

Chapter 17

Earnings per Share and Retained Earnings

Intermediate Accounting 11th edition

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An electronic presentation

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Earnings per Share

While earnings per share (EPS) is one of the most-watched numbers in corporate America, the ability of a company to earn a profit does not always translate to the ability to pay a large dividend.



Earnings per Share

For example, Microsoft chose to reinvest its earnings to fuel future growth until 2003. Eventually, Microsoft grew to a point where it could no longer sustain the growth rate and then it began paying dividends.



Earnings and Earnings per Share

- ❖ **A corporation summarizes the components of its net income on its income statement, which are:**
 - **Income (loss) from continuing operations**
 - **Results from discontinued operations**
 - **Extraordinary gains or losses**
- ❖ **A corporation also reports its earnings per share on its income statement.**

Simple Capital Structure

- ❖ **For computing earnings per share, there are two types of corporate capital structures—simple and complex.**
- ❖ **A simple capital structure is one that consists only of common stock outstanding.**
- ❖ **A corporation with a simple capital structure is required to report basic earnings per share.**

Basic Earnings per Share

$$\frac{\text{Net Income} - \text{Preferred Dividends}}{\text{Weighted Average Number of Common Shares Outstanding}}$$

Lapan Corporation reports net income of \$48,000, and declares and pays dividends of \$8,000 on its preferred stock. It also declares and pays dividends of \$12,000 on its 16,000 shares of common stock.

$$\frac{\$48,000 - \$8,000}{16,000} = \underline{\underline{\$2.50}}$$

Disregard common stock dividends in calculating EPS.

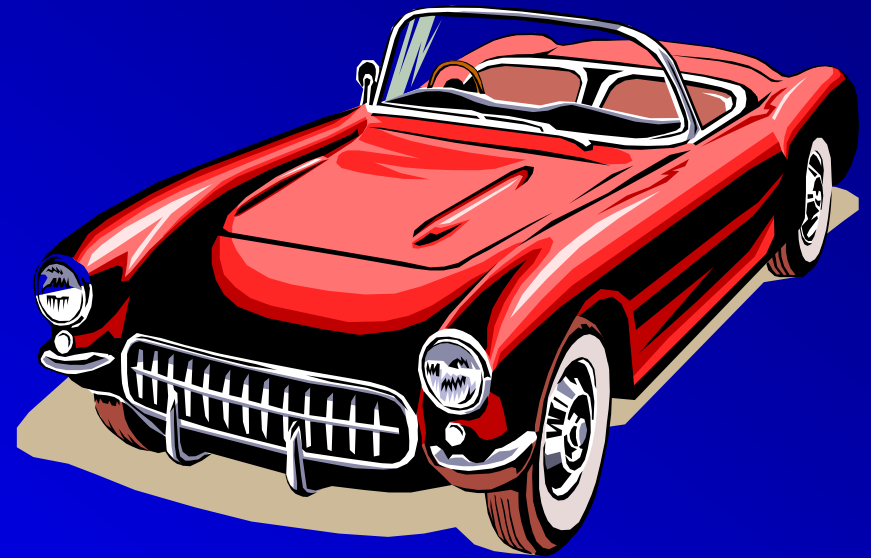
Weighted Average Shares

Since a corporation earns its net income over the entire year, the earnings relate to the common shares outstanding during the year.



Complex Capital Structure

Many corporations have a more complex capital structure that includes outstanding convertible securities or contingent shares that could have a dilutive effect on earnings per share. These securities are referred to as potential common shares.



Diluted Earnings per Share

A corporation with a complex capital structure is required to report two earnings per share amounts on the face of its income statement.

The two amounts are basic earnings per share and diluted earnings per share.



Diluted Earnings per Share

The amount for diluted earnings per share shows the earnings per share after including *all* potential common shares that would reduce earnings per share.



Diluted Earnings per Share

To be included in the diluted earnings per share calculation, any potential common share must have a *dilutive* effect on earnings per share.



Diluted Earnings per Share

Step 1: Compute the basic earnings per share.

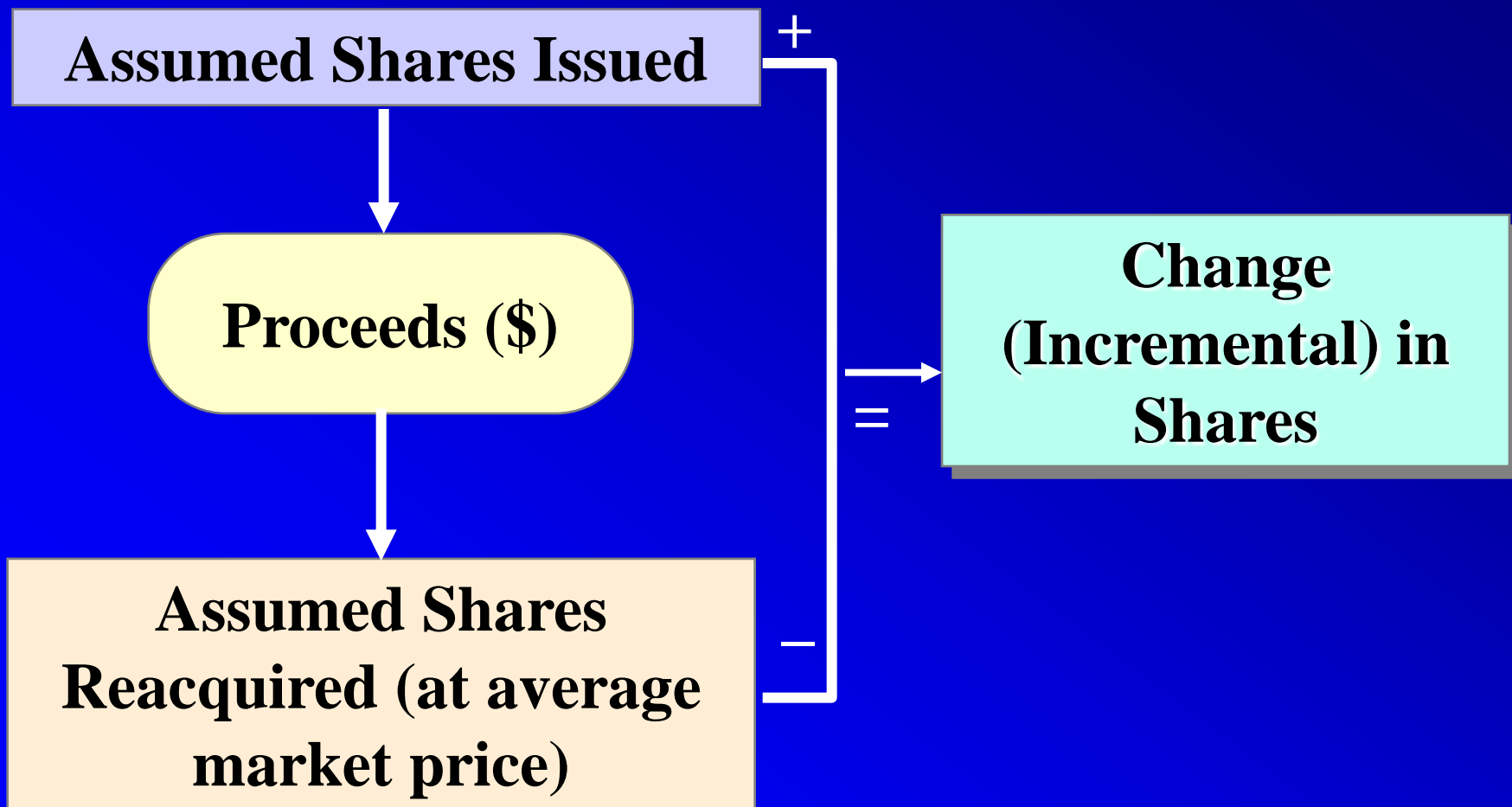
Step 2: Include dilutive stock **options and warrants** and compute a tentative diluted earnings per share (DEPS).

Step 3: Develop a ranking of the impact of each **convertible** preferred stock and **convertible** bond on DEPS.

Step 4: Include each dilutive convertible security in DEPS in a sequential order based on the ranking and compute a new tentative DEPS.

Step 5: Select the lowest computed DEPS as the diluted earnings per share.

Stock Options and Warrants



Treasury Stock Method

- 1. Determine the average market price of common shares during the period.**
- 2. Compute the shares issued from the assumed exercise of all options and warrants.**
- 3. Compute the proceeds received from the assumed exercise by multiplying the shares issued by the option price [plus any unrecognized compensation cost (net of tax) per share].**
- 4. Compute the assumed shares reacquired by dividing the proceeds by the average market price.**
- 5. Compute the incremental common shares.**

Treasury Stock Method

To illustrate Step 3 further, assume Plummer Corporation has compensatory stock options for employees to purchase 1,000 common shares at \$18 per share outstanding the entire year, the average market price for the common stock during the year was \$25 per share, and the unrecognized compensation cost (net of tax) was \$2 per share.

Continued

Treasury Stock Method

Shares assumed issued from assumed exercise: 1,000

Shares assumed reacquired:

$$\frac{\text{Proceeds}}{\text{Average Market Price Per Share}} = \frac{1,000 (\$18 + \$2)}{\$25} = \frac{\$20,000}{\$25} = \underline{(800)}$$

**Assumed increment in common shares for
computing diluted earnings per share**

200

Convertible Securities

Convertible bonds and convertible preferred stock are considered for inclusion in DEPS *after* stock options and warrants.



Convertible Securities

If bonds were assumed to be converted into common stock, the numerator increases because net income would be larger since the interest expense (net of income taxes) for the converted bonds would not exist.



Convertible Securities

Numerical Value Impact on Diluted Earnings Per Share

$$\text{Security A} \quad \frac{\$5,400}{3,000} = \$1.80$$

9% convertible preferred stock. Dividends of \$5,400 were declared during the year. The preferred shares are convertible into 3,000 shares of common stock.

Continued

Convertible Securities

Numerical Value Impact on Diluted Earnings Per Share

$$\text{Security B} \quad \frac{\$4,800}{1,920} = \$2.50$$

10% convertible bonds. Interest expense (net of income taxes) of \$4,800 was recorded during the year. The bonds are convertible into 1,920 shares of common stock.

Continued

Convertible Securities

Numerical Value Impact on Diluted Earnings Per Share

$$\text{Security C} \quad \frac{\$8,000}{5,000} = \$1.60$$

8% convertible preferred stock. Dividends of \$8,000 were declared during the year. The preferred shares are convertible into 5,000 shares of common stock.

Continued

Convertible Securities

Numerical Value Impact on Diluted Earnings Per Share

$$\text{Security D} \quad \frac{\$6,300}{3,150} = \$2.00$$

7% convertible bonds. Interest expense (net of income taxes) of \$6,300 was recorded during the year. The bonds are convertible into 3,150 shares of common stock.

Continued

Convertible Securities

Security	Impact	Order in Ranking
A	\$1.80	2
B	\$2.50	4
C	\$1.60	1
D	\$2.00	3

Security C has the lowest impact on DEPS and is the *most dilutive*. It is the first convertible security (after options and warrants) to be included in DEPS (if dilutive).

Testing to Determine Whether a Convertible Security is Dilutive

If the impact of the first ranked convertible security is less than the initial tentative DEPS, add the potential income to the numerator and the potential shares to the denominator and continue this procedure until the impact of the next convertible security is *more* than the previously computed tentative DEPS.

Computation and Reporting of Diluted Earnings per Share

Format

Explanation	Earnings (Adjustments)	Shares (Adjustments)	=	Earnings Per Share
Basic earnings per share	\$xxxx	xxx	=	\$xxx Basic
Increment in shares (options)	_____	_xx		
DEPS ₁ earnings and shares	\$xxxx	xxx	=	\$xxx DEPS ₁
Savings in interest expense (bonds)	xxx			
Increment in shares (bonds)	_____	_xxx		
DEPS ₂ earnings and shares	\$xxxx	xxx	=	\$xxx DEPS ₂
Savings in preferred dividends	xxx			
Increment in shares from preferred stock	_xxx	_____		
Diluted earnings and shares	\$xxxx	xxx	=	<u>\$xxx</u> Diluted

Computation and Reporting of Diluted Earnings per Share

1. Income statement information for Rush Corporation:
 - a. Net income for 2010 is \$2,800.
 - b. The income tax rate is 30%.
2. Balance sheet information:
 - a. 900 shares of common stock were outstanding the entire year.
 - b. Options were outstanding the entire year. The assumed exercise of these options results in an increment of 85 shares of common stock.
 - c. 100 shares of 8%, \$100 par (and issuance price) convertible preferred stock were outstanding the entire year. \$800 dividends were declared on this stock in 2010. Each share of preferred stock is convertible into 4 shares of common stock.
 - d. 6% convertible bonds, \$5,000 face value were outstanding the entire year. These bonds were issued to yield 6.5%. Bond interest expense of \$320 was recorded in 2010; the total discount is being amortized at the rate of \$20 per year. Each \$1,000 bond is convertible into 32 shares of common stock.

Computation and Reporting of Diluted Earnings per Share

Explanation	Earnings (Adjustments)	Shares (Adjustments)	=	Earnings Per Share
Net income	\$2,800			
Less: Preferred dividends	<u>800</u>			
Basic earnings per share	\$2,000	900	=	\$2.22 Basic

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Computation and Reporting of Diluted Earnings per Share

Explanation	Earnings (Adjustments)	Shares (Adjustments)	=	Earnings Per Share
Net income	\$2,800			
Less: Preferred dividends	<u>800</u>			
Basic earnings per share	\$2,000	900	=	\$2.22 Basic
Increment in shares (options)	<u> </u>	<u>85</u>		
DEPS₁ earnings and shares	\$2,000	985	=	\$2.03 DEPS₁

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Computation and Reporting of Diluted Earnings per Share

Security	Impact	Ranking
Preferred	$\frac{\$800}{100 \times 4} = \frac{\$800}{400} = \$2.00$	2
Bonds	$\frac{[(\$5,000 \times 0.06) + \$20] \times (1 - 0.3)}{5 \times 32} = \frac{\$224}{160} = \$1.40$	1

Computation and Reporting of Diluted Earnings per Share

Explanation	Earnings (Adjustments)	Shares (Adjustments)	=	Earnings Per Share
Basic earnings per share	\$2,000	900	=	\$2.22 Basic
Increment in shares (options)	<u> </u>	<u>85</u>		
DEPS ₁ earnings and shares	\$2,000	985	=	\$2.03 DEPS ₁
Savings in interest expense (bonds)	224			
Increment in shares (bonds)	<u> </u>	<u>160</u>		
Diluted earnings and shares	\$2,224	1,145	=	<u>\$1.94 Diluted</u>

The \$2.00 impact on DEPS of the convertible preferred stock is more than \$1.94; therefore, inclusion of the preferred stock in DEPS would be antidilutive.

Additional Disclosures

When a corporation reports its basic and diluted earnings per share on its income statement, it also is required to make additional disclosures in the notes to its financial statements.



Additional Disclosures

These include a schedule or note which includes information that:

- 1. Identifies the amount of preferred dividends deducted to determine the income available to common stockholders.**
- 2. Describes the potential common shares that were *not* included in the diluted earnings per share computation because they were antidilutive.**
- 3. Describe any material impact on the common shares outstanding of transactions after the close of the accounting period but before the issuance of the financial report.**



IFRS vs. U.S. GAAP

Due to convergence efforts, IFRS and U.S. GAAP are similar in regard to computing and reporting basic and diluted earnings per share. However, the following differences do exist:

- ❖ When using the treasury stock method, IFRS do not require a company to include any unrecognized compensation cost in the assumed proceeds from issuing the stock.**
- ❖ GAAP requires that any unvested contingently issuable shares be excluded from basic EPS calculations. IFRS has no such requirement.**



IFRS vs. U.S. GAAP

Due to convergence efforts, IFRS and U.S. GAAP are similar in regard to computing and reporting basic and diluted earnings per share. However, the following differences do exist:

- ❖ For contracts that may be settled in shares or cash, if a cash settlement is presumed, U.S. GAAP requires an adjustment to earnings but IFRS do not.**
- ❖ Finally, because IFRS do not have the concept of extraordinary items, there is no EPS disclosure related to extraordinary items.**

Chapter 17

The End

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