

Abdelhafid Boussouf University Center – Mila

Institute of Economic, Commercial and Management Sciences

Departement of Economics

LECTURES ON : Financial Ratios

Addressed to 3RD year economics students – Second semester

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Financial ratios are quantitative metrics used to assess and analyze various aspects of a company's financial performance, position, and health. They provide valuable insights into the company's profitability, liquidity, solvency, efficiency, and market valuation. Here's a simplified explanation of some common financial ratios:

1. Profitability Ratios:

a. Gross Profit Margin:

Formula: $\text{Gross Profit Margin} = (\text{Gross Profit} / \text{Revenue}) \times 100\%$

Purpose: Measures the percentage of revenue retained after deducting the cost of goods sold. Indicates the efficiency of production and pricing strategies.

b. Net Profit Margin:

Formula: $\text{Net Profit Margin} = (\text{Net Profit} / \text{Revenue}) \times 100\%$

Purpose: Measures the percentage of revenue retained as net profit after deducting all expenses, including operating, interest, and taxes. Indicates overall profitability.

2. Liquidity Ratios:

a. Current Ratio:

Formula: $\text{Current Ratio} = \text{Current Assets} / \text{Current Liabilities}$

Purpose: Measures the company's ability to meet short-term obligations with its current assets. A ratio above 1 indicates sufficient liquidity.

b. Quick Ratio (Acid-Test Ratio):

Formula: $\text{Quick Ratio} = (\text{Current Assets} - \text{Inventory}) / \text{Current Liabilities}$

Purpose: Measures the company's ability to meet short-term obligations using only its most liquid assets. Excludes inventory, which may not be easily converted to cash.

3. Solvency Ratios:

a. Debt-to-Equity Ratio:

Formula: $\text{Debt-to-Equity Ratio} = \text{Total Debt} / \text{Total Equity}$

Purpose: Measures the proportion of debt financing relative to equity financing. Indicates the company's reliance on debt and its financial leverage.

b. Interest Coverage Ratio:

Formula: Interest Coverage Ratio = EBIT (Earnings Before Interest and Taxes) / Interest Expense

Purpose: Measures the company's ability to cover interest payments on its debt obligations. Indicates its ability to service its debt from operating earnings.

4. Efficiency Ratios:

a. Inventory Turnover:

Formula: Inventory Turnover = Cost of Goods Sold / Average Inventory

Purpose: Measures how efficiently the company manages its inventory by assessing how many times inventory is sold and replaced within a given period.

b. Accounts Receivable Turnover:

Formula: Accounts Receivable Turnover = Revenue / Average Accounts Receivable

Purpose: Measures how efficiently the company collects payments from customers by assessing how many times accounts receivable are collected and replaced within a given period.

5. Market Valuation Ratios:

a. Price-to-Earnings (P/E) Ratio:

Formula: P/E Ratio = Market Price per Share / Earnings per Share (EPS)

Purpose: Measures the relationship between the company's stock price and its earnings per share. Indicates investors' expectations and valuation of the company.

b. Price-to-Book (P/B) Ratio:

Formula: P/B Ratio = Market Price per Share / Book Value per Share

Purpose: Measures the relationship between the company's stock price and its book value per share. Indicates whether the stock is overvalued or undervalued relative to its accounting value.

These are just a few examples of financial ratios used by investors, analysts, and managers to evaluate and compare companies' financial performance and position. Each ratio provides valuable insights into different aspects of the company's financial health and helps stakeholders make informed decisions.