnerships are not deemed to be separate entities. Therefore, the owners (but not the business) must pay a tax when any income is generated. However, the income is taxed only that one time when earned by the business.

For a proprietorship, Form 1040 Schedule C is an income statement attached to the owner's individual income tax return to include the business's profit or loss. A partnership does file its own tax return on Form 1065, but that is merely for information purposes; no income tax is paid. Instead, the various business revenues and expenses are assigned to the partners for inclusion on their individual tax returns. Any eventual conveyance of this income from the business to the owner does not create a second tax.

In contrast, as separate legal entities, corporations pay their own taxes by reporting all taxable income on Form 1120. Tax rules do allow smaller corporations to file their income taxes as S corporations if certain guidelines are met. S corporations follow virtually the same tax rules as partnerships so that income is only taxed one time when initially earned. However, when any dividends are eventually distributed from those earnings, this transfer is also viewed as taxable income to the stockholders. Income is taxed once when earned by the corporation and again when distributed to the owners. Critics have long argued that the conveyance of the dividend is not a new earning process. To mitigate the impact of this second tax, the U. S. Congress has established a maximum tax rate of 15 percent on much of the dividend income collected by individuals. This rate is considerably lower than that applied to most other types of income (such as salaries). Whether that reduced tax rate for dividends should continue at 15 percent or be raised or lowered is the subject of intense political debate.

To illustrate, assume that income tax rates are 30 percent except for the 15 percent tax on dividends. A proprietorship (or partnership) earns a profit of \$100. For this type business, the \$100 is only taxable to the owner or owners when earned. Payment of the resulting \$30 income tax ( $\$100 \times 30$  percent) leaves \$70 as the remaining disposal income. Any distribution of this money to an owner has no impact on taxes. The government has collected \$30.

6. A negative feature associated with the corporate form; corporate earnings are taxed when earned by the business and then taxed again when distributed to owners in the form of dividends.

If a corporation reports income of \$100, a tax of \$30 is assessed to the business so that only \$70 remains. This residual amount can then be conveyed to owners as a dividend. However, if distributed, another tax must be paid, this time by the stockholder. The second income tax is \$70 times 15 percent, or \$10.50. The owner is left with only \$59.50 (\$70.00 less \$10.50) in disposal income. The government has collected a total of \$40.50 (\$30.00 plus \$10.50). The increase in the amount taken by

the government is significant enough to reduce the inclination of many owners to incorporate their businesses.

### TEST YOURSELF

Question:

James Erskine and Pamela White are starting a new business. They are trying to determine whether to go to the trouble of incorporating or simply shake hands to form a partnership. Which of the following is a reason to create a partnership?

- a. Partnerships can raise large amounts of money more easily than corporations.
- b. Partnerships offer limited liability for their owners.
- c. Partnerships are not subject to double taxation of income.
- d. Partnerships are more likely to have a continuous life than a corporation.

Answer:

The correct answer is choice c: Partnerships are not subject to double taxation of income.

Explanation:

Because ownership of a corporation is viewed as separate from the business, capital shares can be issued to raise money—often large sums. These shares allow frequent changes in ownership that provides an easy way for a business to exist beyond the life of the original owners. Corporations provide only limited liability for their owners, a major reason for their popularity. However, partnerships are not subject to the same double taxation effect as corporations. The owners save money.

### KEY TAKEAWAY

Legally, businesses can be created to function as corporations, partnerships, or sole proprietorships. Corporations are formed by meeting the legal requirements of an individual state. In contrast, partnerships and proprietorships can be started with little formal activity. A corporation differs from these other two forms because it is an entity legally separate from its ownership. Because of that separation, the maximum possible loss for the stockholders in a corporation is limited to the amount invested. Without that separation, owners of a partnership or proprietorship face the risk of unlimited liability. Ownership shares of a corporation (capital stock) are issued to raise money for operations and growth. In many cases, these shares can be readily sold by one owner to the next, often on a stock exchange. The ability to buy and sell capital shares enables a corporation to raise funds and have a continuous life. Disadvantages associated with the corporate form include the cost and difficulty of incorporation and government regulation. The double taxation of corporate income (which is not found with partnerships and sole proprietorships) is often the biggest drawback to incorporation. This second tax effect results because dividends are taxed to the recipients, although a reduced rate is often applied.



## 16.2 The Issuance of Common Stock

### LEARNING OBJECTIVES

At the end of this section students should be able to meet the following objectives:

1. Identify the legal rights normally held by the owners of a corporation's common stock.
2. Describe the responsibilities of a board of directors.
3. Explain the terms "authorized," "outstanding," "issued," and "par value" in relation to common stock.
4. Record the issuance of common stock for cash.
5. Record the issuance of common stock for a service or for an asset other than cash.

### Common Stock

*Question: Several accounts frequently appear in the shareholders' equity section of a balance sheet reported by a corporation. Each has its own particular meaning. For example, as of January 1, 2011, the Kellogg Company reported the information shown in [Figure 16.1](#) "Shareholders' Equity—Kellogg Company as of January 1, 2011" (all numbers in millions).*

Figure 16.1 *Shareholders' Equity—Kellogg Company as of January 1, 2011*

|  |                |
|--|----------------|
| Common stock, \$0.25 par value, 1,000,000,000 shares authorized; Issued: 419,272,027 in 2010 | \$105          |
| Capital in excess of par value   | 495            |
| Retained earnings  | 6,122          |
| Treasury stock at cost; 53,667,635 shares  | (2,650)        |
| Accumulated other comprehensive income (loss)  | <u>(1,914)</u> |
| Total Kellogg Company equity   | <u>\$2,158</u> |

*Some of the terms shown in [Figure 16.1](#) "Shareholders' Equity—Kellogg Company as of January 1, 2011" have been examined previously, others have not.*

- For example, “retained earnings” was described in earlier chapters as the increase in net assets generated as net income over the life of a business less any amounts distributed as dividends during that same period.
- In the earlier discussion of investments in available for sale securities, “accumulated other comprehensive income” was introduced because this balance sheet category reflected unrealized changes in fair value. For those investments, gains and losses caused by the rise and fall of stock prices are not included within net income. Rather, they are reported within this section of stockholders' equity.

**Common stock**<sup>7</sup> has also been mentioned in connection with the capital contributed to a corporation by its owners. As can be seen in Figure 16.1 "Shareholders' Equity—Kellogg Company as of January 1, 2011", Kellogg communicates additional information about its common stock such as the number of authorized and issued shares as well as par value. What is common stock? Answering this question seems a logical first step in analyzing the information provided by a company about its capital shares.

Answer: Common stock represents the basic ownership of a corporation. One survey found that common stock is the only type of capital stock issued by approximately 90 percent of corporations. Matthew Calderisi, senior editor, *Accounting Trends & Techniques*, 63rd edition (New York: American Institute of Certified Public Accountants, 2009), 299. Obtaining shares of a company's common stock provides several distinct rights. However, the specific rights are set by the laws of the state of incorporation and do vary a bit from state to state, although the following are typical. Although the **Kellogg Company** has its headquarters in Battle Creek, Michigan, the company is incorporated in the state of Delaware. Thus, the laws of Delaware set the rights of the common stock shares for this company.

7. A type of capital stock that is issued by every corporation; it provides rights to the owner that are specified by the laws of the state in which the organization is incorporated.
8. A group that oversees the management of a corporation; the members are voted to this position by stockholders; it hires the management to run the company on a daily basis and then meets periodically to review operating, investing, and financing results and also to approve policy and strategy.

- Based on state laws and the corporation's own rules, the owners of common stock are allowed to vote on a few specified issues. By far the most prevalent is the election of the **board of directors**<sup>8</sup>. As mentioned previously, these individuals represent the ownership of the corporation in overseeing the management. The board of directors meets periodically (annually, quarterly, or as necessary) to review the financial results as well as the future plans and operating strategy developed by management. The board provides guidance and changes where necessary. A list of the individuals (often ten to twenty-five) who serve in this capacity is typically included in a corporation's annual report, often just after the financial statements.

- The responsibilities of the board of directors can vary rather significantly from company to company. Some boards do little whereas others are heavily involved in policy making. For example, a note to the financial statements of **Starbucks Corporation** explained, “We may repurchase shares of **Starbucks** common stock under a program authorized by our Board of Directors.” Apparently, approval of this particular program fell within the designated responsibilities of the **Starbucks** board.
- One of the most important decisions for any board of directors is the declaration of dividends. Management cannot pay dividends to shareholders without specific approval by the board. Dividends cause the company (and specifically its cash balances) to get smaller so careful consideration of the impact must be made before declaration is approved. Stockholders like to receive dividends but do not want the company’s future to be imperiled as the size shrinks.
- If dividends are paid on common stock, all stockholders share in them proportionally. Although dividends are never guaranteed, the owners must be treated fairly if dividends are distributed. An owner who holds 12 percent of the outstanding common stock is entitled to 12 percent of any dividends paid on common stock. The board of directors cannot reward some common shareholders while ignoring others.
- Should the company ever be liquidated, the common stock shareholders are entitled to share proportionally in any assets that remain after all liabilities and other claims are settled. Unfortunately, most liquidations result from a severe financial crisis so that holding assets at the end of the process is rare.

### Capital Stock Terminology

*Question: “Authorized,” “issued,” “outstanding,” and “par value” are terms mentioned by the Kellogg Company in Figure 16.1 “Shareholders’ Equity—Kellogg Company as of January 1, 2011” in describing its ownership shares. What terms are associated with capital stock and what do each of them mean?*

Answer:

9. The maximum number of shares that a corporation can issue based on the articles of incorporation approved by the state government at the time of incorporation.

**Authorized**<sup>9</sup>. In applying to the state government as part of the initial incorporation process, company officials indicate the maximum number of capital shares they want to be allowed to issue. This approved limit is the authorized total. Corporations often set this figure so high that they never have to worry about

reaching it. However, states normally permit authorization levels to be raised if necessary.

**Issued**<sup>10</sup>. The number of issued shares is simply the quantity that has been sold or otherwise conveyed to owners. According to Figure 16.1 "Shareholders' Equity—Kellogg Company as of January 1, 2011", **Kellogg** reports that the state of Delaware authorized one billion shares of common stock, but only about 419 million have actually been issued to stockholders as of the balance sheet date. The remaining unissued shares are still available if the company needs to raise money in the future by selling additional capital stock.

**Outstanding**<sup>11</sup>. The total amount of stock currently in the hands of the public is referred to as the shares "outstanding." Shares are often bought back by a corporation from its stockholders and recorded as treasury stock. Thus, originally issued shares are not always still outstanding. According to the information provided, **Kellogg** has acquired nearly 54 million treasury shares. Thus, on the balance sheet date, the company has roughly 365 million shares of common stock outstanding in the hands of its stockholders (419 million issued less 54 million treasury shares). This number is quite important because it serves as the basis for dividend payments as well as any votes taken of the stockholders.

**Par value**<sup>12</sup>. The most mysterious term on a set of financial statements might well be "par value." Decades ago, the requirement was established in many states that a par value had to be set in connection with the issuance of capital stock. This par value is printed on the face of each stock certificate and indicates (depending on state law) the minimum amount of money that owners must legally leave in the business. By requiring a par value to be specified, lawmakers hoped to prevent the declaration of a cash dividend that was so large it would bankrupt the company, leaving creditors with no chance of repayment. The owners had to leave the set par value in the company.

Traditionally, companies have gotten around this limitation by setting the par value at an extremely low number. Many other laws have been passed over the years that have been much more effective at protecting both creditors and stockholders. For example, **Kellogg** discloses a par value of \$0.25 for its common stock, which is actually quite high. Many companies report par values that fall between a penny and a nickel. The April 30, 2011, balance sheet for **Barnes & Noble** shows a par value for its common stock of one-tenth of a penny.

10. The number of shares of a corporation that have been sold or conveyed to owners.
11. The number of shares of a corporation that are currently in the hands of the public; it is the shares that have been issued since operations first began less any treasury shares repurchased and still held by the corporation.
12. A number printed on a stock certificate to indicate the minimum amount of money owners must legally leave in the business; it is generally set at a low amount to avoid legal complications.

## TEST YOURSELF

Question:

Several years ago the Catawba Corporation was incorporated. The company was authorized to issue ten million shares of \$0.02 par value common stock. Currently, eight million shares remain unissued. In addition, the company is holding 25,000 treasury shares. How many shares are issued and how many shares are outstanding, respectively, for Catawba Corporation?

- a. Issued—18,000,000, Outstanding—1,975,000
- b. Issued—10,000,000, Outstanding—2,000,000
- c. Issued—2,000,000, Outstanding—2,025,000
- d. Issued—2,000,000, Outstanding—1,975,000

Answer:

The correct answer is choice d: Issued—2,000,000, Outstanding—1,975,000.

Explanation:

The Catawba Corporation was authorized to issue ten million shares but still has eight million shares unissued. Apparently, two million have been issued to date. However, 25,000 of these shares were bought back from stockholders as treasury stock. Thus, only 1,975,000 shares are outstanding (in the hands of the stockholders) at the current time.

### Reporting the Issuance of Common Stock

*Question: Over the years, one residual accounting effect has remained from the legal requirement to include a par value on stock certificates. This figure continues to be used in reporting the issuance of capital stock. Thus, if Kellogg sells one share for cash of \$46.00 (the approximate value on the New York Stock Exchange during the fall of 2011), the common stock account is increased but only by its \$0.25 par value. Kellogg receives \$46.00 but the par value is \$0.25. How can this journal entry balance? How does a company report the issuance of a share of common stock for more than par value?*

Answer: A potential stockholder contributes assets to a company to obtain an ownership interest. In accounting, this conveyance is not viewed as an exchange. It is fundamentally different than selling inventory or a piece of land to an outside party. Instead, the contribution of monetary capital is an expansion of both the company and its ownership. As a result, no gain, loss, or other income effect is ever reported by an organization as a result of transactions occurring in its own stock. An investor is merely transferring assets to a corporation to be allowed to join the ownership.

Consequently, a second shareholders' equity balance is created to report the amount received from owners above par value. As shown in [Figure 16.1 "Shareholders' Equity—Kellogg Company as of January 1, 2011"](#), Kellogg uses the title **capital in excess of par value**<sup>13</sup> but a number of other terms are frequently encountered in practice such as "additional paid-in capital." Therefore, Kellogg records the issuance of a share of \$0.25 par value common stock for \$46 in cash as shown in [Figure 16.2 "Issuance of a Share of Common Stock for Cash"](#). A few states allow companies to issue stock without a par value. In that situation, the entire amount received is entered in the common stock account.

Figure 16.2 Issuance of a Share of Common Stock for Cash

|                                |       |       |
|--------------------------------|-------|-------|
| Cash                           | 46.00 |       |
| Common stock (par value)       |       | .25   |
| Capital in excess of par value |       | 45.75 |

On a balance sheet, within the stockholders' equity section, the amount owners put into a corporation when they originally bought stock is the summation of the common stock and capital in excess of par value accounts. This total reflects the assets conveyed to the business to gain capital stock. For Kellogg, this figure is \$600 million as shown in [Figure 16.3 "Kellogg Common Stock and Capital in Excess of Par Value, January 1, 2011"](#). That is the amount of assets received by this company from its owners since operations first began.

As mentioned in a previous chapter, the sales of capital stock that occur on the New York Stock Exchange or other stock markets are between two investors and have no direct effect on the company. Those transactions simply create a change in the ownership.

13. A figure that represents the amount received by a corporation from the original issuance of capital stock that is above the par value listed on the stock certificate; it is also referred to as additional paid in capital.

Figure 16.3 Kellogg Common Stock and Capital in Excess of Par Value, January 1, 2011

|                                |                      |
|--------------------------------|----------------------|
| Common Stock                   | \$105 million        |
| Capital in Excess of Par Value | \$495 million        |
| Total Contributed Capital      | <u>\$600 million</u> |

### TEST YOURSELF

Question:

When incorporated by the state of Nebraska, Stan Company was authorized to issue ten million shares of common stock with a \$0.10 par value. At first, one million shares were issued for \$5 per share. Later, another four million were issued at \$6 per share. What is the amount to be reported as the capital in excess of par value and also as the total of contributed capital?

- Capital in Excess of Par Value—\$500,000, Contributed Capital—\$1,000,000
- Capital in Excess of Par Value—\$28,500,000, Contributed Capital—\$29,000,000
- Capital in Excess of Par Value—\$28,800,000, Contributed Capital—\$30,000,000
- Capital in Excess of Par Value—\$29,000,000, Contributed Capital—\$30,000,000

Answer:

The correct answer is choice b: Capital in Excess of Par Value—\$28,500,000, Contributed Capital—\$29,000,000.

Explanation:

Stan issued one million shares for \$5 each for contributed capital of \$5 million. The corporation then issued four million more shares for \$6 each or a total of \$24 million. Total contributed capital is \$29 million (\$5 million plus \$24 million). Common stock is recorded at the par value of these shares or \$500,000 (five million shares issued with a par value of \$0.10 each). The remaining \$28.5 million of the contribution (\$29 million less \$500,000) is reported as capital in excess of par value.

## Issuing Common Stock in Noncash Exchanges

*Question: Common stock is sometimes issued in exchange for property or personal services rather than for cash. Such capital contributions are especially prevalent when a small corporation is first getting started. Potential owners may hold land, buildings, machinery, or other assets needed by the business. Or, an accountant, attorney, engineer, or the like might be willing to provide expert services and take payment in stock. This arrangement can be especially helpful if the business is attempting to conserve cash. What recording is made if common stock is issued for a service or an asset other than cash?*

Answer: The issuance of stock for a service or asset is not technically a trade. As mentioned earlier, the issuance of capital stock is not viewed as a trade by the corporation because it merely increases the number of capital shares outstanding. It is an expansion of both the company and its ownership. That is different than, for example, giving up an asset such as a truck in exchange for a computer or some other type of property. But merely an expansion of the ownership. However, the accounting rules are the same. The asset or the service received by the corporation is recorded at the fair value of the capital stock surrendered. That figure is the equivalent of historical cost. It reflects the sacrifice made by the business to obtain the asset or service. However, if the fair value of the shares of stock is not available (which is often the case for both new and small corporations), the fair value of the property or services received becomes the basis for reporting.

To illustrate, assume that a potential investor is willing to convey land with a fair value of \$125,000 to the Maine Company in exchange for an ownership interest. During negotiations, officials for Maine offer to issue ten thousand shares of \$1 par value common stock for this property. The shares are currently selling on a stock exchange for \$12 each. The investor decides to accept this proposal rather than go to the trouble of trying to sell the land.

The "sacrifice" made by the Maine Company to acquire this land is \$120,000 ( $\$12$  per share  $\times$  10,000 shares). Those shares could have been sold to the public to raise that much money. Instead, Maine issues them directly in exchange for the land and records the transaction as shown in **Figure 16.4 "Issue Ten Thousand Shares of Common Stock Worth \$12 per Share for Land"**.



Figure 16.4 Issue Ten Thousand Shares of Common Stock Worth \$12 per Share for Land

|  |         |         |
|--|---------|---------|
| Land   | 120,000 |         |
| Common Stock (\$1 par value × 10,000 shares)             |         | 10,000  |
| Capital in Excess of Par Value (\$120,000 less \$10,000) |         | 110,000 |

If this stock was not selling on a stock exchange, fair value might not have been apparent. In that situation, the Maine Company recognizes the land at its own fair value of \$125,000 with an accompanying \$5,000 increase in the capital in excess of par value account.

### KEY TAKEAWAY

Common stock forms the basic ownership units of most corporations. The rights of the holders of common stock shares are set by state law but normally include voting for the board of directors, the group that oversees operations and guides future plans. Financial statements often disclose the number of authorized shares (the maximum allowed), issued shares (the number that have been sold), and outstanding shares (those currently in the hands of owners). Common stock usually has a par value although the meaning of this figure has faded in importance over the decades. Upon issuance, common stock is recorded at par value with any amount received above that balance reported in an account such as capital in excess of par value. If issued for a service or asset other than cash, the financial recording is based on the fair value of the shares surrendered. However, if a reasonable estimation of value is not available, the fair value of the asset or service is used.

## 16.3 Issuing and Accounting for Preferred Stock and Treasury Stock

### LEARNING OBJECTIVES

At the end of this section students should be able to meet the following objectives:

1. Explain the difference between preferred stock and common stock.
2. Discuss the distribution of dividends to preferred stockholders.
3. Record the issuance of preferred stock.
4. Provide reasons for a corporation to spend its money to reacquire its own capital stock as treasury stock.
5. Account for the purchase and resale of treasury stock when both gains and losses occur.

### Differentiating Preferred Stock from Common Stock

*Question: Some corporations also issue a second type of capital stock referred to as **preferred stock**<sup>14</sup>. Approximately 5–15 percent of the corporations in the United States have preferred stock outstanding but the practice is especially prevalent in certain industries. How is preferred stock different from common stock?*

*Answer: Preferred stock is another version of capital stock where the rights of those owners are set by the contractual terms of the stock certificate rather than state law. In effect, common stockholders voluntarily surrender one or more of their legal rights in hopes of enticing additional investors to contribute money to the corporation. For common stockholders, preferred stock is often another possible method of achieving financial leverage in a manner similar to using money raised from bonds and notes. If the resulting funds can be used to generate more profit than the dividends paid on the preferred stock, the residual income for the common stock will be higher.*

14. A capital stock issued by some companies that has one or more specified preferences over common shareholders, usually in the form of cash dividends.

The term “preferred stock” comes from the preference that is conveyed to these owners. They are being allowed to step in front of common stockholders when specified rights are applied. A wide variety of such benefits can be assigned to the holders of preferred shares, including additional voting rights, assured

representation on the board of directors, and the right to residual assets if the company ever liquidates.

By far the most typical preference is to cash dividends. As mentioned earlier in this chapter, all common stockholders are entitled to share proportionally in any dividend distributions. However, if a corporation issues preferred stock with a stipulated dividend, that amount must be paid before any money is conveyed to the owners of common stock. No dividend is ever guaranteed, not even one on preferred shares. A dividend is only legally required if declared by the board of directors. But, if declared, the preferred stock dividend normally must be paid before any common stock dividend. Common stock is often referred to as a residual ownership because these shareholders are entitled to all that remains after other claims have been settled including those of preferred stock.

The issuance of preferred stock is accounted for in the same way as common stock. Par value, though, often serves as the basis for stipulated dividend payments. Thus, the par value listed for a preferred share frequently approximates fair value. To illustrate, assume a corporation issues ten thousand shares of preferred stock. A \$100 per share par value is printed on each stock certificate. If the annual dividend is listed as 4 percent, cash of \$4 per year ( $\$100 \text{ par value} \times 4 \text{ percent}$ ) must be paid on preferred stock before any distribution is made on common stock.

If ten thousand shares of this preferred stock are each issued for \$101 in cash (\$1,010,000 in total), the company records the journal entry shown in [Figure 16.5](#) "[Issue Ten Thousand Shares of \\$100 Par Value Preferred Stock for \\$101 per Share](#)".

*Figure 16.5 Issue Ten Thousand Shares of \$100 Par Value Preferred Stock for \$101 per Share*

|                                |           |           |
|--------------------------------|-----------|-----------|
| Cash                           | 1,010,000 |           |
| Preferred Stock (Par Value)    |           | 1,000,000 |
| Capital in Excess of Par Value |           | 10,000    |

For recording purposes, companies often establish separate “capital in excess of par value” accounts—one for common stock and one for preferred stock. Those amounts are then frequently combined in reporting the balances within stockholders' equity.

## TEST YOURSELF

Question:

The Gatellan Company wants to acquire a building worth \$2 million from Alice Wilkinson. The company does not have sufficient cash and does not want to take out a loan so it offers to issue 90,000 shares of its \$1 par value common stock in exchange for the building. Wilkinson wants more assurance of receiving a dividend each year and asks for 18,000 shares of the company's \$100 par value preferred stock paying an annual dividend rate of 5 percent. Eventually, the parties come to an agreement and the Gatellan Company records capital in excess of par value of \$200,000. Which of the following happened?

- a. Gatellan issued the common stock but it had no known fair value.
- b. Gatellan issued the common stock and it had a \$20 per share fair value.
- c. Gatellan issued the preferred stock and it had no known fair value.
- d. Gatellan issued the preferred stock and it had a \$102 per share fair value.

Answer:

The correct answer is choice c: Gatellan issued the preferred stock and it had no known fair value.

Explanation:

In a, the asset is recorded at \$2 million, the stock is its \$90,000 par value, and the capital in excess is \$1.91 million. In b, the asset is recorded at \$1.8 million, the stock is its \$90,000 par value, and the capital in excess is \$1.71 million. In c, the asset is recorded at \$2 million, the stock is its \$1.8 million par value, and the capital in excess is \$200,000. In d, the asset is recorded at \$1,836,000, the stock is its \$1.8 million par value, and the capital in excess is \$36,000.

15. Issued shares of a corporation's own stock that have been reacquired; balance is shown within the stockholders' equity section of the balance sheet as a negative amount unless the shares are retired (removed from existence).

### The Acquisition of Treasury Stock

*Question: An account called **treasury stock**<sup>15</sup> is often found near the bottom of the shareholders' equity section of a balance sheet. Treasury stock represents issued shares of a corporation's own stock that have been reacquired. For example, the September 30, 2011,*

*balance sheet for Viacom Inc. reports a negative balance of over \$8.2 billion identified as treasury stock.*

*An earlier story in the Wall Street Journal indicated that Viacom had been buying and selling its own stock for a number of years: "The \$8 billion buyback program would enable the company to repurchase as much as 13 percent of its shares outstanding. The buyback follows a \$3 billion stock-purchase program announced in 2002, under which 40.7 million shares were purchased." Joe Flint, "Viacom Plans Stock Buy Back, Swings to Loss on Blockbuster," *The Wall Street Journal*, October 29, 2004, B-2.*

*Why does a company voluntarily give billions of dollars back to stockholders in order to repurchase its own stock? That is a huge amount of money leaving the company. Why not invest these funds in inventory, buildings, investments, research and development, and the like? Why does a corporation buy back its own shares as treasury stock?*

Answer: Numerous possible reasons exist to justify spending money to reacquire an entity's own stock. Several of these strategies are rather complicated and a more appropriate topic for an upper-level finance course. However, an overview of various ideas should be helpful in understanding the rationale for such transactions.

- As a reward for service, businesses often give shares of their stock to key employees or sell shares to them at a relatively low price. In some states, using unissued shares for such purposes is restricted legally. The same rules do not apply to shares that have been reacquired. Thus, some corporations acquire treasury shares to have available as needed for compensation purposes.
- Acquisition of treasury stock can be used as a tactic to push up the market price of a company's stock in order to please the remaining stockholders. Usually, a large scale repurchase (such as made by **Viacom**) indicates that management believes the stock is undervalued at its current market price. Buying treasury stock reduces the supply of shares in the market and, according to economic theory, forces the price to rise. In addition, because of the announcement of the repurchase, outside investors often rush in to buy the stock ahead of the expected price increase. The supply of shares is decreased while demand is increased. Stock price should go up. Not surprisingly, current stockholders often applaud a decision to buy treasury shares as they anticipate a jump in their investment values.

- Corporations can also repurchase shares of stock to reduce the risk of a hostile takeover. If another company threatens to buy sufficient shares to gain control, the board of directors of the target company must decide if acquisition is in the best interest of the stockholders. If the board of directors does agree to the purchase of the corporation by an outside party, the two sides then negotiate a price for the shares as well as any other terms of the acquisition. If not, the target might attempt to buy up shares of its own stock in hopes of reducing the number of owners in the market who are willing to sell their shares. Here, repurchase is a defensive strategy designed to make the takeover more difficult to accomplish. Plus, as mentioned previously, buying back treasury stock should drive the price up, making purchase more costly for the predator.

### Reporting the Purchase of Treasury Stock

*Question: To illustrate the financial reporting of treasury stock, assume that the Chauncey Company has been in business for over twenty years. During that time, the company has issued ten million shares of its \$1 par value common stock at an average price of \$3.50 per share. The company now reacquires three hundred thousand of these shares for \$4 each. How is the acquisition of treasury stock reported?*

*Answer: Under U.S. GAAP, several methods are allowed for reporting the purchase of treasury stock. Most companies use the cost method because of its simplicity. As shown in Figure 16.6 "Purchase of Three Hundred Thousand Shares of Treasury Stock at a Cost of \$4 Each", the acquisition of these shares is recorded by Chauncey at the \$1.2 million cost (300,000 shares at \$4 each) that was paid.*

*Figure 16.6 Purchase of Three Hundred Thousand Shares of Treasury Stock at a Cost of \$4 Each*

|                |           |           |
|----------------|-----------|-----------|
| Treasury Stock | 1,200,000 |           |
| Cash           |           | 1,200,000 |

Because the money spent on treasury stock represents assets that have left the business, this balance is shown within stockholders' equity as a negative, reflecting a decrease in net assets instead of an increase.

Except for possible legal distinctions, treasury stock held by a company is the equivalent of unissued stock. The shares do not receive dividends and have no voting privileges.

### Reporting the Reissuance of Treasury Stock above Cost

*Question: Treasury shares can be held by a corporation forever or eventually reissued at prices that might vary greatly from original cost. If sold for more than cost, is a gain recognized? If sold for less, is a loss reported? What is the impact on a corporation's financial statements if treasury stock shares are reissued?*

*To illustrate, assume that Chauncey Company subsequently sells one hundred thousand shares of its treasury stock (shown in [Figure 16.6 "Purchase of Three Hundred Thousand Shares of Treasury Stock at a Cost of \\$4 Each"](#)) for \$5.00 each. That is \$1.00 more than these shares had cost to reacquire. Is this excess reported by Chauncey as a gain on its income statement?*

Answer: As discussed previously, transactions in a corporation's own stock are considered expansions and contractions of the ownership and never impact reported net income. The buying and selling of capital stock are transactions viewed as fundamentally different from the buying and selling of assets such as inventory and land. Therefore, no gains and losses are recorded in connection with treasury stock. As shown in [Figure 16.7 "Sale of One Hundred Thousand Shares of Treasury Stock Costing \\$4 Each for \\$5 per Share"](#), an alternative reporting must be constructed.

*Figure 16.7 Sale of One Hundred Thousand Shares of Treasury Stock Costing \$4 Each for \$5 per Share*

|  |         |         |
|--|---------|---------|
| Cash                                     | 500,000 |         |
| Treasury Stock (Cost)                    |         | 400,000 |
| Capital in Excess of Cost—Treasury Stock |         | 100,000 |

The “capital in excess of cost-treasury stock” is the same type of account as the “capital in excess of par value” that was recorded in connection with the issuance of both common and preferred stocks. Within stockholders' equity, these individual accounts can be grouped into a single balance or reported separately.

## Reporting the Reissuance of Treasury Stock below Cost

*Question: The first group of treasury shares was reissued for more than cost. Assume that Chauncey subsequently sells another one hundred thousand of treasury shares, but this time for only \$2.60 each. The proceeds in this transaction are below the acquisition cost of \$4 per share. What recording is made if treasury stock is sold at the equivalent of a loss?*

Answer: Interestingly, the reissuance of treasury stock for an amount below cost is a transaction not well covered in U.S. GAAP. Authoritative rules fail to provide a definitive rule for reporting such reductions except that stockholders' equity is decreased with no direct impact recorded in net income. Absolute rules are not always available in U.S. GAAP.

The most common approach seems to be to first remove any capital in excess of cost recorded by the reissuance of earlier shares of treasury stock at above cost. If that balance is not large enough to absorb the entire reduction, a decrease is then made in retained earnings as shown in [Figure 16.8 "Sale of One Hundred Thousand Shares of Treasury Stock Costing \\$4 Each for \\$2.60 per Share"](#). The \$100,000 balance in capital in excess of cost-treasury stock was created in the previous reissuance illustrated in [Figure 16.7 "Sale of One Hundred Thousand Shares of Treasury Stock Costing \\$4 Each for \\$5 per Share"](#).

Figure 16.8 Sale of One Hundred Thousand Shares of Treasury Stock Costing \$4 Each for \$2.60 per Share

|  |         |         |
|--|---------|---------|
| Cash                                     | 260,000 |         |
| Capital in Excess of Cost—Treasury Stock | 100,000 |         |
| Retained Earnings                        | 40,000  |         |
| Treasury Stock (Cost)                    |         | 400,000 |

One outcome of this handling should be noted. In earlier chapters of this textbook, “retained earnings” was defined as a balance equal to all income reported over the life of a business less all dividend distributions to the owners. Apparently, this definition is not correct in every possible case. In [Figure 16.8 "Sale of One Hundred Thousand Shares of Treasury Stock Costing \\$4 Each for \\$2.60 per Share"](#), the retained earnings balance is also reduced as a result of a stock transaction where a loss occurred that could not otherwise be reported.



### TEST YOURSELF

Question:

Several years ago, Ashcroft Inc. issued 800,000 shares of \$2 par value stock for \$3 per share in cash. Early in the current year, Ashcroft repurchases 100,000 of these shares at \$8 per share. A month later, 40,000 of these treasury shares are sold back to the public at \$10 per share. What is the total impact on reported shareholders' equity of these transactions?

- a. \$1,920,000 increase
- b. \$2,000,000 increase
- c. \$2,280,000 increase
- d. \$2,420,000 increase

Answer:

The correct answer is choice b: \$2,000,000 increase.

Explanation:

The initial issuance of stock increases net assets by \$2.4 million (800,000 shares  $\times$  \$3). The purchase of treasury stock reduces net assets by \$800,000 (100,000 shares  $\times$  \$8). The reissuance of a portion of the treasury stock increases net assets by \$400,000 (40,000 shares  $\times$  \$10). The individual account balances have not been computed here but the overall increase in shareholders' equity is \$2 million (\$2.4 million less \$800,000 plus \$400,000).

## TEST YOURSELF

Question:

Several years ago, the Testani Corporation issued 800,000 shares of \$2 par value stock for \$3 per share in cash. Early in the current year, Testani repurchases 100,000 shares at \$8 per share. A month later, 40,000 of these shares are sold back to the public at \$10 per share. Several weeks later, after a drop in market price, 50,000 more shares of the treasury stock were reissued for \$5 per share. What is the overall impact on reported retained earnings of the reissuance of the 90,000 shares of treasury stock?

- a. No effect
- b. \$50,000 reduction
- c. \$70,000 reduction
- d. \$90,000 reduction

Answer:

The correct answer is choice c: \$70,000 reduction.

Explanation:

The first batch of 40,000 shares of treasury stock was sold at \$2 above cost, creating a capital in excess of cost account of \$80,000. The second batch of 50,000 shares was sold at \$3 below cost or \$150,000 in total. In recording this second reissuance, the \$80,000 capital in excess of cost is first removed entirely with the remaining \$70,000 shown as a decrease in retained earnings.

### KEY TAKEAWAY

A corporation can issue preferred stock as well as common stock. Preferred shares are given specific rights that come before those of common stockholders. Frequently, these rights involve the distribution of dividends. A set amount is often required to be paid before common stockholders can receive any dividends. After issuance, capital stock shares can be bought back by a company from its investors for a number of reasons. For example, repurchase might be carried out in hopes of boosting the stock price. These shares are usually reported at cost and referred to as treasury stock. In acquiring such shares, money flows out of the company so the account appears as a negative balance within stockholders' equity. When reissued above cost, the treasury stock account is reduced and capital in excess of cost is recognized. To record a loss, any previous capital in excess of cost balance is removed followed by a possible reduction in retained earnings. Net income is not impacted by a transaction in a company's own stock.

## 16.4 The Issuance of Cash and Stock Dividends

### LEARNING OBJECTIVES

At the end of this section students should be able to meet the following objectives:

1. Identify the various dates associated with a dividend distribution.
2. Prepare journal entries to report a cash dividend declaration and payment to stockholders.
3. Define the characteristics of a cumulative dividend.
4. Explain a company's rationale for issuing a stock dividend or stock split.
5. Record the issuance of a stock dividend

### Reporting Dividend Distributions

*Question: As stated in an early section of this textbook, a vast majority of investors purchase capital stock for only two reasons: price appreciation and dividend payments. Cash dividends and long-term capital gains (gains on the sale of certain investments that have been held for over one year) are especially appealing to individual investors because they are taxed at a lower rate than most other types of income.*

*Dividends represent the profits of a business that are being passed along to the owners. Because the corporation is effectively giving away assets, dividends require formal approval by the board of directors. This action is known as a dividend declaration. The board considers current cash balances as well as the projected needs of the business before deciding on the amount, if any, of a dividend payment. How does a corporation report the declaration and distribution of a cash dividend?*

*Answer: Dividends provide a meaningful signal to investors about the financial health of a business. Some corporations even boast about having paid a constant or rising annual dividend for many years. Unfortunately, a number of businesses have been forced recently to reduce or even eliminate their dividend distributions as a result of general economic difficulties. Such decisions typically lead to a drop in the market price of a corporation's stock because of the negative implications.*

Other businesses stress rapid growth and rarely, if ever, pay a cash dividend. The board of directors prefers that all profits remain in the business to stimulate future growth. For example, **Google Inc.** reported net income of \$4.2 billion (2008), \$6.5 billion (2009), and \$8.5 billion (2010) but paid no dividends in any of those years.

Chronologically, accounting for dividends involves several dates with approximately two to five weeks passing between each:

- The **date of declaration**<sup>16</sup>
- The **date of record**<sup>17</sup> (and the related ex-dividend date)
- The **date of payment**<sup>18</sup> (also known as the date of distribution)

To illustrate, assume that the Hurley Corporation has one million shares of authorized common stock. Since incorporation several years ago, three hundred thousand shares have been issued to the public but twenty thousand were recently bought back as treasury stock. Thus, 280,000 shares are presently outstanding, in the hands of investors. In the current year, Hurley earned a reported net income of \$780,000. After some deliberations, the board of directors votes to distribute a \$1.00 cash dividend to the owner of each share of common stock.

The day on which Hurley's board of directors formally decides on the payment of this dividend is known as the date of declaration. Legally, this action creates a liability for the company that must be recognized through the journal entry shown in **Figure 16.9 "\$1.00 per Share Dividend Declared by Board of Directors, 280,000 Shares Outstanding"**. Dividends are only paid on shares that are outstanding so the liability balance is \$280,000.

16. Date on which dividend payments are formally declared (approved) by the board of directors; it is the day on which a liability is recorded by the corporation.

17. Date on which stock must be held for a shareholder to be entitled to the receipt of a dividend; the date of record is specified by the board of directors when the dividend is declared.

18. Date on which a cash dividend is distributed to those shareholders who held a corporation's stock on the date of record; it is also known as the date of distribution.

*Figure 16.9 \$1.00 per Share Dividend Declared by Board of Directors, 280,000 Shares Outstanding*

|                   |         |         |
|-------------------|---------|---------|
| Retained Earnings | 280,000 |         |
| Dividends Payable |         | 280,000 |

As discussed previously, dividend distributions reduce the amount reported as retained earnings but have no impact on net income.

When the dividend is declared by the board, the date of record is also set. Only the shareholders who own the stock on that day qualify for receipt. The ex-dividend date is the first day on which an investor is not entitled to the dividend. Because receipt of the dividend has been lost, the market price of the stock typically drops

by approximately the amount of the dividend on the ex-dividend date (although myriad other market factors influence the movement of stock prices).

No journal entry is recorded by a corporation on either the date of record or the ex-dividend date because they do not represent an event or transaction. Those dates simply allow Hurley to identify the owners to whom the dividend will be paid.

On the date of payment, the corporation mails checks to the appropriate recipients. That is a simple event to record as shown in [Figure 16.10 "Payment of \\$1.00 per Share Cash Dividend"](#).

Figure 16.10 Payment of \$1.00 per Share Cash Dividend

|                   |         |         |
|-------------------|---------|---------|
| Dividends Payable | 280,000 |         |
| Cash              |         | 280,000 |

## Cumulative Preferred Stock

*Question: Assume that Wington Company issues 1,000 shares of \$100 par value preferred stock to an investor on January 1, Year One. The preferred stock certificate specifies an annual dividend rate of 8 percent. Thus, dividend payment to the owner is supposed to be \$8 per share each year ( $\$100 \times 8$  percent).*

*At the end of Year One, Wington faces a cash shortage and the board of directors chooses not to pay this dividend. Have the owners of the preferred shares lost the right to the Year One dividend? Must a corporation report a liability if a preferred stock dividend is not paid at the appointed time?*

*Answer: Preferred stock dividends are often identified on the stock certificate as **cumulative**<sup>19</sup>. This term indicates that any obligation for unpaid dividends on these shares must be met before dividends can be distributed to the owners of common stock. Cumulative dividends are referred to as “in arrears” when past due.*

19. Feature attached to most types of preferred stock so that any dividend payments that are omitted must still be paid before the holders of common stock receive any dividends.

*Thus, if the dividend on the preferred shares of Wington is cumulative, the \$8 per share is in arrears at the end of Year One. In the future, this (and any other) missed dividend will have to be paid before any distribution to the owners of common*

stock can be considered. Conversely, if a preferred stock is noncumulative, a missed dividend is simply lost to those owners. It has no impact on the future allocation of dividends between preferred and common shares.

The existence of a cumulative preferred stock dividend in arrears is information that must be disclosed through a note to the financial statements. However, the balance is not reported as a liability. Only dividends that have been formally declared by the board of directors are recorded through a journal entry.

### TEST YOURSELF

Question:

The Hansbrough Company has 20,000 shares outstanding of \$100 par value preferred stock with a 6 percent annual dividend rate. This company also has five million shares of \$1 par value common stock outstanding. No dividends at all were paid in either Year One or Year Two. Near the end of Year Three, a cash dividend of \$400,000 is scheduled to be distributed. If the preferred stock dividend is cumulative, how is this dividend allocated?

- a. Preferred—\$ 60,000, Common—\$340,000
- b. Preferred—\$120,000, Common—\$180,000
- c. Preferred—\$240,000, Common—\$160,000
- d. Preferred—\$360,000, Common—\$ 40,000

Answer:

The correct answer is choice d: Preferred—\$360,000, Common—\$ 40,000.

Explanation:

Owners of the preferred stock are entitled to \$6 per year ( $\$100 \text{ par value} \times 6 \text{ percent}$ ) or \$120,000 ( $\$6 \times 20,000 \text{ shares outstanding}$ ). Because the preferred stock dividend is cumulative, dividends for Years One and Two are settled first. After those distributions, another \$120,000 is paid for Year Three. A total of \$360,000 is conveyed to the preferred stockholders. The remaining \$40,000 dividend ( $\$400,000 \text{ less } \$360,000$ ) goes to the residual ownership, the holders of the common stock.

## TEST YOURSELF

Question:

The Singler Company has 20,000 shares outstanding of \$100 par value preferred stock with a 6 percent annual dividend rate. The company also has five million shares of \$1 par value common stock outstanding. No dividends at all were paid in either Year One or Year Two. Near the end of Year Three, a cash dividend of \$400,000 is scheduled to be distributed. If the preferred stock dividend is noncumulative, how is this dividend distributed?

- a. Preferred—\$60,000, Common—\$340,000
- b. Preferred—\$120,000, Common—\$280,000
- c. Preferred—\$240,000, Common—\$160,000
- d. Preferred—\$360,000, Common—\$ 40,000

Answer:

The correct answer is choice b: Preferred—\$120,000, Common—\$280,000.

Explanation:

The preferred stock dividend is noncumulative. Thus, the amounts that were missed during Years One and Two do not carry over into the future. Owners of the preferred stock are only entitled to receive a dividend distribution for the current period (\$120,000 or \$100 par value × 6 percent × 20,000 shares). The owners of the common stock receive the remainder of the dividend (\$280,000 or \$400,000 less \$120,000).

20. A division of each share of outstanding stock to increase the number of those shares; it is a method of reducing the market price of the stock; the process is carried out in hopes that a lower price will generate more market activity in the stock and, therefore, a faster rise in price.

21. A dividend distributed to shareholders by issuing additional shares of stock rather than cash; it increases the number of shares outstanding but each owners interest in the company stays the same; as with a stock split, it reduces the price of the stock in hopes of stimulating market interest.

## Distribution of Stock Dividends

*Question: A corporate press release issued by Ross Stores Inc. on November 17, 2011, informed the public that “its Board of Directors has approved a two-for-one **stock split**<sup>20</sup> to be paid in the form of a 100% **stock dividend**<sup>21</sup> on December 15, 2011 to stockholders of record as of November 29, 2011.”*

*Obviously, as shown by this press release, a corporation can distribute additional shares of its stock to shareholders instead of paying only cash dividends. These shares are issued as a stock dividend or a stock split. Although slightly different in a legal sense, most companies (such as Ross Stores) use the terms “stock dividend” and “stock split” interchangeably. As can be seen in this press release, the terms “stock dividend” and “stock split” have come to*



*be virtually interchangeable to the public. However, minor legal differences do exist that actually impact reporting. Par value is changed to create a stock split but not for a stock dividend. Interestingly, stock splits have no reportable impact on financial statements but stock dividends do. Therefore, only stock dividends will be described in this textbook. No assets are distributed in either scenario—just more shares of the company's own stock. Are stockholders better off when they receive additional shares of a company's stock in the form of a stock dividend?*

Answer: When a stock dividend (or stock split) is issued, the number of shares held by every investor increases but their percentage of the ownership stays the same. Their interest in the corporation remains proportionally unchanged. They have gained nothing.

To illustrate, assume that the Red Company reports net assets of \$5 million. Janis Samples owns one thousand of the ten thousand shares of this company's outstanding common stock. Thus, she holds a 10 percent interest (1,000 shares/10,000 shares) in a business with net assets of \$5 million.

The board of directors then declares and distributes a 4 percent stock dividend. For each one hundred shares that a stockholder possesses, Red Company issues an additional 4 shares (4 percent times one hundred). Therefore, four hundred new shares of Red's common stock are conveyed to the ownership as a whole (4 percent times ten thousand). This distribution raises the number of outstanding shares to 10,400. However, a stock dividend has no actual impact on the corporation. There are simply more shares outstanding. Nothing else has changed.

Janis Samples receives forty of these newly issued shares (4 percent times one thousand) so that her holdings have grown to 1,040 shares. After this stock dividend, she still owns 10 percent of the outstanding stock of Red Company (1,040/10,400), and the company still reports net assets of \$5 million. The investor's financial position has not improved. She has gained nothing as a result of the stock dividend.

Not surprisingly, investors make no journal entry in accounting for the receipt of a stock dividend. No change has taken place except for the number of shares held.

However, the corporation does make a journal entry to record the issuance of a stock dividend although distribution creates no impact on either assets or liabilities. The retained earnings balance is decreased by the fair value of the shares

issued while contributed capital (common stock and capital in excess of par value) is also increased by this same amount. Fair value is used here because the company could have issued those new shares for that amount of cash and then paid the money out as a dividend. Issuing a stock dividend creates the same overall impact.

One exception to this method of reporting is applied. According to U.S. GAAP, if a stock dividend is especially large (in excess of 20–25 percent of the outstanding shares), the change in retained earnings and contributed capital is recorded at par value rather than fair value. A stock dividend of between 20 and 25 percent can be recorded at either fair value or par value. When the number of shares issued becomes this large, fair value is no longer viewed as a reliable indicator of the financial effect of the distribution.

## TEST YOURSELF

Question:

The Hazelton Corporation has 600,000 shares outstanding of \$2 per share par value common stock that was issued for \$5 per share but currently trades on a stock market for \$9 per share. The board of directors opts to issue a 3 percent stock dividend. What will be the reported reduction in retained earnings as a result of this action?

- a. Zero
- b. \$36,000
- c. \$126,000
- d. \$162,000

Answer:

The correct answer is choice d: \$162,000.

Explanation:

As a small stock dividend (under 20–25 percent of the outstanding shares), retained earnings is decreased by the fair value of the shares issued while contributed capital goes up by the same amount. Hazelton issues 18,000 new shares (3 percent of 600,000) with a fair value of \$9 each or \$162,000 in total ( $18,000 \times \$9$ ). The par value is only \$36,000 ( $18,000 \times \$2$ ) with the difference recorded as capital in excess of par value. The journal entry to record this stock dividend is as follows.

Figure 16.11

|                                |         |         |
|--------------------------------|---------|---------|
| Retained Earnings              | 162,000 |         |
| Common Stock                   |         | 36,000  |
| Capital in Excess of Par Value |         | 126,000 |

## TEST YOURSELF

Question:

The Pitino Corporation has 600,000 shares outstanding of \$2 per share par value common stock that was issued for \$5 per share but currently trades for \$9 per share. The board of directors opts to issue a 60 percent stock dividend. What will be the reported reduction in retained earnings?

- a. \$360,000
- b. \$720,000
- c. \$2,520,000
- d. \$3,240,000

Answer:

The correct answer is choice b: \$720,000.

Explanation:

As a large stock dividend (over 20–25 percent of the outstanding shares), retained earnings is decreased by the par value of the shares issued while contributed capital goes up by the same amount. Pitino issues 360,000 new shares (60 percent of 600,000) with a par value of \$2 each or \$720,000 in total ( $360,000 \times \$2$ ). The journal entry to record this stock dividend is as follows.

Figure 16.12

|                   |         |         |
|-------------------|---------|---------|
| Retained Earnings | 720,000 |         |
| Common Stock      |         | 720,000 |

### Why Issue a Stock Dividend?

*Question: If no changes occur in the makeup of a corporation as the result of a stock dividend, why does a board of directors choose to issue one?*

**Answer:** The primary purpose served by a stock dividend (or a stock split) is a reduction in the market price of the corporation's capital stock. When the price of a

share rises to a relatively high level, fewer investors are willing to make purchases. At some point, market interest wanes. This reduction in demand will likely have a negative impact on the stock price. A growing business might find that a previously escalating trend in its market value has hit a plateau when the price of each share rises too high.

By issuing a large quantity of new shares (sometimes two to five times as many shares as were outstanding), the price falls, often precipitously. For example, an investor who held one hundred shares at a market price of \$120 per share (total value of \$12,000) might now own two hundred shares selling at \$60 per share or three hundred shares selling at \$40 per share (but with the same total market value of \$12,000). The stockholder's investment remains unchanged but, hopefully, the stock is now more attractive to potential investors at the lower price so that the level of active trading increases.

Stock dividends also provide owners with the possibility of other benefits. For example, cash dividend payments usually drop after a stock dividend but not always in proportion to the change in the number of outstanding shares. An owner might hold one hundred shares of common stock in a corporation that has paid \$1 per share as an annual cash dividend over the past few years (a total of \$100 per year). After a 2-for-1 stock dividend, this individual now owns two hundred shares. The board of directors might then choose to reduce the annual cash dividend to only \$0.60 per share so that future payments go up to \$120 per year (two hundred shares  $\times$  \$0.60 each). Such a benefit, though, is not guaranteed. The investors can merely hope that additional cash dividends will be received.

### KEY TAKEAWAY

Many corporations distribute cash dividends after a formal declaration is passed by the board of directors. Journal entries are required on both the date of declaration and the date of payment. The date of declaration and the ex-dividend date are important in identifying the owners entitled to receive the dividend but no transaction occurs. Hence, no recording is made on either of those dates. Preferred stock dividends are often cumulative so that any dividends in arrears must be paid before a common stock distribution can be made. Dividends in arrears are not recorded as liabilities until declared although note disclosure is needed. Stock dividends and stock splits are issued to reduce the market price of capital stock and keep potential investors interested in the possibility of acquiring ownership. A stock dividend is recorded as a reduction in retained earnings and an increase in contributed capital. However, stock dividends have no direct impact on the financial condition of either the company or its stockholders.

## 16.5 The Computation of Earnings per Share

### LEARNING OBJECTIVES

At the end of this section students should be able to meet the following objectives:

1. Compute and explain return on equity.
2. Discuss the reasons that earnings per share (EPS) figures are so closely watched by investors.
3. Calculate basic EPS with or without the existence of preferred stock.
4. Explain the relevance of the P/E ratio.
5. Identify the informational benefit provided by diluted EPS.

### The Calculation of Return on Equity

*Question: Throughout this textbook, various vital signs have been presented. They include ratios, numbers, percentages, and the like that are commonly studied by decision makers as an indication of current financial health and future prosperity. One common measure is **return on equity (ROE)**<sup>22</sup>. How does an interested party calculate the return on equity reported by a business?*

*Answer: Return on equity reflects the profitability of a business based on the size of the owners' claim to net assets. It is simply the reported net income divided by average stockholders' equity for the period.*

$$\text{return on equity} = \text{net income} / \text{average stockholders' equity}$$

For example, **PPG Industries Inc.** began 2010 with total stockholders' equity of \$3,922 million. Partly because of a large acquisition of treasury stock and the payment of a \$360 million cash dividend, the company ended that year with stockholders' equity of only \$3,833 million. For the year ended December 31, 2010, **PPG** reported net income of \$880 million for a return on equity of 22.7 percent.

$$\text{average stockholders' equity: } (\$3,922 \text{ million} + \$3,833 \text{ million}) / 2 = \$3,877.5 \text{ million}$$

$$\text{return on equity: } \$880 \text{ million} / \$3,877.5 \text{ million} = 22.7\%$$

22. Ratio computed to measure the profitable use of a business's resources; it is determined by dividing net income by average stockholders' equity for the period.

As with all such vital signs, the strength or weakness of PPG's 22.7 percent return on equity is difficult to evaluate in isolation. Comparison with other similar companies can be very helpful as is the trend for this particular company over time. For example, decision makers looking at PPG were likely to be particularly impressed with the 2010 return on equity after learning that the 2009 return on equity was 11.5 percent.

### Earnings per Share and the P/E Ratio

*Question: No single "vital sign" that is computed to help investors analyze a business and its financial health is more obsessively watched than earnings per share (EPS). Corporations even call press conferences to announce their latest EPS figures. According to U.S. GAAP, public companies are required to present EPS for each period that net income is reported. As just one example, Pfizer Inc. disclosed basic EPS of \$1.03 on its income statement for the year ended December 31, 2010. Why is the EPS reported by a corporation so closely monitored by the investment community?*

*Answer: The simple reason for the public fascination with EPS is that this number is generally considered to be linked to the market price of a company's capital stock. Therefore, constant and wide-scale speculation takes place about future EPS figures as a technique for forecasting future stock prices. If analysts merely predict an increase in EPS, this forecast alone can lead to a surge in the traded price of a company's shares.*

A **price-earnings ratio (P/E ratio)**<sup>23</sup> is even computed to help quantify this relationship. The P/E ratio is the current price of the stock divided by the latest EPS figure. It enables investors to anticipate movements in the price of a stock based on projections of earnings per share. If a company's P/E ratio is twenty and is expected to remain constant, then an increase in EPS of \$1 should lead to a \$20 rise in stock price.

Theories abound as to how P/E ratios should be used. Some investors only buy capital shares of companies with high P/E ratios. They believe the P/E ratio indicates businesses that the stock market has assessed as particularly strong with excellent future prospects. Other investors prefer companies with low P/E ratios because those stocks may well be undervalued by the market with more room for the price to grow.

23. A ratio computed by dividing the current market price of an entity's stock by the latest earnings per share balance; it is used to help predict future stock prices based on anticipated EPS figures.



Figure 16.13 As of November 23, 2011, the P/E ratio for Several Prominent Companies

|         |       |
|---------|-------|
| IBM     | 14.08 |
| MetLife | 5.27  |
| Pfizer  | 14.52 |
| Target  | 12.05 |

The ongoing debate as to whether EPS and the P/E ratio are over emphasized as investing tools is a controversy better left to upper-level finance courses. The fascination is certainly real regardless of whether the perceived benefits are as great as many decision makers believe.

### Calculating Earnings per Share

*Question: EPS is obviously a much analyzed number in a set of financial statements. How is EPS calculated?*

*Answer:* EPS is a common stock computation designed to measure operating results after all other claims have been satisfied. In simplest form, EPS (often referred to as **basic EPS**<sup>24</sup>) is the net income for the period divided by the weighted average number of outstanding shares of common stock. The computation allocates a company's income equally to each of its shares.

To illustrate, assume the Maris Company reports its most recent net income as \$700,000. If the company has a weighted average of 200,000 shares of common stock outstanding for this period of time, EPS is  $\$700,000/200,000$  or \$3.50 per share. Furthermore, if the market price of Maris Company stock is \$35, then the P/E ratio is  $35/3.50$ , or ten.

Because EPS only relates to common stock, this computation is altered slightly if any preferred stock shares are also outstanding. Preferred stock is normally entitled to a specified dividend before common stock has any claim. However, most preferred stocks get nothing other than that dividend. Therefore, in determining basic EPS, any preferred stock dividend must be removed to arrive at the portion of income that is attributed to the ownership of common stock.

24. A figure that must be reported by corporations that have their stock publicly traded; it is net income less preferred stock dividends divided by the weighted-average number of shares of common stock outstanding during the period.

#### *Basic EPS*

(net income – preferred stock dividend)/average number of common shares outstanding

### TEST YOURSELF

Question:

Daryl Corporation's net income for the current year is reported as \$450,000. Preferred stock dividends for the same period amount to \$10,000. On January 1, 100,000 shares of common stock were outstanding. On July 1, 20,000 additional shares of common stock were issued. What is Daryl's EPS?

- a. \$3.67
- b. \$4.00
- c. \$4.40
- d. \$4.50

Answer:

The correct answer is choice b: \$4.00.

Explanation:

The income attributed to common stock is \$440,000, the reported balance of \$450,000 less the \$10,000 preferred stock dividend. The weighted average number of outstanding common shares for this year was 110,000. The company had 100,000 shares of common stock outstanding during the first six months and 120,000 shares for the second six months.

Figure 16.14

|  |                |
|--|----------------|
| 100,000 for 6 months =                               | 600,000        |
| 120,000 for 6 months =                               | 720,000        |
| Total  | 1,320,000      |
| Average for the year: 1,320,000/12 months =          | 110,000 shares |
| Basic Earnings per share: \$440,000/110,000 shares = | \$4.00         |

## TEST YOURSELF

Question:

The latest income statement for the St. John Corporation reports net income of \$828,000. Preferred dividends for the period were \$30,000. On January 1, 200,000 shares of common stock were outstanding. However, on October 1, 40,000 shares of this common stock were repurchased as treasury stock. What is St. John's basic EPS?

- a. \$3.28
- b. \$3.78
- c. \$4.20
- d. \$4.73

Answer:

The correct answer is choice c: \$4.20.

Explanation:

The income attributed to common stock is \$798,000, the reported balance of \$828,000 for the period less the \$30,000 preferred stock dividend. The weighted average number of outstanding common shares for this year was 190,000. The company had 200,000 shares of common stock outstanding during the first nine months of the year but only 160,000 shares for the final three months (as a result of buying back the shares of treasury stock).

Figure 16.15

|  |                |
|--|----------------|
| 200,000 for 9 months =                               | 1,800,000      |
| 160,000 for 3 months =                               | 480,000        |
| Total  | 2,280,000      |
| Average for the year: 2,280,000/12 months =          | 190,000 shares |
| Basic Earnings per share: \$798,000/190,000 shares = | \$4.20         |

### Diluted Earnings per Share

*Question: For the year ended March 31, 2011, the McKesson Corporation reported basic EPS of \$4.65 per share. However, this company also reported a second figure, diluted EPS, which was*

*only \$4.57 per share. What is the meaning of diluted EPS? Why is diluted EPS also reported by some businesses along with basic EPS?*

Answer: All publicly traded companies must disclose basic EPS. Income reported for the period (after removal of any preferred stock dividends) is allocated evenly over the weighted average number of shares of outstanding common stock. Basic EPS is a mechanically derived figure based on the historically reported income and number of shares outstanding.

Many corporations also have other contractual obligations outstanding that could become common stock and, therefore, potentially affect this computation. Stock options, convertible bonds, and convertible preferred stock can each be exchanged in some manner for common stock shares. The decision to convert is usually up to the holder and out of the control of the company. If these conversions ever take place, the additional shares could cause EPS to drop—possibly by a significant amount. This potential reduction should be brought to the attention of investors.

**Diluted EPS**<sup>25</sup> serves as a warning to decision makers of the possible impact that the existence of convertibles can have on ownership. It provides a “worst case scenario” by setting up a hypothetical computation to give weight to the possibility of such conversions. Because of the complicated steps that are involved, the actual mechanical process is better left to an intermediate accounting course. However, an understanding of the purpose of reporting diluted EPS is worthwhile at the introductory level.

Stock options, convertible bonds, convertible preferred stocks, and the like could become common stock and reduce a company's reported EPS. Thus, U.S. GAAP requires that this possible impact is calculated and shown by the reporting of a lower diluted EPS. For the **McKesson Corporation**, if all other transactions stayed the same except that its convertible items were exchanged for common stock, basic EPS would fall from \$4.65 to \$4.57. That is the possible dilution that could be caused by the presence of items convertible into common stock. For an investor or potential investor, that is information of interest. Including this figure alerts decision makers to the possibility of such conversions and helps them quantify the potential impact.

25. Hypothetical computation that reduces basic earnings per share to reflect the possible decrease if outstanding convertible items are actually turned into common stock; it includes the potential impact of stock options, convertible bonds, convertible preferred stock, and the like to warn decision makers of the “worst case scenario” if those convertibles are ever turned into common stock.

### KEY TAKEAWAY

Return on equity (ROE) is a percentage often computed by financial analysts to help evaluate the profitability of a business. It is net income divided by the average stockholders' equity for that period of time. Likewise, the reporting of earnings per share (EPS) draws an especially wide circle of interest. EPS is considered by most decision makers who are looking at a particular business. Basic EPS must be reported by every publicly traded company for each year in which net income is reported. It is the net income for the period divided by the weighted average number of common stock shares outstanding. Because EPS is only determined for common stock, any preferred stock dividends must be removed from net income as a preliminary step in this computation. The resulting EPS figure is viewed as having a major impact on the movement of the company's stock price. The price-earnings (P/E) ratio even quantifies that effect. If a corporation also has items such as stock options or convertible bonds that can be turned into common stock, their conversion could potentially have an adverse impact on EPS. Thus, if a company has any convertibles outstanding, diluted EPS must also be reported to help investors understand the possible negative impact that might result from future conversions.

## Talking with a Real Investing Pro (Continued)

Following is a continuation of our interview with Kevin G. Burns.

*Question:* Investors in the United States seem to have an obsession about the reporting of earnings per share (EPS). Even slight movements in projected EPS figures can create significant swings in the market price of a company's stock. Do you think there is an overemphasis on EPS in the public's investing decisions? How closely do you pay attention to the EPS figures that are reported by the businesses that you are following?

*Kevin Burns:* This is a very good question. By now students should realize that accounting is really all about estimates. Although investors would like accounting to be objectively exact, reporting such estimates really requires an awful lot of subjectivity. For example, for many years, **General Electric** would almost always report EPS a penny or two above market expectations. This was quarter after quarter like clockwork. It got to the point where if the company didn't "beat" the estimates on the street by a penny or two, the market was disappointed. It is absurd to believe that this is meaningful. This is especially true when earnings can also be managed simply by delaying or speeding up a major transaction from one time period to another. I believe that EPS, although important, is not the ultimate piece of information that some investors seem to think. I am much more concerned about asset values, growth prospects, and what a company does with the cash it is able to generate.

## Video Clip

[\(click to see video\)](#)

*Professor Joe Hoyle talks about the five most important points in [Chapter 16 "In a Set of Financial Statements, What Information Is Conveyed about Shareholders' Equity?"](#).*

## 16.6 End-of-Chapter Exercises

## QUESTIONS

1. What are the three legal forms of business found in the United States?
2. Art Heyman and Jeff Mullins create a new business that they form as a partnership. Why might they have decided not to incorporate their business?
3. Hans Iverson forms a business that earns income of \$600,000 in the current year. He paid himself \$400,000 purely as a reward for ownership (not a salary). How are this income and this distribution taxed if the business is formed as a sole proprietorship? How are this income and this distribution taxed if the business is formed as a corporation?
4. Jack and Jill form a business by each contributing \$30,000 in cash. Jack then borrows \$1 million for the business from the local bank. Unfortunately, the money is lost through a series of bad investments. If this business is formed as a corporation, what is the impact of this loss on Jill? If this business is formed as a partnership, what is the impact of this loss on Jill?
5. Arthur C. Clarke bought one share of common stock in HAL Computing on the New York Stock Exchange. What rights does Clarke gain as a result of this ownership?
6. Wilson Beckett buys a share of common stock directly from Anston Corporation for \$13 in cash. Several weeks later, Beckett sells this share to Buddy O'Coron for \$22 in cash. What is the impact on Anston of each of these transactions?
7. The Amskan Corporation issues common stock to several investors. On the stock certificate, a par value of \$1.00 per share is listed. What is the significance of this par value figure?
8. Hogsdon Corporation was incorporated in the state of Delaware although its operations are carried out entirely in the state of Vermont. On its balance sheet, the company indicates that it has 300 million shares of common stock authorized, 188 million issued, and 174 million outstanding. What do each of these terms mean?
9. Company PR issues 1,000 shares of common stock with a \$2.00 per share par value to investors for cash of \$9.00 per share. What journal entry does the company record for this transaction?
10. Company PR issues 1,000 shares of common stock with a \$2.00 per share par value and a \$9.00 per share fair value to investors for a tract of land that has a fair value of \$10,000. What journal entry does the company record?
11. Over the years, the Boyer Corporation has issued thousands of shares of its common stock. It has also bought back some of these shares as treasury stock and then reissued them later. Under what conditions do these transactions affect the company's reported net income?



12. Mike Lewis and Warren Chapman each own 50 percent of the common stock of MLWc Corporation. Ron Wyskowski wants to become an owner, so he contributes \$50,000 in cash to the business for 1,000 shares of preferred stock. How might these preferred shares be different from the company's common stock? Why might the original owners have wanted to issue preferred shares rather than common shares to Wyskowski? Why might Wyskowski have wanted to acquire preferred shares rather than common shares?
13. The Vylon Corporation wants to buy enough shares of the Bitsey Corporation to gain control of its operations. Upon hearing this news, the board of directors of Bitsey immediately authorizes the purchase of 3 million shares of its common stock. Why is the company acquiring its own treasury stock?
14. The common stock of Orlent Corporation has been selling for approximately \$14 per share for the past year. Stockholders are upset that the stock price has not risen for such an extended period of time. On January 19 of the current year, the board of directors authorizes the purchase of 11 million share of the company's own stock. Why was this action most likely taken?
15. A press release issued by Mason-Williams Corporation provides the following information: "On March 17, the company's Board of Directors declared a \$0.60 per share cash dividend on the company's common stock to be paid to all owners on record as of March 29 with distribution on April 11." The company has 20 million shares authorized, 6 million shares issued, and 5 million shares outstanding. Make all journal entries for this cash dividend including the dates.
16. The CarlB Corporation has 30,000 shares of common stock issued and outstanding. It also has 2,000 shares of \$100 par value preferred stock issued and outstanding that pays an annual 4 percent cash dividend. The dividend is neither declared nor paid in Year One. What reporting is necessary on the Year One financial statements if this preferred stock dividend is cumulative? What reporting is necessary on the Year One financial statements if this preferred stock dividend is noncumulative?
17. The MWF Corporation has 40,000 shares of common stock issued and outstanding. It also has 5,000 shares of \$100 par value preferred stock issued and outstanding that pays an annual 6 percent cumulative cash dividend. No cash dividends are declared or paid in Year One but an \$80,000 cash dividend is declared and paid in Year Two. How much of this cash will each share of common stock receive in Year Two?
18. A company has 100,000 shares outstanding at January 2, Year One. The company reports assets of \$1.4 million and liabilities of \$500,000. The company's stock is selling for \$20 per share just before it issues a 20 percent dividend. Susan Marie Fonseca owns 8,000 shares of the

company's stock before the dividend. What journal entry does she make when she receives the additional 1,600 shares? Why is this reporting necessary?

19. What benefit does an owner hope to receive when a corporation issues a stock dividend or a stock split?
20. The Lion Corporation has shares of \$2 par value common stock outstanding that are currently selling for \$29 per share. The company issues 35,000 new shares as a stock dividend. What is the reduction to be recorded in retained earnings if this issuance is a 10 percent stock dividend? What is the reduction to be recorded in retained earnings if the issuance is a 40 percent stock dividend?
21. In Year One, the Marstale Corporation reports a return on equity (ROE) of 14.7 percent. In Year Two, the ROE is 18.2 percent. How is ROE computed? What information is provided by a company's ROE?
22. A company has both common stock and preferred stock outstanding. Each of these stocks paid a cash dividend in the current year. How is basic earnings per share (EPS) computed?
23. A company reports net income of \$300,000 for Year One. It started this year with 120,000 shares of common stock outstanding. However, on April 1, another 20,000 shares were issued to the public for cash. What should be reported as basic EPS?
24. A company reports a price-earnings ratio (P/E ratio) of 14.6. How is that figure determined? How might investors make use of this number?
25. The Jacston Corporation reports basic EPS of \$3.80 but diluted EPS of \$2.90. In general, how is diluted EPS computed? What is the significance of diluted EPS to investors?

TRUE OR FALSE

1. \_\_\_\_ Sole proprietorships are easier to form than corporations.
2. \_\_\_\_ Most businesses of any significant size are formed as corporations.
3. \_\_\_\_ Limited liability is a concept that applies to a corporation but not to a partnership.
4. \_\_\_\_ Mutual agency is a concept that applies to a corporation but not to a partnership.
5. \_\_\_\_ All corporations in the United States have both common stock and preferred stock.
6. \_\_\_\_ Par value is a term used to indicate the market value of a share of capital stock.
7. \_\_\_\_ The management of a corporation appoints the board of directors.
8. \_\_\_\_ If a company has 80,000 shares of common stock issued but only 70,000 shares outstanding, the company holds 10,000 shares of its own treasury stock.
9. \_\_\_\_ If a company has 80,000 shares of common stock issued but only 70,000 shares outstanding and a \$1.00 per share dividend is declared, retained earnings is reduced on that date by \$80,000.
10. \_\_\_\_ A company is going to pay a cash dividend. The liability for that dividend is first reported on the date of record.
11. \_\_\_\_ The Yelson Company has 20,000 shares of \$50 par value preferred stock authorized but only 9,000 shares issued and outstanding. This preferred stock pays a 4 percent annual cash dividend that is cumulative. The dividend is missed in both Year One and Year Two. A liability for \$36,000 should be reported on the December 31, Year Two, balance sheet.
12. \_\_\_\_ Jayne Wellsfield owns 10,000 shares of Hartlan Corporation that she bought for \$16 per share. She sells this entire investment to Robert Cranston for \$23 per share. This transaction has no financial impact on Hartlan.
13. \_\_\_\_ The Robertsen Corporation issues 4,000 shares of \$3 par value common stock (with a fair value of \$9 per share) in exchange for eight acres of land worth \$5,000 per acre. Robertsen should report a gain as a result of this transaction.
14. \_\_\_\_ The Cordol Corporation issues 10,000 shares of its \$2 par value common stock for \$9 cash per share. Later, the company reacquires 2,000 shares of this stock for \$10 per share. The cost method is used to record these shares. Cordol records this acquisition as an asset with a reported value of \$20,000.
15. \_\_\_\_ The Lodroc Corporation issues 30,000 shares of its \$1 par value common stock for \$13 cash per share. Later, the company reacquires 4,000 shares of this stock for \$15 per share. The cost method is used to

record these shares. The treasury stock is reissued at \$16 per share. Net income is not affected by either the reacquisition or the reissuance of these shares.

16. \_\_\_\_ On the ex-dividend date, the price of a company's stock on a stock exchange will have a tendency to fall.
17. \_\_\_\_ A company declares a cash dividend on December 18, Year One to be paid on January 22, Year Two. Working capital decreases in Year One but is not affected in Year Two.
18. \_\_\_\_ A cumulative dividend on preferred stock must be paid each year or a company can be forced into bankruptcy.
19. \_\_\_\_ An investor receives 1,000 shares of stock valued at \$7 per share as a stock dividend. Dividend revenue of \$7,000 should be recognized.
20. \_\_\_\_ The Westling Corporation is trying to decide whether to issue a 15 percent stock dividend (15,000 new shares) or a 30 percent stock dividend (30,000 new shares). The 30 percent stock dividend automatically reduces retained earnings by twice as much as the 15 percent stock dividend.
21. \_\_\_\_ Return on equity (ROE) is found by dividing net income for a period by the average amount of retained earnings.
22. \_\_\_\_ Basic earnings per share is required to be reported for all publicly-traded corporations.
23. \_\_\_\_ Earnings per share is found by taking the net income for the year divided by the number of common shares outstanding at the end of the year.
24. \_\_\_\_ The P/E ratio relates a company's reported earnings per share to the market price of its common stock.
25. \_\_\_\_ A company reports net income of \$500,000 but pays cash dividends to preferred stock (\$100,000) and common stock (\$50,000). The company has 100,000 shares of common stock outstanding all year as well as 20,000 shares of preferred stock. Basic EPS is \$3.50 per share.
26. \_\_\_\_ Diluted EPS includes the potential negative impact of convertibles on the computation of earnings per share.

**MULTIPLE CHOICE**

1. Bob Wills, Susan Oglethorpe, and Billie Elkins form a business and decide to have it formally recognized as a corporation. Which of the following is the most likely reason for that decision?
  - a. The limited liability that is available to the owners of a corporation.
  - b. The advantages of mutual agency which are only available to the owners of a corporation.
  - c. The double taxation faced by partnerships and sole proprietorships.
  - d. The ease of forming a corporation.
  
2. Which of the following rights is most typical for the owners of a corporation's common stock?
  - a. The right to vote for the members of the board of directors
  - b. The right to an annual dividend
  - c. The right to be involved in policy making decisions
  - d. The right to decide on the issuance of a cash dividend
  
3. Landon Corporation sold 16,000 shares of \$0.50 par value common stock for \$17 per share. Which of the following is the journal entry Landon should make?

a. *Figure 16.16*

|                                |         |         |
|--------------------------------|---------|---------|
| Cash                           | 272,000 |         |
| Common Stock                   |         | 8,000   |
| Capital in Excess of Par Value |         | 264,000 |

b. *Figure 16.17*

|              |         |         |
|--------------|---------|---------|
| Cash         | 272,000 |         |
| Common Stock |         | 272,000 |

c. *Figure 16.18*

|                                |         |         |
|--------------------------------|---------|---------|
| Capital in Excess of Par Value | 264,000 |         |
| Common Stock                   |         | 264,000 |

d. *Figure 16.19*

|              |       |       |
|--------------|-------|-------|
| Cash         | 8,000 |       |
| Common Stock |       | 8,000 |

4. Jackson Company is authorized to issue 20,000 shares of \$1 par value stock. On February 1, Year One, it issues 4,000 shares for \$9 per share. On July 1, Year One, the company pays a \$1 per share cash dividend. On December 1, Year One, the company buys back 1,000 shares of its own stock at \$11 per share. Treasury stock is reported at its cost. On a December 31, Year One, balance sheet, what is reported as Capital in Excess of Par Value?
  - a. \$17,000
  - b. \$28,000
  - c. \$30,000
  - d. \$32,000
  
5. Paul Mitchell purchased a licensing agreement for \$40,000 from a well-known restaurant chain. Subsequently, Traylor Corporation agreed to issue 2,000 shares of its common stock to Mitchell in exchange for this licensing agreement, which now has a value of \$30,000. At the time of the exchange, Traylor's \$2 par value stock was selling for \$14 per share. For what amount should Traylor report the licensing agreement?
  - a. \$4,000
  - b. \$28,000
  - c. \$30,000
  - d. \$40,000
  
6. Kramer Company is authorized by the state to issue 10,000 shares of 8 percent, \$100 par value preferred stock. On January 1, Year One, Kramer issues 5,000 shares for \$125 per share. On December

- 13, Year One, Kramer's board of directors declares the annual dividend to owners on record as of January 3, Year Two. The dividend will be distributed January 18, Year Two. What liability should Kramer Company report on its December 31, Year One, balance sheet as a result of this dividend?
- Zero
  - \$40,000
  - \$50,000
  - \$80,000
7. Barbara Waterman bought 10,000 shares of \$2 par value common stock directly from the Townsend Corporation for \$13 per share. Later she sold these shares to Benjamin Duke for \$17 per share. Subsequently, he sold 2,000 of these shares back to Townsend for cash of \$19 per share. The cost method is in use for the treasury stock. Just based on these transactions, what is the total amount reported by the company as its stockholders' equity.
- \$92,000
  - \$112,000
  - \$132,000
  - \$152,000
8. The Kansas-Kentucky Corporation is started on January 1, Year One. The company issues 100,000 shares of its \$1 par value common stock for \$8 per share. Subsequently, the company reports net income of \$40,000 each year and pays an annual cash dividend of \$10,000. In Year Three, the company reacquires 10,000 of these shares for \$15 each. The cost method is to be applied to the treasury stock. Several weeks later, the company reissues 1,000 shares of this stock for \$17 per share. A few days later, another 2,000 shares are reissued for \$12 per share. At the end of Year Three, what should the company report as its retained earnings?
- \$84,000
  - \$86,000
  - \$88,000
  - \$90,000

9. The Gewrty Corporation issues a 50 percent stock dividend. Which of the following is true about this event?
- The owners are happy because they own a larger percentage of the company.
  - The owners are happy because the stock price will be lower, which might well create an increase in the demand for the company's stock on the stock market.
  - The owners are unhappy because the net assets have been reduced by the company's action.
  - The owners are unhappy because some owners benefit more than others from a stock dividend.
10. The Anglewood Corporation has 200,000 shares of its \$1 par value common stock outstanding. These shares currently have a market price of \$15 each. The company decides to issue a 10 percent (20,000 shares) stock dividend. At the last moment, the board of directors decides to increase this stock dividend to 30 percent (60,000 shares). Which of the following is true about the impact of the change in this decision?
- Retained earnings will be \$60,000 lower than it would have been.
  - Retained earnings will be \$90,000 lower than it would have been.
  - Retained earnings will be \$220,000 higher than it would have been.
  - Retained earnings will be \$240,000 higher than it would have been.
11. The Kearsey Corporation issues 10,000 shares of its own common stock (with a \$10 per share par value) for cash of \$12 per share. Several months later, the company reacquires 1,000 shares of its own stock for \$15 per share. This treasury stock is to be reported using the cost method. Which of the following statements is true?
- If these treasury shares are later reissued for \$17,000, the \$2,000 gain cannot be reported on the company's income statement.



- b. The \$15,000 cash outflow will be reported like a dividend as a reduction in retained earnings.
  - c. The \$15,000 cost of these treasury shares will be reported by the company as a noncurrent asset.
  - d. When these shares are reacquired, the company's contributed capital will increase by \$15,000.
12. Portor Corporation is authorized to issue 150,000 shares of its \$0.25 par value common stock. It currently has 90,000 shares issued and outstanding. Portor plans to declare a stock dividend and is curious about the effect this will have on retained earnings. Portor's stock has a current market value per share of \$26. Portor is trying to decide between a 5 percent stock dividend and a 40 percent stock dividend. Which of the following shows the reduction caused by each on retained earnings?

|    | 5% Stock Dividend | 40% Stock Dividend |
|----|-------------------|--------------------|
| a. | \$117,000         | \$936,000          |
| b. | \$117,000         | \$9,000            |
| c. | \$1,125           | \$9,000            |
| d. | \$1,125           | \$936,000          |

13. Falls Church Corporation ended Year Four with revenues of \$98,000 and expenses of \$86,000. The company distributed a cash dividend of \$8,000 during the year. No stock transactions occurred. On the year-end balance sheet, the stockholders' equity accounts total \$492,000. Which of the following is Falls Church's return on equity (ROE) for the year?
- a. 2.45%
  - b. 6.73%
  - c. 9.18%
  - d. 9.75%
14. Fleming Corporation began and ended the current year with 50,000 outstanding shares of common stock. These shares were paid a \$0.20 per share cash dividend. Net income for the year totaled \$480,000. The company also had 10,000 shares of preferred stock outstanding throughout the year that paid

dividends of \$30,000. Which of the following figures is reported as Fleming's basic earnings per share?

- a. \$6.00 per share
  - b. \$9.00 per share
  - c. \$9.60 per share
  - d. \$10.60 per share
15. The Houston Corporation started the year with 190,000 shares of common stock but issued 40,000 more shares on April 1 of the current year. The company also has 30,000 shares of preferred stock outstanding for the entire year. During the year, net income of \$710,000 was reported. Cash dividends were paid during the year; \$50,000 was distributed to the owners of the preferred stock and \$30,000 to the owners of the common stock. What should be reported as basic earnings per share for this year (rounded)?
- a. \$2.86
  - b. \$2.87
  - c. \$3.00
  - d. \$3.09
16. The Zerton Corporation ends Year One with net income of \$400,000 and 100,000 shares of common stock issued and outstanding. The company also has 30,000 shares of \$50 par value preferred stock issued and outstanding. During the year, the company distributed a \$1 per share cash dividend on its common stock and a \$2 per share cash dividend on its preferred stock. Each share of preferred stock is convertible into two shares of common stock. What should the company report as its basic earnings per share (rounded)?
- a. \$2.13
  - b. \$2.50
  - c. \$3.40
  - d. \$4.00
17. Friar Inc. reported net income for Year Five of \$1,870,000. It had 600,000 shares of common stock outstanding on January 1, Year Five, and repurchased 150,000 of those shares on September 1,

Year Five, as treasury stock. The company has no preferred stock. At the end of Year Five, Friar's stock was selling for \$26 per share. Which of the following is Friar's price-earnings ratio on that date?

- a. 6.25
- b. 7.00
- c. 7.65
- d. 8.33

## VIDEO PROBLEMS

Professor Joe Hoyle discusses the answers to these two problems at the links that are indicated. After formulating your answers, watch each video to see how Professor Hoyle answers these questions.

1. Your roommate is an English major. The roommate's parents own a chain of ice cream shops located throughout Florida. One day, while waiting for an appointment with an academic advisor, your roommate asks you the following question: "My parents started their business originally as a partnership. However, after a year or two, they switched over and had the business incorporated. Since then, they complain every year about double taxation. What does that mean? And, if double taxation is so bad, why didn't they just continue to function as a partnership? They seemed happier before they made this switch." How would you respond?

[\(click to see video\)](#)

2. Your uncle and two friends started a small office supply store several years ago. The company has grown and now has several large locations. Your uncle knows that you are taking a financial accounting class and asks you the following question: "We are planning to build a new store in a town that is 50 miles from our headquarters. For us, this is a major expansion. We are going to need several million dollars in cash. We have looked at several options for raising this money. Our financial advisor has recommended that we issue preferred stock. I'm not totally sure what this means. And, I'm not sure why we wouldn't just be better off to issue additional shares of the corporation's common stock. Why is our financial advisor giving us this advice?" How would you respond?

[\(click to see video\)](#)

## PROBLEMS

1. Cutlass Corporation is authorized by the state government to issue 40,000 shares of \$1 par value common stock. On March 15, the company issues 1,000 shares for \$6 cash per share. On April 19, the company issues another 800 shares for \$7 per share. Record these transactions.
2. McNair Corporation is authorized to issue 150,000 shares of 5 percent, \$200 par value preferred stock. On January 22, McNair issues 32,000 shares of this preferred stock for \$225 per share. The board of directors for McNair declares the annual preferred dividend on September 1, payable to owners on record as of September 17, with the money to be distributed on October 1.
  - a. Record the issuance of the preferred stock.
  - b. Record the declaration and payment of the dividend and provide the date for each entry.
3. Several years ago, Douglas Company issued 33,000 shares of its \$1 par value common stock for \$18 per share. In the current year, Douglas's board of directors approves a plan to buy back a portion of these common stock shares. Prepare journal entries for each of the following transactions and events.
  - a. On Monday, Douglas buys back 2,500 shares for \$35 per share.
  - b. On Tuesday, Douglas reissues 1,000 shares of treasury stock for \$37 per share.
  - c. On Wednesday, Douglas reissues 500 shares of treasury stock for \$34 per share.
  - d. On Thursday, Douglas reissues 600 shares of treasury stock for \$28.
  - e. On Friday, the board of directors declares a cash dividend of \$1.00 per share.
4. The following are a number of transactions and events for the Nielsen Corporation. For each, prepare the necessary journal entry. If no entry is required, please indicate that.
  - a. The state of Delaware approves the application for incorporation made by Nielsen and authorizes 100,000 shares of common stock with a \$10 per share par value.

- b. Nielsen issues the first 1,000 shares of its common stock for \$12 per share in cash.
  - c. On the same day as (b), Nielsen issues another 500 shares of common stock for equipment that is valued at \$6,200.
  - d. Nielsen's board of directors declares a \$2 per share cash dividend.
  - e. On the date of record for the previous dividend, Nielsen prepares a list of all owners.
  - f. The date of payment arrives and Nielsen mails out all dividend distributions.
  - g. A 10 percent stock dividend is declared and immediately issued after the market price of the common stock has risen to \$19 per share.
  - h. The company reacquires 300 shares of common stock for \$16 per share in cash. Treasury stock is reported by means of the cost method.
  - i. The company reissues 200 shares of its treasury stock for \$17 per share in cash.
  - j. The company reissues the remaining shares of treasury stock for \$11 per share in cash.
  - k. A 40 percent stock dividend is declared and immediately issued on a day when the fair value of the stock is \$20 per share.
5. At the beginning of Year One, a company issues 40,000 shares of \$2 par value common stock for \$23 per share in cash. The company also issues 10,000 shares of \$40 par value preferred stock that pays an annual dividend of 10 percent. No dividend is paid in Year One but a total dividend of \$100,000 is distributed in Year Two.
- a. If the preferred stock dividend is not cumulative, what is reported on the financial statements about the dividend at the end of Year One?
  - b. If the preferred stock dividend is not cumulative, what amount of cash dividend does each share of common stock receive in Year Two?
  - c. If the preferred stock dividend is cumulative, what is reported on the financial statements about the dividend at the end of Year One?

- d. If the preferred stock dividend is cumulative, what amount of cash dividend does each share of common stock receive in Year Two?
6. The Rostinaja Company is incorporated at the beginning of Year One. For convenience, assume that the company earns a reported net income of \$130,000 each year and pays an annual cash dividend of \$50,000. The company is authorized to issue 200,000 shares of \$3 par value common stock. At the start of Year One, the company issues 40,000 shares of this common stock for \$8 per share. At the end of Year Two, the company buys back 5,000 shares of its own stock for \$12 per share. The cost method is used to record these shares. At the start of Year Three, the company reissues 1,000 of these shares for \$14 per share. At the start of Year Four, the company reissues the remainder of the treasury stock for \$9 per share.
    - a. Prepare the stockholders' equity section of this company's balance sheet as of December 31, Year One.
    - b. Prepare the stockholders' equity section of this company's balance sheet as of December 31, Year Two.
    - c. Prepare the stockholders' equity section of this company's balance sheet as of December 31, Year Three.
    - d. Prepare the stockholders' equity section of this company's balance sheet as of December 31, Year Four.
  7. Grayson Corporation is authorized by the state to sell 2 million shares of its \$1 par value common stock to the public. Before Year Seven, the company had issued 60,000 shares for cash of \$12 per share. During Year Seven, Grayson issued another 14,000 shares at the market value of \$24 per share.

On January 1, Year Seven, Grayson reported retained earnings of \$1,950,000. During that year, Grayson earned net income of \$80,000 and paid cash dividends to common stockholders of \$19,000. Also, during December of Year Seven, Grayson repurchased 11,000 shares of its own stock when the market price was \$22 per share.

- a. Record the issuance of the common stock in Year Seven.
- b. Determine retained earnings as of the end of Year Seven.

- c. Record the purchase of the treasury stock.
  - d. Prepare the stockholders' equity section of the balance sheet as of December 31, Year Seven.
  - e. Compute the company's return on equity (ROE) for Year Seven.
8. On December 28, Year One, the Pickins Corporation was formed. The articles of incorporation authorize 5 million shares of common stock carrying a \$1 par value, and 1 million shares of \$5 par value preferred stock. On January 1, Year Two, 2 million shares of common stock are issued for \$15 per share. Also on January 1, 500,000 shares of preferred stock are issued at \$30 per share.
- a. Prepare journal entries to record these transactions on January 1.
  - b. On March 9, Year Two, the Pickins Corporation repurchases 100,000 common shares as treasury stock paying a price of \$13 per share. During August of that year, all 100,000 treasury shares are reissued at \$16 per share. Prepare journal entries to record these transactions.
  - c. On November 3, Year Two, Pickins issues a 30 percent stock dividend on all outstanding shares of common stock when the market price is \$50 per share. On December 1, Year Two, Pickins declares a \$0.75 per share cash dividend on common stock and a \$2.00 per share cash dividend on preferred stock. Payment is scheduled for December 20, Year Two, to shareholders of record on December 10, Year Two. Prepare journal entries to record the declaration and distribution of these stock and cash dividends.
9. On March 1, St. George Company declares a stock dividend on its \$1 par value stock. The company had 1,000 shares outstanding on that date with a market value of \$13 per share.
- a. What reduction is recorded in retained earnings if a 10 percent stock dividend is issued?
  - b. What reduction is recorded in retained earnings if a 30 percent stock dividend is issued?



10. Rawlings Company has the following equity accounts at the beginning and end of Year Three:

|   | January 1,<br>Year Three | December 31,<br>Year Three |
|---|--------------------------|----------------------------|
| Preferred Stock, 6%,<br>\$100 par value | \$2,000,000              | \$2,000,000                |
| Common Stock, \$1 Par<br>Value          | \$160,000                | \$200,000                  |
| Capital in Excess of Par,<br>Common     | \$12,000,000             | \$16,000,000               |
| Retained Earnings                       | \$1,100,000              | \$1,800,000                |

The common stock account increased because 40,000 shares of common stock were issued to the public on September 1, Year Three. Preferred stock was paid its dividend during the year. A cash dividend was also distributed on the common stock. Net income for the year was \$1,200,000.

- a. How much cash was received when the common stock was issued during Year Three?
  - b. What was the total cash dividend paid on the common stock shares during the year?
  - c. What was the company's basic earnings per share for Year Three?
11. Information on Massaff Corporation's stock accounts follows:

|                                   | December 31,<br>Year 7 | December 31,<br>Year 8 |
|-----------------------------------|------------------------|------------------------|
| Outstanding shares of             |                        |                        |
| Common stock                      | 300,000                | 330,000                |
| Nonconvertible<br>preferred stock | 10,000                 | 10,000                 |

The following additional information is available about this company:

- On July 1, Year 8, Massaff issued 30,000 additional shares of common stock for cash.
- Net income for the year ended December 31, Year 8, was \$750,000.
- During Year 8, Massaff paid dividends of \$3.00 per share on its preferred stock. The company also paid a total cash dividend of \$220,000 on its outstanding shares of common stock.

*Required:*

Compute Massaff's basic earnings per common share for the year ended December 31, Year 8.

12. Yesterday, the Neumann Corporation had 100,000 shares of common stock authorized, 60,000 shares issued, and 40,000 shares outstanding. The stock has a par value of \$10 per share but was issued originally for \$24 per share. The stock is currently selling on a stock exchange for \$30 per share. Treasury stock was acquired for \$25 per share. None of that stock has been reissued. It is recorded using the cost method.

Today, a stock dividend was issued. After that dividend was distributed, the Neumann Corporation reported a total for its Capital in Excess of Par Value account of \$960,000. How many shares were issued in the stock dividend?

13. A company has 20,000 shares of common stock issued and outstanding. These shares have a par value of \$10 per share but were issued for \$17 per share. When the fair value of the shares hits \$21 per share, the company declares and issues a 50 percent stock dividend. The company accidentally recorded these new shares as a small stock dividend (20 percent or less) when the issuance should have been reported as a large stock dividend. At the end of the year, the company reported total assets of \$300,000, total retained earnings of \$80,000, and total stockholders' equity of \$220,000.
- a. What was the proper amount of total assets that should have been reported?

- b. What was the proper amount of total retained earnings that should have been reported?
  - c. What was the proper amount of total stockholders' equity that should have been reported?
14. In several past chapters, we have met Heather Miller, who started her own business, Sew Cool. The following are the financial statements for December.

Figure 16.20  
Sew Cool Financial Statements

| <b>Sew Cool<br/>Income Statement<br/>As of December 31, 20X8</b> |         |
|--|---------|
| Revenue  | \$4,000 |
| Cost of Goods  | (2,000) |
| Gross Profit   | 2,000   |
| Other Expenses   | (1,665) |
| Earnings before Interest and Tax                                 | 335     |
| Interest Expense   | (30)    |
| Earnings before Tax  | 305     |
| Tax Expense  | (107)   |
| Net Income   | \$198   |

Figure 16.21

| <b>Sew Cool<br/>Stmt. of Retained Earnings<br/>As of December 31, 20X8</b> |       |
|--|-------|
| Retained Earnings, December 1, 20X8  | \$500 |
| Net Income   | 198   |
| Dividends  | (158) |
| Retained Earnings, December 31, 20X8                                       | \$540 |

Figure 16.22

| Sew Cool<br>Balance Sheet<br>December 31, 20X8 |             |                                       |                |
|--|-------------|---------------------------------------|----------------|
| <b>Assets</b>                                  |             | <b>Liabilities</b>                    |                |
| <b>Current</b>                                 |             | <b>Current</b>                        |                |
| Cash   | \$940       | Accounts Payable                      | \$900          |
| Accounts Receivable                            | 500         | Income Tax Payable                    | <u>120</u>     |
| Less Allowance for<br>Doubtful Accounts        | <u>(20)</u> |                                       |                |
| Net Accounts Receivable                        | 480         |                                       |                |
| Inventory                                      | <u>700</u>  |                                       |                |
| Total Current Assets                           | \$2,120     | Total Current Liabilities             | \$1,020        |
| <b>Noncurrent</b>                              |             | <b>Noncurrent</b>                     |                |
| Equipment                                      | \$1,000     | Notes Payable                         | \$1,060        |
|  |             | <b>Owners' Equity</b>                 |                |
|  |             | Capital Stock                         | \$500          |
|  |             | Retained Earnings                     | 540            |
|  |             | Total Owners' Equity                  | <u>\$1,040</u> |
| Total Assets                                   | \$3,120     | Total Liabilities & Owners'<br>Equity | \$3,120        |

Based on the financial statements determine Sew Cool's return on equity (ROE).

## COMPREHENSIVE PROBLEM

This problem will carry through several chapters, building in difficulty. It allows students to continually practice skills and knowledge learned in previous chapters.

In Chapter 15 "In a Set of Financial Statements, What Information Is Conveyed about Other Noncurrent Liabilities?", financial statements for March were prepared for Webworks. They are included here as a starting point for the required recording for April.

Here are Webworks financial statements as of March 31.

Figure 16.23

*Webworks Financial Statements*

| <b>Webworks<br/>Income Statement<br/>As of March 31</b> |          |
|---|----------|
| Revenue   | \$20,810 |
| Cost of Goods Sold                                      | (12,258) |
| Gross Profit  | 8,552    |
| Deprec. and Amort. Expense                              | (392)    |
| Other Expenses and Losses                               | (6,413)  |
| Investment Income (Loss)                                | 200      |
| Earnings before Interest and Tax                        | 1,947    |
| Interest Expense  | (15)     |
| Earnings before Tax                                     | 1,932    |
| Tax Expense   | (580)    |
| Net Income  | \$1,352  |

Figure 16.24

| <b>Webworks<br/>Stmt. of Retained Earnings<br/>As of March 31</b> |          |
|---|----------|
| Retained Earnings, March 1  | \$18,249 |
| Net Income  | 1,352    |
| Retained Earnings, March 31                                       | \$19,601 |

Figure 16.25

| Webworks<br>Balance Sheet<br>March 31 |          |  |          |
|---------------------------------------|----------|--|----------|
| Assets                                |          | Liabilities                                      |          |
| <b>Current</b>                        |          | <b>Current</b>                                   |          |
| Cash                                  | \$9,027  | Accounts Payable                                 | \$2,770  |
| Accounts Receivable                   | 1,600    | Salaries Payable                                 | 350      |
| Less Allowance for Doubtful Accounts  | (160)    | Interest Payable                                 | 30       |
| Net Accounts Receivable               | 1,440    | Unearned Revenue                                 | 300      |
| Trading Securities, Net               | 1,800    |  |          |
| Merchandise Inventory                 | 2,324    |  |          |
| Supplies Inventory                    | 50       |  |          |
| Total Current Assets                  | \$14,641 | Total Current Liabilities                        | \$3,450  |
| <b>Property, Plant, and Equipment</b> |          | <b>Noncurrent</b>                                |          |
| Equipment                             | \$10,500 | Note Payable                                     | \$3,000  |
| Less Accumulated Depreciation         | (1,138)  |  |          |
| Furniture                             | 1,000    |  |          |
| Less Accumulated Depreciation         | (102)    |  |          |
| Total P, P, and E                     | \$10,260 |  |          |
| <b>Other Noncurrent Assets</b>        |          | <b>Owners' Equity</b>                            |          |
| Available-for-Sale Securities         | \$2,275  | Capital Stock                                    | \$2,000  |
| Licensing Agreement, Net              | 1,400    | Retained Earnings                                | 19,601   |
|                                       |          | Other Accumulated Comprehensive Income:          |          |
|                                       |          | Unrealized Gain on Available-for-Sale Securities | 525      |
|                                       |          | Total Owners' Equity                             | \$22,126 |
| Total Assets                          | \$28,576 | Total Liabilities & Owners' Equity               | \$28,576 |

The following events occur during April:

- a. Webworks starts and completes ten more sites and bills clients for \$7,000.
- b. Leon invites Nancy Po (an employee) to invest money in the business. She contributes \$2,000 and becomes an equal owner with Leon.
- c. Webworks purchases supplies worth \$125 on account.
- d. At the beginning of March, Webworks had fourteen keyboards costing \$120 each and twenty-eight flash drives costing \$23 each. Webworks uses periodic FIFO to cost its inventory.
- e. Webworks purchases ninety-five keyboards for \$121 each and ninety flash drives for \$25 each. All purchases are on account.
- f. Webworks sells eighty-seven keyboards for \$13,050 and ninety of the flash drives for \$2,850 cash.
- g. Webworks collects \$6,400 in accounts receivable.
- h. Webworks pays its \$500 rent.
- i. Webworks pays off \$14,000 of its accounts payable.
- j. Webworks sells all of its shares of RST stock for \$20 per share.
- k. Webworks pays Juan Marcon (another employee) \$700 for his work during the first three weeks of April.

- l. Webworks writes off an account receivable from December in the amount of \$150 because collection appears unlikely.
- m. Webworks pays off its salaries payable from March.
- n. Webworks pays Leon Jackson and Nancy Po a salary of \$3,500 each.
- o. Webworks completes the design for the photographer for which it was paid in February. The \$300 of unearned revenue has now been earned.
- p. Webworks pays Leon Jackson and Nancy Po a dividend of \$250 each.
  
- q. Webworks pays taxes of \$372 in cash.

*Required:*

- a. Prepare journal entries for the previous events.
- b. Post the journal entries to T-accounts.
- c. Prepare an unadjusted trial balance for Webworks for April.
- d. Prepare adjusting entries at the end of February for the following and post them to your T-accounts.
  
- r. Webworks owes Juan Marcon \$100 for his work during the last week of April.
- s. Webworks receives an electric bill for \$440. Webworks will pay the bill in May.
- t. Webworks determines that it has \$65 worth of supplies remaining at the end of April.
- u. Webworks is continuing to accrue bad debts at 10 percent of accounts receivable.
- v. Webworks continues to depreciate its equipment over four years and its furniture over five years, using the straight-line method.
- w. The license agreement should be amortized over its one-year life.
- x. QRS Company is selling for \$14 per share on April 30.
- y. Interest should be accrued for April.
  
- z. Record cost of goods sold.
  
- e. Prepare an adjusted trial balance.
- f. Prepare financial statements for April.

## RESEARCH ASSIGNMENT

Assume that you take a job as a summer employee for an investment advisory service. One of the partners for that firm is currently looking at the possibility of investing in **Advanced Micro Devices Inc.** The partner is aware that technology companies like **AMD** often issue a lot of stock options and other items that can be converted into shares of common stock. The partner is curious as to the potential impact such conversions might have on the company and the price of its stock. The partner asks you to look at the 2010 financial statements for **AMD** by following this path:

- Go to <http://www.amd.com>.
  - At the top of this screen, click on “About AMD.”
  - In the center of the next screen, click on “Investor Relations.”
  - On the left side of the next screen, click on “Annual Report & Proxy.”
  - On the next screen, click on “2010 Annual Report” to download.
  - Scroll to page 73 and find the company’s statement of operations (income statement) for the year ended December 25, 2010. At the bottom of that statement, determine the basic earnings per share reported by **AMD** as well as the diluted earnings per share. In addition, note the number of common stock shares used in the computation of basic earnings per share and the number of common stock shares used in the computation of diluted earnings per share.
  - Scroll down to page 81 and read the last paragraph on that page which is part of “Note 2: Summary of Significant Accounting Policies.” This paragraph mentions that **AMD** has three types of instruments outstanding that can be converted into common stock.
- a. For the year ended December 25, 2010, what is the amount reported for basic earnings per share and for diluted earnings per share? What is the amount of the difference in those two figures?
  - b. Assume that the common stock of **AMD** was selling on the New York Stock Exchange on December 25, 2010, at \$8.05. What was the P/E Ratio?
  - c. What were the three types of convertible items that **AMD** had outstanding at this time?
  - d. How many shares of common stock were used in computing basic earnings per share and how many shares of common stock were used in computing diluted earnings per share? How many shares were added to arrive at diluted earnings per share as a result of the possible conversion of the items listed in the answer to (c)?