

Earnings Per Share (\$)

- Measure of net income on a per share basis, allowing for comparisons across companies
- Increasing EPS is a sign of profitability and growth
- EPS can increase despite a decrease in earnings when the number of common shares outstanding is reduced (i.e., a company buys back its common shares outstanding)

Diluted Earnings Per Share (diluted EPS)

- Earnings per share (EPS) calculated using fully diluted shares outstanding (i.e. including the impact of stock option grants and convertible bonds)

Ratio

$$\text{EPS (\$)} = \frac{(\text{Net Income} - \text{Preferred Dividends})}{\text{Number of Common Shares Outstanding*}}$$

*Weighted average

Example 1

For the year ended December 31, 2007:

Sales = \$1,000,000

Cost of Goods Sold \$550,000

SG&A expenses = \$250,000

Other income/(expense), net = (\$150,000)

Additional Information:

On January 1, 20,000 shares of common stock were outstanding. On July 1, 10,000 shares of common stock were issued.

EPS (\$) =
$$\frac{(\text{Net Income} - \text{Preferred Dividends})}{\text{Number of Common Shares Outstanding}^*}$$

=
$$\frac{\$50,000}{25,000^*}$$

= \$2 per share

*25,000 = (20,000) + (10,000 x 6/12)

Example 2

For the year ended December 31, 2007:

Sales = \$1,000,000

Cost of Goods Sold \$550,000

SG&A expenses = \$250,000

Other income/(expense), net = (\$150,000)

Additional Information:

On January 1, 20,000 shares of common stock were outstanding. On July 1, 10,000 shares of common stock were issued. On October 1, bonds were converted into 8,000 shares of common stock.

$$\text{EPS (\$)} = \frac{(\text{Net Income} - \text{Preferred Dividends})}{\text{Number of Common Shares Outstanding}}$$

$$= \frac{\$50,000}{27,000*}$$

$$= \$1.85 \text{ per share}$$

$$*27,000 = (20,000) + (10,000 \times 6/12) + (8,000 \times 3/12)$$

DuPont Return on Assets (%)

- Represents the return (net income) produced by the company's assets
- Stated as a percentage (%)
- Measure of profitability based on two ratios:
 - net profit margin, and
 - total asset turnover (number of sales generated by assets)

$$\text{Return on Assets (ROA)} = \frac{\text{Net Income}}{\text{Average Total Assets}}$$

$$\begin{aligned} \text{DuPont Return on Assets (DuPont ROA)} &= \text{Net Profit Margin} \times \text{Total Asset Turnover} \\ &= \frac{\text{Net Income}}{\text{Sales}} \times \frac{\text{Sales}}{\text{Average Total Assets}} \end{aligned}$$

Example:

Sales = \$2,000

Net Income = \$100

Total Assets (BOY) = \$900

Total Assets (EOY) = \$1,100

$$\text{Return on Assets (ROA)} = \frac{\$100}{\$1,000} = 10\%$$

$$\begin{aligned} \text{DuPont Return on Assets (DuPont ROA)} &= \text{Profit Margin} \times \text{Total Asset Turnover} \\ &= \frac{\$100}{\$2,000} \times \frac{\$2,000}{\$1,000} \\ &= 5\% \times 2 \\ &= 10\% \end{aligned}$$