## **Chapter 11**

# Reporting and Interpreting Stockholders' Equity

## **Learning Objectives**

After studying this chapter, you should be able to:

- 11-1 Explain the role of stock in the capital structure of a corporation.
- 11-2 Compute and analyze the earnings per share ratio.
- 11-3 Describe the characteristics of common stock and report common stock transactions.
- 11-4 Discuss and report dividends.
- 11-5 Compute and analyze the dividend yield ratio.
- 11-6 Discuss and report stock dividends and stock splits.
- 11-7 Describe the information reported on the statement of stockholders' equity.
- 11-8 Describe the characteristics of preferred stock and report preferred stock transactions.
- 11-9 Discuss the impact of stock transactions on cash flows.

## **Advantages of a Corporation**

The corporate form of business has the primary advantage of ease of participation in ownership, as compared to a sole proprietorship or a partnership. Ease of ownership exists in three forms.

- + Shares of stock may be purchased in small amounts.
- + Ownership interests can be transferred easily through the sale of shares on established markets.
- + Stock ownership provides investors with limited liability.

11-3

## **Ownership of a Corporation**

Corporations enjoy a continuous existence separate and apart from its owners. A corporation can . . .

Own assets

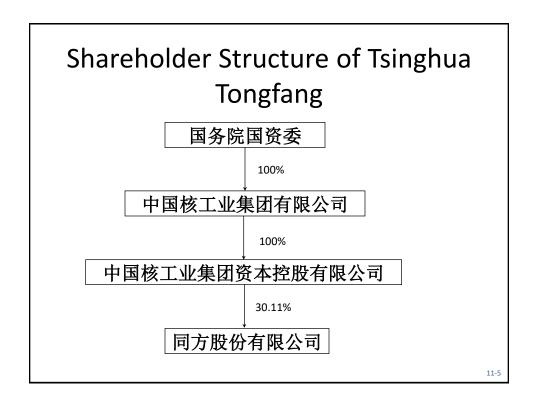
Incur liabilities

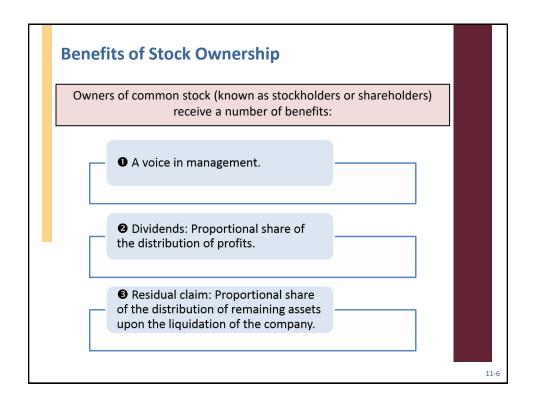
Sue others and be sued

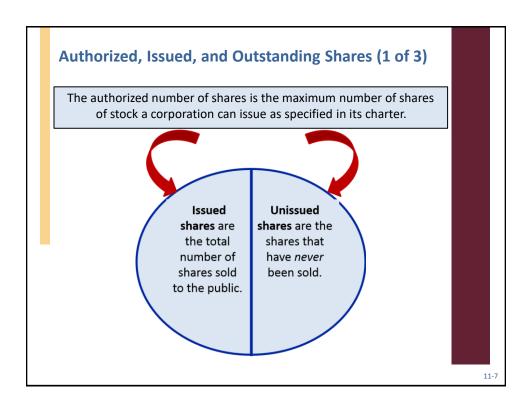
Expand and contract in size

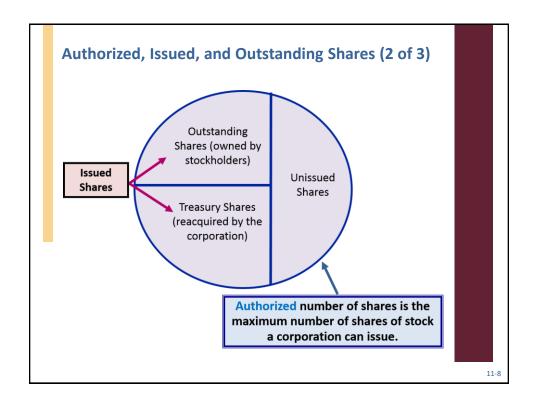
Enter into contracts independently of its owners

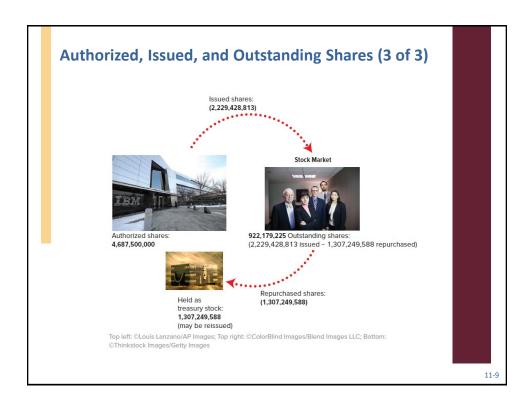
Corporations are created by application to a state government (not the federal government). Corporations are governed by a board of directors elected by the stockholders.











## Exercise 11-1

Boynton Corporation was issued a charter by the state of Illinois on January 15 of this year. The charter authorized the following:

Common stock, \$20 par value, 206,000 shares
Preferred stock, 9 percent, par value \$16 per share, 8,000 shares
authorized

During Year 1, the following selected transactions were completed in the order given:

- a. Sold and issued 40,000 shares of common stock at \$32 cash per share.
- b. Sold and issued 6,000 shares of preferred stock at \$48 cash per share.
- c. At the end of Year 1, the accounts showed net income of \$80,000. No dividends were declared.

#### Required:

Prepare the stockholders' equity section of the balance sheet at the end of the year.

## Boynton Corporation Balance Sheets (Partial)

#### Stockholders' Equity

Common stock (\$20 par value; 206,000 shares authorized, 40,000 shares issued and outstanding)

Preferred stock, 9% (\$16 par value, 8,000 shares authorized, 6,000 shares issued and outstanding)

Additional paid-in capital, common stock

Additional paid-in capital, preferred stock 192,000

Retained earnings

Total stockholders' equity

80,000 \$1,648,000

\$ 800,000

96,000

480,000

#### Common Stock Preferred Stock

Proceeds from sale	\$1,280,000	\$288,000
Par value	800,000	96,000
Remainder	\$ 480,000	\$192,000

11-11

## Earnings per Share (EPS) (1 of 2)

KEY RATIO ANALYSIS



Earnings per share = Net income

Weighted average number of common shares outstanding

\* Preferred dividends, if any, should be subtracted from net income.

Companies are required to report EPS on their income statements. IBM's income for 2017 was \$5,753 million, and the average number of shares outstanding was 932.8 million.



## Exercise 11-2

The financial statements for Gensen Corporation included the following selected information:

 Common stock
 \$2,000,000

 Retained earnings
 \$1,000,000

 Net income
 \$1,100,000

 Shares issued
 100,000

 Shares outstanding
 80,000

 Dividends declared and paid
 \$800,000

The common stock was sold at a price of \$40 per share.

#### Required:

- 1. What is the amount of additional paid-in capital?
- 2. What was the amount of retained earnings at the beginning of the year?
- 3. How many shares are in treasury stock?
- 4. Compute earnings per share (assume the weighted average shares outstanding is equal to the shares outstanding).

1. What is the amount of additional paid-in capital?

Cash received from share issue (100,000 shares x \$40 per share) \$4,000,000

Less: Common stock (2,000,000)

Additional paid-in capital \$2,000,000

2. What was the amount of retained earnings at the beginning of the year?

Retained earnings at the year-end\$1,000,000Add: Dividends declared and paid800,000Less: Net income(1,100,000)Retained earnings at the beginning\$700,000

11-15

3. How many shares are in treasury stock?

Issued shares100,000Less: Outstanding shares80,000Treasury stock shares20,000

4. Compute earnings per share (assume the weighted average shares outstanding is equal to the shares outstanding).

Earnings per Share =  $\frac{\text{Net Income}}{\text{Weighted Average Number of Common Shares Outstanding}}$   $= \frac{\$1,100,000}{80,000}$  = \$13.75

## **Common Stock Transactions (1 of 2)**

Common stock is held by investors who are the **owners** of a corporation.

#### Stockholders have the right to:

- Vote
- · Share in profits of the business
- Elect the board of directors who hire and monitor the executives who manage a company's activities on a day-to-day basis

11-17

## **Common Stock Transactions (2 of 2)**

**Par value** is the nominal value per share, established in the corporate charter.\*

Par Value # Market Value

**Legal capital** is the amount of capital, required by the state, that must remain invested in the business.

\*Some states do not require a par value to be stated in the charter.

### **Initial Sale of Stock**

An **initial public offering,** or IPO, involves the very first sale of a company's stock to the public (i.e., when the company first "goes public").

Additional sales of new stock to the public are called seasoned offerings.

Assume IBM sold 100,000 shares of its \$0.20 par value common stock for \$150 per share. The company would record the following journal entry:

	Debit	Credit
Cash (+A) (100,000 × \$150)	15,000,000	
Common stock (+SE) (100,000 × \$0.20)		20,000
Additional paid-in capital (+SE)		14,980,000

Assets		=	Liabilities	+	Stockholders' Equity	
Cash	+15,000,000				Common stock	+20,000
					Additional paid-in capital	+14,980,000

11-19

## **Sale of Stock in Secondary Markets**

When a company sells stock to the public, the transaction is between the issuing corporation and the investor.

Subsequent to the initial sale, investors can sell shares to other investors without directly affecting the corporation.

• The corporation is not a part of the transaction and therefore does not receive or pay anything.



## **Stock Issued for Employee Compensation**

Managers may be offered stock options, a common form of compensation, which permit them to buy stock at a fixed price.

Options specify that shares may be bought at the thencurrent market price.

If the stock price increases, you can exercise your option at the low grant price and sell the stock at the higher price for a profit.

• If you hold a stock option and the stock price declines, you have lost nothing. They are a risk-free investment.

Companies must estimate and report compensation expense associated with stock options.

11-21

## Stock Options(期权)

The right to purchase common stock at a fixed price over a specified period of time. As the stock's price rises above the fixed option price, the value of the option increases.

Option purchase price \$30 per share.



Market price of stock \$75 per share.

## **Repurchase of Stock**

A corporation repurchase its stock from existing stockholders for a number of reasons:

- When employee bonus plans provide workers with shares of company's stock, the company can give employees repurchased shares rather than issue new ones.
  - If a company were to pay bonuses with newly issued shares each period, it
    would increase the number of shares in the market, which would decrease the
    company's stock price.
  - Increasing the number of shares also would dilute existing stockholders' investments, as each share of stock they own would be worth less.
  - By repurchasing shares to fulfill bonus obligations, companies avoid this dilutive effect.

Stock that has been repurchased and is held by the issuing corporation is called **treasury stock**.

Treasury shares have no voting, dividend, or other stockholder rights while they are held as treasury stock.

11-23

## Repurchase and Reissuance of Stock (1 of 2)

IBM reacquired 100,000 shares of its common stock when it was selling for \$140 per share.

	Debit	Credit
Treasury stock (+XSE, –SE) (100,000 × \$140)	14,000,000	
Cash (-A)		14,000,000

Treasury Stock is a contra-equity account, not an asset!

IBM reissued 10,000 shares of treasury stock at \$150 per share.

	Debit	Credit
Cash (+A) (10,000 × \$150)	1,500,000	
Treasury stock (-XSE, +SE) (10,000 × \$140)		1,400,000
Additional paid-in capital (+SE)		100,000

## Repurchase and Reissuance of Stock (2 of 2)

IBM reissued 10,000 shares of treasury stock at \$130 per share.

	Debit	Credit
Cash (+A) (10,000 × \$130)	1,300,000	
Additional paid-in capital (-SE)	100,000	
Treasury stock (-XSE, +SE) (10,000 × \$140)		1,400,000

11-25

## Exercise 11-3

During Year 1 the following selected transactions affecting stockholders' equity occurred for Disney Corporation:

- a. Apr. 1 Repurchased 400 shares of the company's own common stock at \$40 per share.
- b. Jun. 14 Sold 80 shares of the shares purchased on April 1 for \$50 cash per share.
- c. Sept. 1 Sold 60 shares of the shares purchased on April 1 for \$30 cash per share.

#### Required:

Provide journal entries to record each of the transactions in (a) through (c).

	<u>Debit</u>	Credit
a. Treasury Stock (+XSE, –SE) (400 shares × \$40)	16,000	
Cash (-A)		16,000
Bought treasury stock for \$40 per share.		
b. Cash (+A) (80 shares × \$50)	4,000	
Treasury Stock (–XSE, +SE) (80 shares × \$40)		3,200
Additional Paid-in Capital (+SE) (80 shares × \$10)		800
Sold treasury stock at \$50 per share.		
c. Cash (+A) (60 shares × \$30)	1,800	
Additional Paid-in Capital (–SE)	600	
Treasury Stock (–XSE,+SE) (60 shares × \$40)		2,400
Sold treasury stock at \$30 per share.		

### **Dividends on Common Stock**

The return from investing in a company's common stock can come from two sources: stock price appreciation and dividends.

Some investors prefer to buy stocks that pay little or no dividends.

- Wealthy investors in high tax brackets prefer higher stock prices because capital gains may be taxed at a lower rate than dividend income.

Other investors, such as retired people who need a steady income, prefer to receive their return in the form of dividends.

 Retirees seek stocks that will pay relatively high dividends, such as utility stocks.

Analysts compute the dividend yield ratio to evaluate a company's dividend policy.

### **Key Dividend Dates**

Declaration Date Date of Record Date of Payment

<u>Date of Declaration</u>: Date on which the board of directors approves the dividend. Assume IBM declared a \$1,387 million dividend on 10/31.

	Debit	Credit
Retained earnings (–SE)	1,387,000,000	
Dividends payable (+L)		1,387,000,000

<u>Date of Record</u>: Stockholders who own shares on this date will receive the dividend. (No journal entry)

Date of Payment: The date the cash is disbursed to stockholders.

	Debit	Credit
Dividends payable (-L)	1,387,000,000	
Cash (-A)		1,387,000,000

Note: The corporation must have sufficient retained earnings and cash to cover the amount of the dividend.

11-29

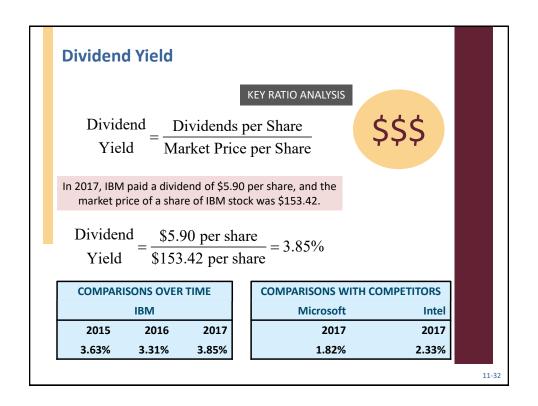
## Exercise 11-4

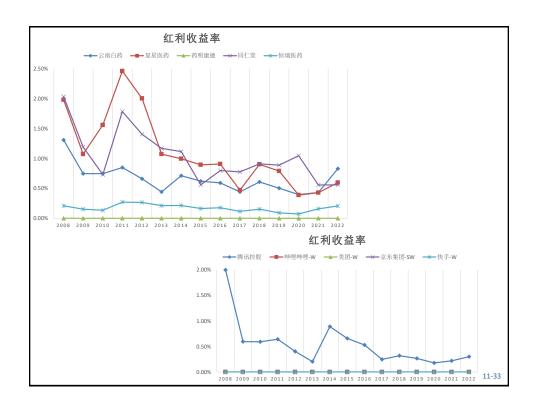
A recent annual report for Lawson, Inc. disclosed that the company declared and paid dividends on common stock in the amount of \$4 per share. During the year, Lawson had 2,000,000,000 authorized shares of common stock and 775,028,600 issued shares. There were 83,340,000 shares of treasury stock.

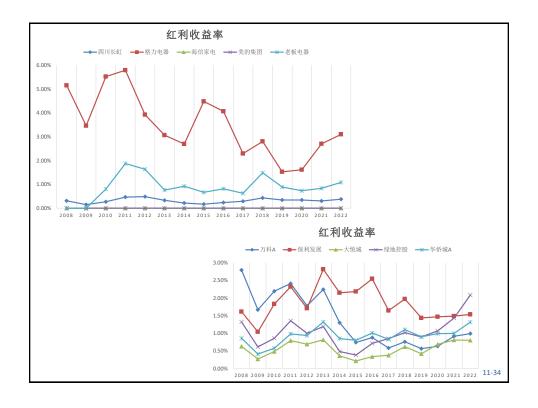
#### Required:

Assume Lawson declared the entire dividend (\$4 per share) on July 15 and subsequently paid the dividend on July 31. Provide the journal entries to record the declaration and payment of dividends.

Requirement		
Dividends paid = No. of outstanding shares × Computation of shares outstanding:	Dividend per share	
Shares issued	_	
	<u>Debit</u>	Cr
July 15		<u>C11</u>
July 15  Retained Earnings (–SE)  Dividends Payable (+L)  Declaration of dividend.	2,766,754,400	_
Retained Earnings (–SE) Dividends Payable (+L)	2,766,754,400	_
Retained Earnings (–SE)  Dividends Payable (+L)  Declaration of dividend.	2,766,754,400 2,766,754,400	2,766,754, 2,766,754,







## **Impact of Dividends on Stock Price**

#### FINANCIAL ANALYSIS

The **ex-dividend date** 除权日is the date two days before the date of record. This date is established by the stock exchanges to account for the fact that it takes time (typically three days) to officially transfer stock from a seller to a buyer.



If someone buys stock before the ex-dividend date, they will be listed as the owner and receive the dividend. If someone buys stock on or after the ex-dividend date, the previous owner will be listed as the owner of the dividend.

Stock prices often fall on the ex-dividend date since the stock no longer includes the right to receive the next dividend.

11-35

## Nature of Stock Dividends (1 of 2)

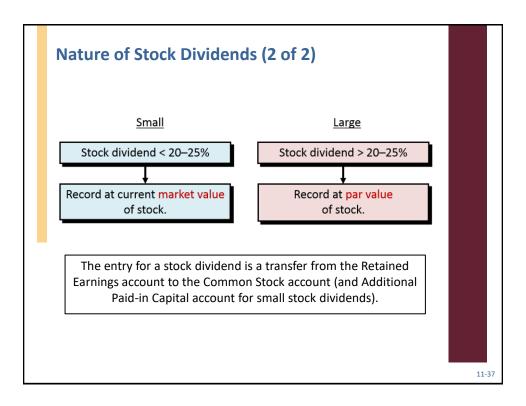
**Stock dividends** represent a distribution of additional shares of stock to shareholders.

- Stock is distributed pro rata; stockholders retain the same percentage ownership after stock dividends are distributed.
- · A stock dividend has no economic value!

Stock dividends do not change the stock's par value or total stockholders' equity.

The stock market reacts immediately when a stock dividend is issued.

- The stock price falls.
- The lower market price may make the stock more attractive to new investors.



#### **Stock Dividends**

**Large Stock Dividend:** Assume IBM issued 50 million shares of its \$0.20 par value stock. On the date of declaration the following journal entry is made:

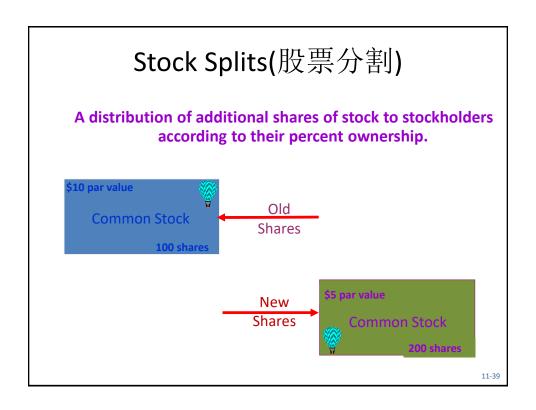
	Debit	Credit
Retained earnings (–SE) (\$0.20 par value × 50,000,000)	10,000,000	
Common stock (+SE) (\$0.20 par value × 50,000,000)		10,000,000

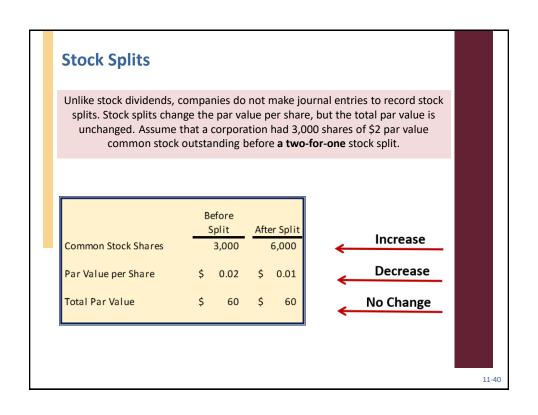
**Small Stock Dividend:** Assume IBM issued 5 million shares of its \$0.20 par value stock when it was trading for \$150 per share.

On the date of declaration the following journal entry is made:

	Debit	Credit
Retained earnings (–SE) (\$150 market price × 5,000,000)	750,000,000	
Common stock (+SE) (\$0.20 par value × 5,000,000)		1,000,000
Additional paid-in capital (+SE) (remainder)		749,000,000

NOTE: Regardless of whether a stock dividend is classified as large or small, there is no change in the total amount of stockholders' equity





### Exercise 11-5

On July 1, Charlotte Corporation had the following capital structure:

Common stock (\$6 par value) \$1,200,000
Additional paid-in capital 1,800,000
Retained earnings 1,400,000
Treasury stock -0-

#### Required:

Complete the table below for each of the two following independent cases:

Case 1: The board of directors declared and issued a 50 percent stock dividend when the stock was selling at \$10 per share.

Case 2: The board of directors announced a 6-to-5 stock split (i.e., a 20 percent increase in the number of shares). The market price prior to the split was \$10 per share.

Items	Before Dividend and Split	After Stock Dividend	After Stock Split
Common stock account	\$	\$	\$
Par per share	\$6	\$	\$
Shares outstanding	#	#	#
Additional paid-in capital	\$1,800,000	\$	\$
Retained earnings	\$1,400,000	\$	\$
Total stockholders' equity	\$	\$	\$

11-41

#### Comparative results:

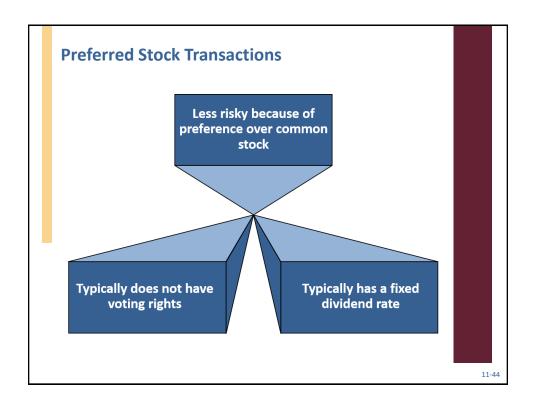
#### STOCKHOLDERS' EQUITY

Items	Before Dividend and Split	After a 50% Stock Dividend	After a 6-to-5 Stock Split
Common stock account	\$1,200,000	\$1,800,000	\$1,200,000
Par per share	\$6	\$6	\$5
Shares outstanding	200,000	300,000	240,000
Additional paid-in capital	\$1,800,000	\$1,800,000	\$1,800,000
Retained earnings	\$1,400,000	\$ 800,000	\$1,400,000
Total stockholders' equity	\$4,400,000	\$4.400.000	\$4.400.000

Comments: Neither the stock dividend nor stock split changed total stockholders' equity because neither involved the disbursement of assets.

- The stock dividend transferred funds out of retained earnings to the common stock; it
  increased the number of shares outstanding but did not change the par value per
  share.
- The stock split did not change any account balances; its only effects were to (1) increase the number of shares outstanding and (2) decrease the par value per share.

	_		1 CORPORATIO				
	Cons		stement of Ch \$ in millions)	anges in Equity			
	Common Stock and Additional	Retained	Treasury	Accumulated Other Comprehensive	Total IBM Stockholders'	Non- Controlling	Total
Equity, January 1, 2017	Paid-In Capital \$53,935	\$152,759	\$(159,050)	\$(29,398)	Equity \$18.246	Interests \$146	S18.39
Cumulative effect of change in accounting principle*	<i>\$33,333</i>	102	\$(133,030)	<i>\$(25,550)</i>	102	<b>9240</b>	10,5
Net income plus other comprehensive income/ (loss)							
Net income		5,753			5,753		5,75
Other comprehensive income/(loss)				2,806	2,806		2,80
Total comprehensive income/(loss)					\$ 8,559		\$ 8,55
Cash dividends paid—common stock		(5,506)			(5,506)		(5,50)
Common stock issued under employee plans (4,311,998 shares)	631				631		63
Purchases (1,226,080 shares) and sales (463,083 shares) of treasury stock under employee plans—net		18	(134)		(116)		(11)
Other treasury shares purchased, not retired (27,237,179 shares)			(4,323)		(4,323)		(4,32
Changes in other equity		0			0		
Changes in noncontrolling interests						(15)	(1
Equity, December 31, 2017	\$54,566	\$153,126	\$(163,507)	\$(26,592)	\$17,594	\$131	\$17,72





U.S. GAAP and IFRS use different words to describe the same stockholders' equity accounts.

International Perspective

IBM (U.S.) GAAP		ASOS (UK) IFRS
Common stock	=	Share capital
Additional paid-in capital	=	Share premium

11-45

## **Dividends on Preferred Stock (1 of 2)**

#### Preferred stock offers a dividend preference:

Current dividend preference红利优先: Requires a company to pay current dividends to preferred stockholders before paying dividends to common stockholders. After this is met then dividends can be paid to common stockholders.

Cumulative dividend preference可累计优先股: Requires any unpaid dividends on preferred stock to accumulate. This amount, called dividends in arrears, must be paid before common dividends are paid.

If preferred stock is **noncumulative**, any dividends not declared in previous years are permanently lost and will never be paid.

Note: Dividends in arrears are disclosed in the notes to the financial statements. They are not a liability until the board of directors declares them.

### **Dividends on Preferred Stock (2 of 2)**

#### Wally Company has the following stock outstanding:

Preferred stock: 6%, \$20 par value, 2,000 shares outstanding. *Assume* current dividend preference

Common stock: \$10 par value, 5,000 shares outstanding

- 1) If Wally issues a \$3,000 current dividend, the dividends would be allocated as follows:
  - Preferred: \$20 par value × 6% × 2,000 shares = \$2,400
  - Common: \$3,000 \$2,400 = \$600
- 2) If Wally issues a \$30,000 dividend and the dividends were in arrears for two years (assume cumulative dividend preference) the allocation would be as follows:
  - Preferred: \$2,400 current + (\$2,400 in arrears × 2 years) = \$7,200
  - Common: \$30,000 \$7,200 = \$22,800

11-47

## Exercise 11-6

The records of Nashville Company reflected the following balances in the stockholders' equity accounts at December 31, Year 1:

- Common stock, \$24 par value, 60,000 shares outstanding
- Preferred stock, 10 percent, \$10 par value, 10,000 shares outstanding
- Retained earnings, \$432,000

On September 1, Year 2, the board of directors was considering the distribution of a \$130,000 cash dividend. No dividends were paid during the previous two years.

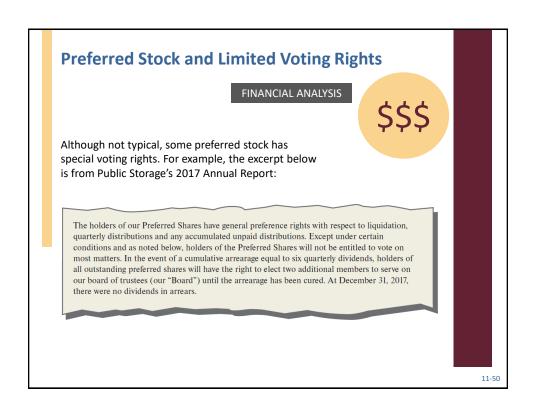
You have been asked to determine dividend amounts under two independent assumptions (show computations):

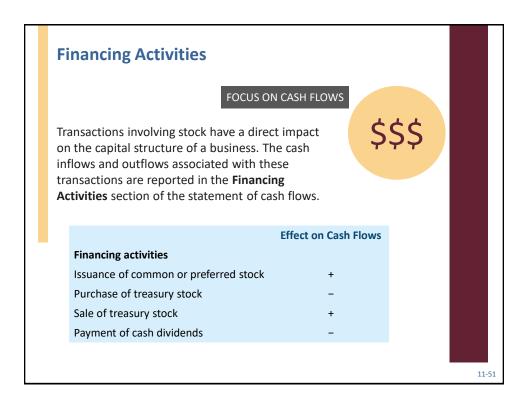
- a. The preferred stock is noncumulative.
- b. The preferred stock is cumulative.

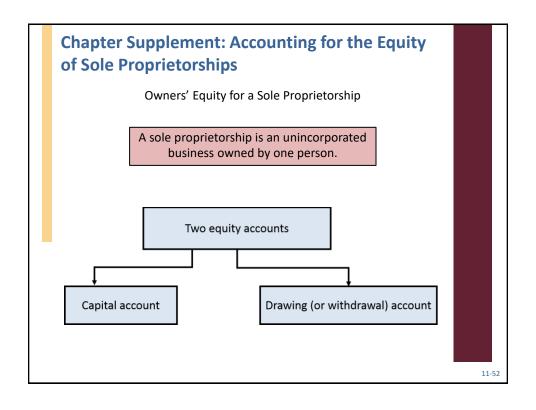
#### Required:

Determine the total and per share amounts that would be paid to the common stockholders and the preferred stockholders under the two independent assumptions.

	Preferred (10,000 Shares)	Common (60,000 Shares)	Total
Non-cumulative:			
Preferred (\$100,000 × 10%)	\$10,000		\$ 10,000
Balance to common (\$130,000 - \$10,000)		\$120,000	120,000
	\$10,000	\$120,000	\$130,000
Dividend per share	\$1.00	\$2.00	
Cumulative:			
Preferred, arrears (\$100,000 × 10% × 2 years)	\$20,000		\$ 20,000
Preferred, current year (\$100,000 × 10%)	10,000		10,000
Balance to common (\$130,000 - \$20,000 - \$10,000)		\$100,000	100,000
	\$30,000	\$100,000	\$130,000
Dividend per share	\$3.00	\$1.67	







## Exhibit 11.4: Accounting for Owner's Equity for a Sole Proprietorship (1 of 2)

Hans Solo started an aviation business by investing \$150,000 of personal savings. The journal entry to record this business formation is:

	Debit	Credit
Cash (+A)	150,000	
Hans Solo, capital (+OE)		150,000

 Assets
 =
 Liabilities
 +
 Owner's Equity

 Cash
 +150,000
 Hans Solo, capital
 +150,000

Each month, Hans Solo withdrew \$1,000 cash from the business for personal living expenses.

	Debit	Credit
Hans Solo, drawing (-OE)	1,000	
Cash (-A)		1,000

Assets = Liabilities + Owner's Equity

Cash -1,000 Hans Solo, drawing -1,000

11-53

## Exhibit 11.4: Accounting for Owner's Equity for a Sole Proprietorship (2 of 2)

At the end of Year 1, \$418,000 of revenues and \$400,000 of expenses were closed to the owner's capital account as follows:

	Debit	Credit
Revenue accounts (-R, closing entry)	418,000	
Expense accounts (–E, closing entry)		400,000
Hans Solo, capital (+OE)		18,000

The drawing account was closed as follows:

	Debit	Credit
Hans Solo, capital (-OE)	12,000	
Hans Solo, drawing (+OE, closing entry)		12,000

### Exhibit 11.4

### Accounting for Owner's Equity for a Sole Proprietorship

#### HANS SOLO AVIATION

## Statement of Owner's Equity For the Year Ended December 31, Year 1

Owner's Equity		
Hans Solo, capital, January 1, Year 1	\$	0
Add: Additional investments during Year 1	150	,000
Add: Net income for Year 1	<u>18</u>	,000
Total	168	,000
Less: Drawings for Year 1	(12,0	<u>)00)</u>
Hans Solo, capital, December 31, Year 1	<u>\$156</u>	000

11-55

## Owners' Equity for a Partnership (1 of 3)

A partnership is owned by two or more individuals. The partnership agreement specifies the division of income, management responsibilities, transfer or sale of partnership interests, disposition of assets upon liquidation, and procedures to be followed in case of the death of a partner.

Separate capital and drawing accounts are maintained for each partner.

Partnership income is divided among the partners according to the partnership agreement.

Advantages of a partnership include:

- Ease of formation
- Complete control by partners
- · No income taxes on business itself

The primary disadvantage of a partnership is unlimited liability of each partner for the partnership's debts.

Partners must report their share of the partnership profits on their individual tax returns.

## Owners' Equity for a Partnership (2 of 3)

Hannah and Bob formed a partnership. Hannah contributed \$60,000 cash. Bob contributed \$40,000 cash. The partners agreed to divide partnership income in the ratio of their contributions (60:40).

The journal entry to record this business formation is:

	Debit	Credit
Cash (+A)	100,000	
Hannah, capital (+OE)		60,000
Bob, capital (+OE)		40,000

Assets		=	Liabilities	+	Owner's Equity	
Cash	+100,000			-	Hannah, capital	+60,000
					Boh canital	+40 000

11-57

## Owners' Equity for a Partnership (3 of 3)

The partners agreed that each month, Hannah would withdraw \$1,000 and Bob would withdraw \$650. The monthly journal entry to record the withdrawal is:

	Debit	Credit
Hannah, drawing (-OE)	1,000	
Bob, drawing (-OE)	650	
Cash (-A)		1,650

_/	Assets		=	Liabilities	+	Owner's Equity	
(	Cash	-1,650				Hannah, drawing	-1,000
						Bob. drawing	-650

## Exhibit 11.5

## Accounting for Owners' Equity for a Partnership

A separate statement of owners' equity, similar to the following, is customarily prepared to supplement the balance sheet:

#### MIRROR IMAGE PARTNERS

Statement of Owners' Equity
For the Year Ended December 31, Year 1

	Hannah		Bob		Total	
Investment, January 1, Year 1	\$	0	\$	0	\$	0
Add: Additional investments during Year 1	60,0	000	40,000		100,000	
Add: Net income for Year 1	<u>18,000</u>		12,000		<u>30,000</u>	
Totals	78,000		52,000		130,000	
Less: Drawings during Year 1	(12,000)		(7,800)		<u>(19,800)</u>	
Owners' equity, December 31, Year 1	<u>\$66,000</u>		<u>\$44,200</u>		<u>\$110,200</u>	

11-59

#### **HW11**

P606 E11-6

P609 E11-16

P610 E11-19

P612 E11-24