

Financial Ratios

Liquidity Ratios

$$\text{current ratio} = \frac{\text{current assets}}{\text{current liabilities}}$$

$$\text{quick ratio} = \frac{\text{current assets} - \text{inventories}}{\text{current liabilities}}$$

Efficiency Ratios



$$\text{average collection period} = \frac{\text{accounts receivable}}{\frac{\text{annual credit sales}}{360}}$$

$$\text{accounts receivable turnover} = \frac{\text{credit sales}}{\text{accounts receivable}}$$

$$\text{inventory turnover ratio} = \frac{\text{cost of goods sold}}{\text{inventories}}$$

$$\text{fixed asset turnover ratio} = \frac{\text{sales}}{\text{net fixed assets}}$$

$$\text{total asset turnover ratio} = \frac{\text{sales}}{\text{total assets}}$$

Leverage Ratios

$$\text{debt ratio} = \frac{\text{current liabilities} + \text{noncurrent liabilities}}{\text{total assets}}$$

$$\text{long-term debt to total capitalization ratio} = \frac{\text{long-term liabilities}}{\text{long-term debt} + \text{preferred stock} + \text{common stock}}$$

$$\text{times interest earned ratio} = \frac{\text{ebit}}{\text{annual interest expense}}$$

$$\text{cashflow overall coverage ratio} = \frac{\text{ebit} + \text{lease expense} + \text{depreciation}}{\text{interest} + \text{lease expense} + \frac{\text{preferred dividends}}{1 - t} + \frac{\text{principal payments}}{1 - t}}$$

Profitability Ratios

$$\text{gross profit margin} = \frac{\text{gross profit}}{\text{net sales}}$$

$$\text{operating profit margin} = \frac{\text{ebit}}{\text{sales}} = \frac{\text{noi}}{\text{sales}}$$

$$\text{net profit margin} = \frac{\text{net income}}{\text{sales}}$$

$$\text{operating income return on investment} = \text{roi} = \frac{\text{noi}}{\text{total assets}}$$

$$\text{return on total assets ratio} = \text{roa} = \frac{\text{net income}}{\text{total assets}}$$

$$\text{return on common equity ratio} = \text{roe} = \frac{\text{net income available to common}}{\text{common stock}}$$