

CHAPTER FOUR NOTES

- Profitability ratios- group of ratios that show the combined effects of liquidity, asset management, and debt management on operation results. (formulas in notebook)
 - Operating Margin- measures operating income EBIT per dollar of sales
 - EBIT/Sales
 - EBIT= Earnings before interest and taxes
 - Profit Margin or Net Profit Margin- measures the net income per dollar of sales
 - $\text{Net income}/\text{sales}$
 - Return on Total Assets= net income/total assets
 - Return on Common Equity- measures the rate of return on common stockholders' investments
 - $\text{Net income}/\text{common shareholder equity}$
 - Return on Invested Capital (ROIC)- measures the total return that a company has provided for its investors.
 - $\text{EBIT} (1-T)/\text{Total Invested Capital}$
 - Total invested capital includes debt and equity
- Basic Earnings Power Ratio (BEP)- measures the raw earnings power of the firm's assets before the influence of taxes and debt; indicates the ability of the firm's assets to generate operating income
 - $\text{EBIT}/\text{Total Assets}$
- Market Value Ratios- relate the stock price to earnings and book value; used in three major ways: by investors, by investment banks or firm itself.
 - P/E Ratio shows the dollar amount investors will pay for one dollar of earnings
 - $\text{Price per share}/\text{Earnings per share}$
 - Market to Book Ratio- ratio of stocks market price to its book value
 - Step 1: $\text{common equity}/\text{shares outstanding}=\text{book value per share}$
 - Step 2: $\text{market price per share}/\text{book price per share}$
- Dupont Formula- a way to calculate a firm's ROE
 - $\text{ROE} = \text{Net income}/\text{Common Equity}$
 - $\text{ROE} = \text{Profit Margin} \times \text{Total asset Turnover} \times \text{Equity Multiplier} \rightarrow (\text{net income}/\text{sales}) \times (\text{sales}/\text{total assets}) \times (\text{total assets}/\text{common equity}) \rightarrow \text{net income}/\text{common equity}$
 - Firm $12.5\% = 3.92\% \times 1.5x \times 2.13x$
 - Industry $15\% = 5.0\% \times 1.8x \times 1.67x$