

UNIT-II: Analysis of Financial Statements

Financial Ratio Analysis

DR. K. Premalatha

23BBT605: Accounting for Managers

Unlock a deeper understanding of financial health and performance.

Financial Ratio Analysis Overview



Liquidity

Ability to meet short-term obligations.



Profitability

Efficiency in generating earnings.



Efficiency

How effectively assets are utilized.



Coverage (Solvency)

Long-term debt-paying ability and risk.

Ratios are derived from key financial statements to assess health and operational efficiency.

Liquidity Ratios (Formulas)

Assess a company's ability to meet its short-term financial obligations.

Current Ratio

(Current Assets ÷ Current Liabilities)

Measures short-term debt-paying ability using all current assets.

Quick Ratio (Acid-Test)

(Current Assets – Inventories) ÷ Current Liabilities

A more conservative measure, excluding less liquid inventory.

Cash Ratio

(Cash + Marketable Securities) ÷ Current Liabilities

The most stringent test, focusing only on cash and near-cash items.

Operating Cash Flow Ratio

Operating Cash Flow ÷ Current Liabilities

Indicates how well operating cash flow covers current liabilities.

Profitability Ratios (Formulas)

Measure a company's ability to generate earnings relative to its revenue, operating costs, balance sheet assets, or shareholders' equity.

Gross Profit Margin

Gross Profit ÷ Net Sales

Profitability after deducting cost of goods sold.

Net Profit Margin

Net Income ÷ Net Sales

Overall profitability after all expenses, including taxes.

Return on Assets (ROA)

Net Income ÷ Average Total Assets

How efficiently assets are used to generate earnings.

Return on Equity (ROE)

Net Income ÷ Average Shareholders' Equity

Return generated on the owners' investment.

Return on Investment (ROI)

Net Income ÷ Owner's Investment

Specific to a particular investment's performance.

Efficiency Ratios (Formulas)

Evaluate how effectively a company utilizes its assets and manages its operations.

1

Asset Turnover

$\text{Net Sales} \div \text{Average Total Assets}$

2

Inventory Turnover

$\text{Cost of Goods Sold} \div \text{Average Inventory}$

3

Receivables Turnover

$\text{Net Credit Sales} \div \text{Average Accounts Receivable}$

4

Days Sales Outstanding

$365 \div \text{Receivables Turnover}$

5

Accounts Payable Turnover

$\text{Net Credit Purchases} \div \text{Average Accounts Payable}$

6

Days Payable Outstanding

$365 \div \text{Accounts Payable Turnover}$

Coverage (Solvency) Ratios (Formulas)

Measure a company's ability to meet its long-term debt obligations and evaluate its overall financial risk.

1

Debt Ratio

Total Liabilities ÷ Total Assets

Proportion of assets financed by debt.

2

Debt to Equity Ratio

Total Liabilities ÷ Shareholders' Equity

Compares total debt to the equity invested.

3

Interest Coverage Ratio

Operating Income ÷ Interest Expense

Ability to meet interest payments from operating earnings.

4

Debt Service Coverage Ratio

Operating Income ÷ Total Debt Service

Ability to cover total debt service obligations.

5

EBITDA Coverage Ratio

EBITDA ÷ Fixed Financial Charges

Covers fixed financial charges using earnings before interest, taxes, depreciation, and amortization.

Additional Key Ratios & Items to Include

- **Working Capital = Current Assets – Current Liabilities**
(Measures short-term liquidity)
- **Net Working Capital Ratio = (Current Assets – Current Liabilities) ÷ Total Assets**
(Proportion of assets funded by working capital)
- **Cash Conversion Cycle = Days Inventory Outstanding + Days Sales Outstanding – Days Payable Outstanding** (Measures time to convert investments into cash flow)
- **Market Value Ratios (e.g., P/E Ratio = Market Price per Share ÷ Earnings per Share)** (Relate share price to earnings or book value)



Items to Include in Ratio Analysis

For a comprehensive and insightful ratio analysis, ensure these critical elements are considered:

Consistent Definitions

Use uniform accounting definitions and time periods to ensure comparability across different periods and entities.

Trend Analysis

Analyze ratios over multiple periods (e.g., 3-5 years) to identify patterns, improvements, or deteriorations in financial performance.

Benchmarking

Compare ratios against industry averages, top performers, and direct competitors to gauge relative strengths and weaknesses.

Qualitative Factors

Combine quantitative ratio insights with qualitative information such as management quality, economic outlook, regulatory changes, and competitive landscape.

Contextual Interpretation

Interpret ratios within the context of the company's size, industry sector, business model, and the prevailing economic conditions.

Summary & Best Practices

Financial statement analysis provides a holistic view of a company's health.

1 Foundation

Comparative and common size statements set the stage by providing contextual insights into financial trends and structures.

2 Ratio Categories

Liquidity, profitability, efficiency, and coverage ratios each offer unique perspectives on short-term stability, earning power, asset utilization, and long-term solvency.

3 Holistic View

Always interpret ratios in conjunction with industry benchmarks, historical trends, and qualitative factors for robust decision-making.