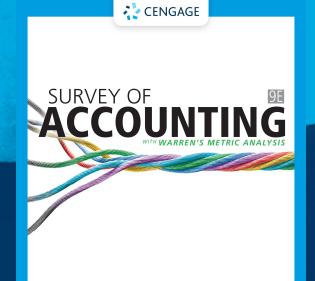
#### Survey of Accounting, 9e

Carl S. Warren and Amanda G .Farmer





# Chapter 8

CARL S. WARREN AMANDA G. FARMER

#### Liabilities and Stockholders' Equity



## Learning Objectives

- Describe how corporations finance their operations and its impact on earnings per share
- Describe and illustrate the accounting for current liabilities, notes payable, and payroll
- Describe the accounting for bonds payable
- Describe types of contingent liabilities and the related accounting
- Describe and illustrate transactions involving stock



#### Learning Objectives (continued)

- Describe and illustrate the accounting for cash and stock dividends
- Describe and illustrate stock splits
- Describe and illustrate the reporting of liabilities and stockholders' equity
- Describe and illustrate the debt and price-earnings ratios



## **Learning Objective 1**

#### Describe how corporations finance their operations and its impact on earnings per share



#### **Financing Corporations**

- Sources used to finance operations
  - Short-term debt
  - Long-term debt
    - Bond
  - Equity
    - Common stock
    - Preference stock
- Earnings per share (EPS)
  - Influences a company's decisions on financing operations using debt or equity

Earnings per Share =  $\frac{\text{Net Income} - \text{Preferred Dividends}}{\text{Number of Common Shares Outstanding}}$ 



#### **Exhibit 1: Reedy Corporation Financing Alternatives**

	Alternative One		Alternati	ve Two	<b>Alternative Three</b>	
	Amount	Percent	Amount	Percent	Amount	Percent
Issue 12% bonds	_	0%	_	0%	\$2,000,000	50%
lssue preferred 9% stock, \$50 par value	_	0	\$2,000,000	50	1,000,000	25
Issue common						
stock, \$10 par value	\$4,000,000	100	2,000,000	50	1,000,000	25
Total amount of financing	\$4,000,000	100%	\$4,000,000	100%	\$4,000,000	100%



#### Exhibit 2: Earnings per Share \$800,000\*

	Alternative One	<b>Alternative Two</b>	<b>Alternative Three</b>
12% bonds	_	—	\$2,000,000
Preferred 9% stock, \$50 par	—	\$2,000,000	1,000,000
Common stock, \$10 par	\$4,000,000	2,000,000	1,000,000
Total	\$4,000,000	\$4,000,000	\$4,000,000
Earnings before interest and income tax	\$ 800,000	\$ 800,000	\$ 800,000
Deduct interest on bonds			(240,000)ª
Income before income tax	\$ 800,000	\$ 800,000	\$ 560,000
Deduct income tax	(320,000) <sup>b</sup>	(320,000) <sup>b</sup>	(224,000) <sup>b</sup>
Net income	\$ 480,000	\$ 480,000	\$ 336,000
Dividends on preferred stock		(180,000) <sup>c</sup>	(90,000) <sup>c</sup>
Available for dividends on common stock	\$ 480,000	\$ 300,000	\$ 246,000
Shares of common stock outstanding	<u>÷ 400,000<sup>d</sup></u>	÷ 200,000 <sup>d</sup>	<u>÷ 100,000<sup>d</sup></u>
Earnings per share on common stock	\$ 1.20	\$ 1.50	\$ 2.46
°\$2,000,000 bonds × 12%			
<sup>b</sup> Income before income tax × 40%			
<sup>c</sup> Preferred stock $\times$ 9%			
<sup>d</sup> Common stock ÷ \$10 par value per share			

#### \* Earnings before interest and income tax

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#### Exhibit 3: Earnings per Share \$440,000\*

	<b>Alternative One</b>	<b>Alternative Two</b>	<b>Alternative Three</b>
12% bonds			\$2,000,000
Preferred 9% stock, \$50 par	—	\$2,000,000	1,000,000
Common stock, \$10 par	\$4,000,000	2,000,000	1,000,000
Total	\$4,000,000	\$4,000,000	\$4,000,000
Earnings before interest and income tax	\$ 440,000	\$ 440,000	\$ 440,000
Deduct interest on bonds			(240,000)
Income before income tax	\$ 440,000	\$ 440,000	\$ 200,000
Deduct income tax	(176,000)	(176,000)	(80,000)
Net income	\$ 264,000	\$ 264,000	\$ 120,000
Dividends on preferred stock		(180,000)	(90,000)
Available for dividends on common stock	\$ 264,000	\$ 84,000	\$ 30,000
Shares of common stock outstanding	÷ 400,000	÷ 200,000	÷ 100,000
Earnings per share on common stock	\$ 0.66	\$ 0.42	\$ 0.30

#### \* Earnings before interest and income tax

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## **Learning Objective 2**

# Describe and illustrate the accounting for current liabilities, notes payable, and payroll



#### Liabilities

- Debts owed to creditors
- Types
  - Current liabilities
  - Long-term liabilities



#### **Accounts Payable and Accruals**

#### Accounts payable transactions

• Involve a variety of purchases on account, including the purchase of merchandise and supplies

#### Accrued liabilities

- Obligation to pay current assets in the future
- Recorded at the end of an accounting period as part of the adjustment process



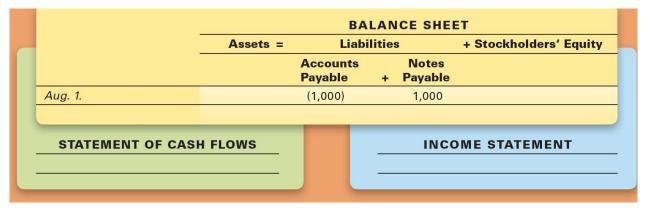
#### **Notes Payable**

- Issued to:
  - Satisfy an account payable
  - Purchase merchandise or other assets
- Borrower: Issuer of the note
- Lender: Party receiving the note



#### **Issuing and Paying Notes**

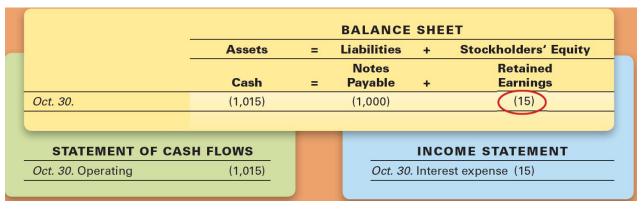
- A business issues a 90-day, 6% note for \$1,000, dated August 1, 20Y5, to satisfy an account payable that is due on October 30
  - Issuing notes payable





#### Issuing and Paying Notes (continued)

- A business issues a 90-day, 6% note for \$1,000, dated August 1, 20Y5, to satisfy an account payable that is due on October 30
  - Paying of note





#### **Transaction Metric Effects**

- Profitability metric: Earnings per share
- Solvency metric is used rather than a liquidity metric
- Effects of issuing and paying the \$1,000 note payable, including interest

SOLVEN	ICY	PROFITAI	BILITY
Net Ass	ets	Earnings per Share	
Issuing note payable	No Effect	Issuing note payable	No Effect
Paying note payable	\$(15)	Paying note payable	Decreases



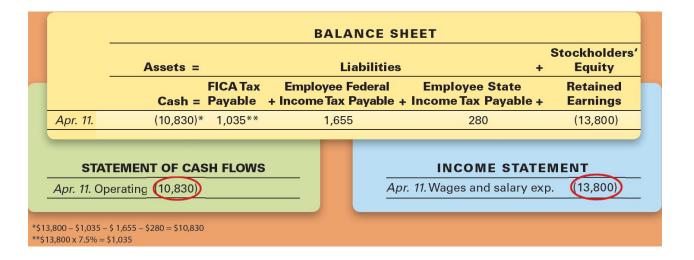
# Payroll

- Amount paid to employees for the services they provide during a period
- **Gross pay**: Total earnings of an employee for a payroll period
  - Includes bonuses and overtime pay
- **Net pay** is obtained after subtracting one or more deductions
  - FICA tax: Contributes to Social Security and Medicare
  - Medical insurance, contributions to pensions, and items authorized by individual employees



#### **Recording the Payroll of McDermott Co.**

- McDermott Co. had a gross payroll of \$13,800 for the week ending April 11
  - FICA tax: 7.5% of the gross payroll
  - Federal and state withholding: \$1,655 and \$280





### **Recording Payroll: Transaction Metric Effects**

Effect of the payroll tax liabilities on the solvency and profitability metrics





#### **Payroll: Employer Expenses**

- Federal, state, and local (if applicable) income taxes
- Also include FICA, FUTA, and SUTA taxes
  - FICA: Employer portion
  - FUTA: Federal Unemployment Tax Act
  - SUTA: State Unemployment Tax Acts
- Taxes paid by employers are an operating expense for the business



#### **Recording Employer Payroll Taxes of McDermott Co.**

- Employer's social security payroll tax: \$1,035
- FUTA tax: \$145
- SUTA tax: \$25

-				BALANCI	ESHI	EET		Of a laboration of
	Assets =			Liabilities	•		+	Stockholders' Equity
		FICA Tax Payable	+	FUTA Tax Payable	+	SUTA Tax Payable	+	Retained Earnings
Apr. 11.		1,035		145		25		(1,205)
STATE	EMENT OF C	ASH FLOWS				INCOME	STA	TEMENT
					Apr. 1	11. Payroll tax ex	кр.	(1,205)



#### **Recording Payroll Taxes: Transaction Metric Effects**

Effect of the payroll tax liabilities on the solvency and profitability metrics





### **Fringe Benefits**

- Recognized as expenses when employer pays part or all of the cost of the fringe benefits
- Recorded during the period in which the employee earns the benefit
  - Estimated cost of the benefits should be recorded as an expense along with any related liability



### **Learning Objective 3**

#### Describe the accounting for bonds payable



#### Bond

- Form of an interest-bearing note
- Bond indenture: Contract between the company issuing the bonds and the bondholders
- Bond issue is divided into several individual bonds
  - Interest may be payable annually, semiannually, or quarterly



#### **Selling Price of Bonds: Determining Factors**

- Face amount of the bonds due at the maturity date
- Periodic interest to be paid on the bonds
  - Identified in the bond indenture
  - Expressed as the **contract rate** or coupon rate
- Market rate of interest (effective rate of interest)
  - Bonds are sold at their face amount if the contract rate of interest is the same as the market rate of interest



#### **Bonds Payable: Illustration**

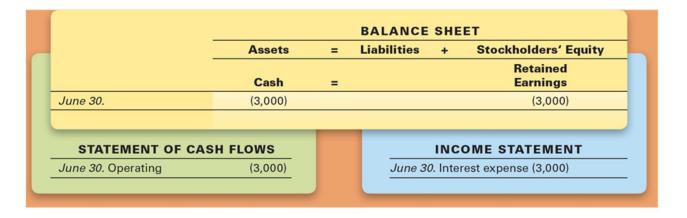
- A business issues \$100,000 of 6%, 5-year bonds
  - Interest payable semiannually: \$3,000
  - Market rate of interest when the bonds are issued: 6%
- Issuing bonds on January 1

	-		BALANCE	SHE	ET	
	Assets	=	Liabilities	+	Stockholders' Equity	
	Cash	=	Bonds Payable			
Jan. 1.	100,000		100,000			
STATEMENT OF CASH FLOWS				INC	OME STATEMENT	
Jan. 1. Financing	100,000					



#### Bonds Payable: Illustration (continued 1)

- Payment of semiannual interest on June 30
  - Interest = \$100,000 × 0.06 × ½ = \$3,000





#### Bonds Payable: Illustration (continued 2)

• Payment of face value of \$100,000 bond at maturity

			BALANCE	SHEET		
	Assets	=	Liabilities	+	Stockholders' Equity	
	Cash	=	Bonds Payable			
Dec. 31.	(100,000)		(100,000)			
		_	_			
STATEMENT O	F CASH FLOWS			INC	OME STATEMENT	
Dec. 31. Financing	(100,000)					
Deereninationig	(100,000)					



#### **Bonds Payable: Transaction Metric Effects**

Effects of the bond payable transactions on the solvency and profitability metrics

SOLVENC Net Asset		PROFITABILITY Earnings per Share	
Issuing bonds payable	No Effect	Issuing bonds payable No Effect	
Payment of interest	\$(3,000)	Payment of interest Decrease	
Paying note payable	No Effect	Paying note payable No Effect	



#### **Selling Price of Bonds**

- Market Rate = Contract Rate
  - Selling Price = Face Amount of Bonds
- Market Rate of Interest > Contract Rate
  - Selling Price < Face Amount of Bonds</li>
    - Discount on Bonds Payable = Face Amount Selling Price
- Market Rate < Contract Rate</li>
  - Selling Price > Face Amount of Bonds
  - Premium on Bonds Payable = Selling Price Face Amount



## **Learning Objective 4**

#### Describe types of contingent liabilities and the related accounting

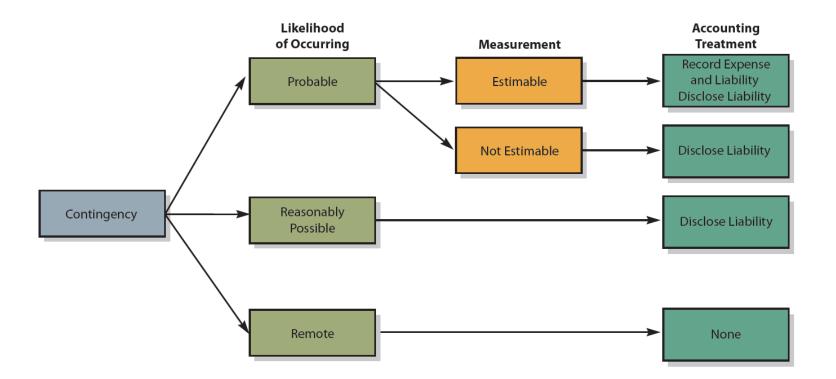


## **Contingent Liabilities**

- Potential liabilities that may arise from past transactions if certain events occur in the future
- Accounting depends on the following factors:
  - Likelihood of the potential liability occurring
    - · Classified as probable, reasonably possible, or remote
  - Ability to measure the potential liability
    - Classified as estimable or not estimable
- Professional judgment is necessary in distinguishing among classes of contingent liabilities



#### **Exhibit 4: Accounting for Contingent Liabilities**





### **Learning Objective 5**

#### Describe and illustrate transactions involving stock



# Exhibit 5: Authorized, Issued, and Outstanding Shares of Stock





# **Shares of Stock**

- Issued with or without par value
  - Par: Monetary value stated on stock certificate
  - No-par stock: Some states might require the board of directors to assign a **stated value** to no-par stock
- Legal capital
  - Minimum stockholder contribution required by some states to protect creditors



# **Stock Rights**

- Right to vote in matters concerning the corporation
- Right to share in distributions of earnings
- Right to share in assets upon liquidation



### **Common and Preferred Stock**

#### Common stock

- When only one class of stock is issued
- Each share has equal rights

#### Preferred stock

- May or may not be issued
- Has preference rights over common stock
- Dividend rights are stated as dollars per share or as a percent of par



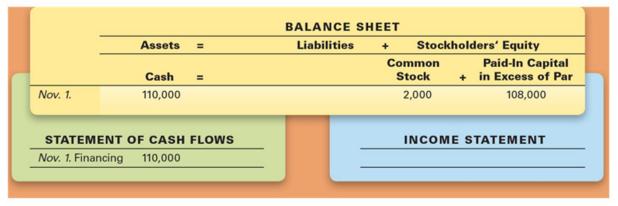
### **Issuance of Stock**

- Price at which a stock sells depends on the following factors:
  - Financial condition, earnings record, and dividend record of the corporation
  - Investor expectations of the corporation's potential earning power
  - · General business and economic conditions and prospects
- Stocks are issued:
  - At a **premium**
  - In exchange for cash or other assets



## **Issuance of Stock by Caldwell Company**

 Cansrsourc14 Company issues 2,000 shares of \$1 par common stock for cash at \$55 per share on November 1



• Transaction metric effects

SOLVENCY	PROFITABILITY
Net Assets \$110,000	Earnings per Share Decrea

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ansrsourc14 The edit suggested to this slide has not been made, since the indicated piece information in already included in the notes to slide 40. ansrsource, 11/19/2019

# **Treasury Stock**

- Stock that a corporation has issued and then reacquired
- Balance at the end of the year is reported as a reduction of stockholders' equity
- Corporation may reacquire (purchase) its own stock to:
  - Provide shares for resale to employees
  - Reissue as bonuses to employees
  - Support the market price of the stock



#### **Treasury Stock: Hoffman Inc.**

• Purchases 10,000 shares of its outstanding common stock for \$150,000

			BAI	ANC	E SHEET
-	Assets	=	Liabilities	+	Stockholders' Equity
	Cash	=			Treasury Stock
Feb. 6.	(150,000)				(150,000)
STATEMENT OF CASH FLOWS					INCOME STATEMENT
Feb. 6. Finan	cing (150,000)				

Transaction metric effects





# **Learning Objective 6**

# Describe and illustrate the accounting for cash and stock dividends



# **Dividends**

- Declaring a dividend decreases the retained earnings of the corporation
- Types of dividend declared by the board of directors
  - Cash dividend
  - Stock dividend

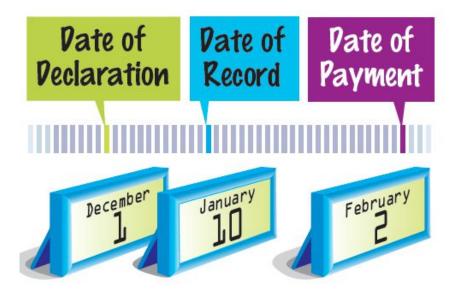


# **Cash Dividends**

- Cash distribution of earnings by a corporation to its shareholders
- Conditions for a cash dividend
  - Sufficient retained earnings
  - Sufficient cash
  - Formal action by the board of directors
- Special or extra dividends
  - Paid when a corporation experiences higher than normal profits
- Dividends are not paid on the treasury shares



#### **Exhibit 6: Cash Dividend Dates**



Board of Owners of Dividend directors the shares is paid. takes action on this date to declare receive dividends. dividends.



### **Declaration of Cash Dividends**

- On December 1, Hiber Corporation's board of directors declares the cash dividends of \$42,500
  - Date of record: January 10
  - Date of payment: February 2

		в	ALANCE SI	HEET
	Assets =	Liabilities	+	Stockholders' Equity
		Dividends Payable	+	Retained Earnings
Dec. 1.		42,500		(42,500)
STATEMENT OF CASH FLOWS			-	INCOME STATEMENT



### **Payment of Cash Dividends**

• Payment of dividend on February 2

			BALANCE S	HEET
	Assets	=	Liabilities	+ Stockholders' Equity
	Cash	=	Dividends Payable	
Feb. 2.	(42,500)		(42,500)	
STATEMENT	OF CASH FLOWS			INCOME STATEMENT
Feb. 2. Financing	(42,500)			

Transaction metric effects of the declaration and purchase

SOLVENCY Net Assets		PROFITABILI1 Earnings per SI	
Declaring cash dividend	\$(42,500)	Declaring cash dividend	No Effect
Payment of cash dividend	No Effect	Payment of cash dividend	No Effect



# **Stock Dividends**

- Distribution of shares of stock to stockholders
- Transfer retained earnings to paid-in capital
- Do not change the assets, liabilities, or total stockholders' equity of a corporation
  - Individual stockholder's proportionate interest (equity) is also not changed



#### Stock Dividends (continued)

- A stockholder owns 1,000 of a corporation's 10,000 shares outstanding
  - If the corporation declares a 6% stock dividend, the stockholder's proportionate interest will not change as shown below

	Before Stock	After Stock
	Dividend	Dividend
Total shares issued	10,000	10,600 [10,000 + (10,000 × 6%)]
Number of shares owned	1,000	1,060 [1,000 + (1,000 × 6%)]
Proportionate ownership	10% (1,000/10,000)	10% (1,060/10,600)

• Do not affect the solvency and profitability metrics



# **Learning Objective 7**

#### Describe and illustrate stock splits



# **Stock Split**

- Process by which a corporation reduces the par or stated value of its common stock and issues a proportionate number of additional shares
- Objective
  - To reduce a stock's market price per share in order to attract more investors
- Does not affect any financial statement accounts, since only the par value and number of shares outstanding change



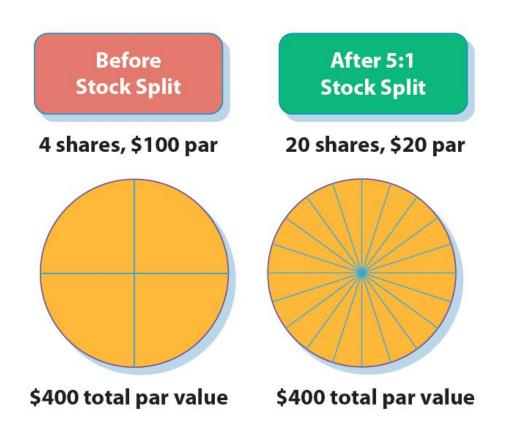
### **Stock Split Before and After**

- Rojek Corporation has 10,000 shares of \$100 par common stock outstanding with a current market price of \$150 per share
  - Stock split declared by the board of directors
    - Each common shareholder will receive five shares for each share held
    - Par of each share of common stock will be reduced to \$20

	Before Split	After Split
Number of shares	10,000	50,000
Par value per share	imes\$100	imes\$20
Total	\$1,000,000	\$1,000,000



#### **Exhibit 8: Stock Split Before and After**





# **Learning Objective 8**

# Describe and illustrate the reporting of liabilities and stockholders' equity



# **Reporting Liabilities and Stockholders' Equity**

- Liabilities expected to be paid within one year
  - Presented in the Current Liabilities section of the balance sheet
- Contingent liabilities that are probable but cannot be reasonably estimated or are only possible
  - Disclosed in the notes to the financial statements
- Changes in common stock, preferred stock, treasury stock, paid-in capital, and retained earnings
  - Reported in a separate statement of stockholders' equity



#### Exhibit 9: Partial Balance Sheet with Liabilities and Stockholders' Equity

Bergstom Corporation Balance Sheet December 31, 20Y8

#### Liabilities

Current liabilities:		
Accounts payable \$	488,200	
Notes payable (9% due on March 1, 20Y9)	250,000	
Accrued interest payable	15,000	
Accrued salaries and wages payable	13,500	
Other accrued liabilities	9,850	
Total current liabilities		\$ 776,550
Long-term liabilities:		
Debenture 8% bonds payable, due in 15 years		
(Market value, \$950,000)		1,000,000
Total liabilities		\$1,776,550

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#### Exhibit 9: Partial Balance Sheet with Liabilities and Stockholders' Equity (continued)

#### Stockholders' Equity

Paid-in capital:		
Preferred 10% stock, \$50 par (20,000 shares		
authorized and issued)	\$1,000,000	
Common stock, \$20 par (250,000 shares authorized,		
100,000 shares issued)	2,000,000	
Paid-in capital in excess of par	400,000	
Paid-in capital from treasury stock	120,000	
Total paid-in capital	\$3,520,000	
Retained earnings	4,580,500	
Total	\$8,100,500	
Deduct treasury stock (1,000 shares at cost)	(75,000)	
Total stockholders' equity		8,025,500
Total liabilities and stockholders' equity		\$9,802,050



### **Exhibit 10: Statement of Stockholders' Equity**

Bergstom Corporation Statement of Stockholders' Equity For the Year Ended December 31, 20Y8

			Paid-In Capital in Excess of	Paid-In Capital		Treasury	
	Preferred	Common	Par—Common	From Treasury	Retained	(Common)	
	Stock	Stock	Stock	Stock	Earnings	Stock	Total
Balance, January 1	\$1,000,000	\$1,750,000	\$350,000	\$120,000	\$3,900,500	\$(45,000)	\$7,075,500
Net income					860,000		860,000
Dividends on preferred							
stock					(100,000)		(100,000)
Dividends on common							
stock					(80,000)		(80,000)
Issuance of additional							
common stock		250,000	50,000				300,000
Purchase of treasury stock						(30,000)	(30,000)
Balance, December 31	\$1,000,000	\$2,000,000	\$400,000	\$120,000	\$ 4,580,500	\$(75,000)	\$8,025,500



# **Learning Objective 9**

#### Describe and illustrate the debt and price-earnings ratios



### **Debt Ratio**

• Solvency metric

 $Debt Ratio = \frac{Total Liabilities}{Total Assets}$ 

- Measures the percent of a company's total assets financed by debt
  - Shows how the company is using debt to generate income



#### **Debt Ratio** (continued)

 The following data (in millions) were taken from recent financial statements of Apple Inc. (AAPL) and Microsoft (MSFT)

	Assets	Total Liabilities	Stockholders' Equity
Apple	\$375,319	\$241,272	\$134,047
Microsoft	258,848	176,130	82,718

Debt ratios (rounded to one decimal place) of the companies

Apple:	64.3% (\$241,272 ÷ \$375,319)
Microsoft:	68.0% (\$176,130 ÷ \$258,848)



# **Price-Earnings Ratio (P/E)**

Indicates the market's assessment of the future earnings potential of a company

Price-Earnings Ratio = <u>Market Price per Share of Common Stock</u> <u>Earnings per Share of Common Stock</u>

• The higher a company's price-earnings ratio, the more favorable the market's assessment of the future earnings potential and the growth of the company



#### **EPS and P/E for Apple Inc. and Microsoft**

	Year 3	Year 2	Year 1
Apple Inc.			
Earnings per share	\$ 9.27	\$ 8.35	\$ 9.28
Common stock price at end of year*	167.90	113.09	100.54
Microsoft			
Earnings per share	2.15	3.29	2.59
Common stock price at end of year* * Adjusted for dividends and stock splits.	98.61	68.93	51.16

	Year 3	Year 2	Year 1
Apple Inc.			
\$167.90 ÷ \$9.27	18.1		
\$113.09 ÷ \$8.35		13.5	
\$100.54 ÷ \$9.28			10.8
Microsoft			
\$98.61 ÷ \$2.15	45.9		
\$68.93 ÷ \$3.29		21.0	
\$51.16 ÷ \$2.59			19.8



## **End of Chapter 8**

