

Concept Capsule 1: The art of Financial Ratios

Understanding Financial Ratios

Financial ratios are vital tools used by investors, analysts, and company leaders to evaluate a company's financial health and performance. They provide insights by comparing various financial metrics extracted from financial statements. Here's a closer look at some key financial ratios:

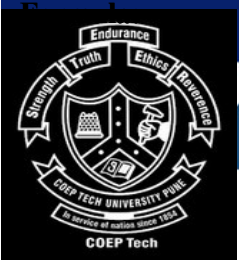
1. Profitability Ratios: It refers to the analysis of profits in relation to revenue from operations or funds (or assets) employed in the business and the ratios calculated to meet this objective are known as 'Profitability Ratios'.

2. Liquidity Ratios: To meet its commitments, business needs liquid funds. The ability of the business to pay the amount due to stakeholders as and when it is due is known as liquidity, and the ratios calculated to measure it are known as 'Liquidity Ratios'. These are essentially short-term in nature.

3. Solvency Ratios: Solvency of business is determined by its ability to meet its contractual obligations towards stakeholders, particularly towards external stakeholders, and the ratios calculated to measure solvency position are known as 'Solvency Ratios'. These are essentially long-term in nature.

4. Activity (or Turnover) Ratios: This refers to the ratios that are calculated for measuring the efficiency of operations of business based on effective utilization of resources. Hence, these are also known as 'Efficiency Ratios'.

5. Market Ratios: Market value ratios are used to evaluate the current share price of a publicly held company's stock. These ratios are employed by current and potential investors to determine whether a company's shares are over-priced or underpriced.



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1. Profitability Ratios

Profitability ratios are calculated to analyze the earning capacity of the business which is the outcome of utilization of resources employed in the business. There is a close relationship between the profit and the efficiency with which the resources employed in the business are utilized.

The various ratios which are commonly used to analyze the profitability of the business are:

1.1 Gross Profit Ratio

The Gross Profit Ratio is a key profitability ratio that measures the gross margin as a percentage of net revenue from operations. It helps in assessing how efficiently a business is producing and selling its goods.

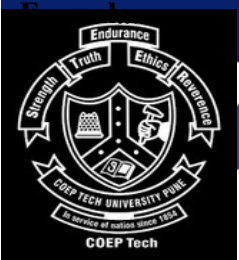
Formula

$$\text{Gross Profit Ratio} = \left(\frac{\text{Gross Profit}}{\text{Net Revenue from Operations}} \right) \times 100$$

Significance:

- Reflects the efficiency of production and pricing strategies.
- A **higher ratio** suggests:
 - Better control over production or purchase costs
 - Strong pricing power or higher selling prices
 - More room to cover operating and non-operating expenses
- A **lower ratio** may indicate:
 - Unfavorable purchasing terms
 - Increased production costs
 - Ineffective pricing or sales strategies

A consistently high gross profit ratio is a positive sign, suggesting strong financial health and efficient operations.



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1.2 Operating Ratio

The Operating Ratio is a key financial metric used to assess the efficiency of a company's operations by comparing operating costs to net revenue from operations.

Formula:

$$\text{Operating Ratio} = \left(\frac{\text{Cost of Revenue from Operations} + \text{Operating Expenses}}{\text{Net Revenue from Operations}} \right) \times 100$$

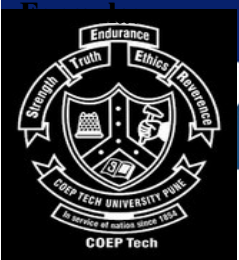
Components:

- **Cost of Revenue from Operations:** Direct costs involved in producing goods or services (e.g., raw materials, direct labor, etc.)
- **Operating Expenses:** Include all routine business expenses such as:
 - Office and administrative expenses
 - Selling and distribution expenses
 - Employee benefit expenses
 - Depreciation
 - Other day-to-day operational costs

Significance:

- Indicates the **proportion of revenue** consumed by the **core business operations**.
- A **lower operating ratio** is desirable as it indicates:
 - Better operational efficiency
 - Higher operating profit margin
- A **higher operating ratio** suggests higher operational costs, which may require cost control measures.

The ideal operating ratio varies by industry but should generally be **less than 85%**, leaving enough margin for net profit after operations.



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1.3 Operating Profit Ratio

The Operating Profit Ratio measures the operating margin — the proportion of revenue that remains after covering operating costs, but before interest and taxes. It highlights the efficiency of core business operations.

Formulas:

Method 1 (Residual Method):

$$\text{Operating Profit Ratio} = 100 - \text{Operating Ratio}$$

Method 2 (Direct Calculation):

$$\text{Operating Profit Ratio} = \left(\frac{\text{Operating Profit}}{\text{Revenue from Operations}} \right) \times 100$$

Where: $\text{Operating Profit} = \text{Revenue from Operations} - \text{Operating Cost}$

Components:

•Operating Profit excludes:

Interest income/expense, Non-operating income or losses, Exceptional or extraordinary items

•Operating Cost includes:

•Cost of revenue from operations, Operating expenses (admin, selling, employee benefits, depreciation, etc.)

Significance:

•Reflects the core profitability of the business before considering financing and non-operating factors.

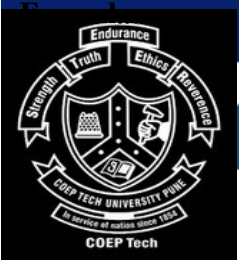
•A higher operating profit ratio indicates:

- Greater operational efficiency
- Better cost control
- Stronger profit margins

•Useful for:

- Intra-firm comparisons over different periods
- Inter-firm comparisons within the same industry

A lower operating ratio and hence a higher operating profit ratio is considered a healthy sign for any business.



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1.4 Net Profit Ratio

The Net Profit Ratio is a comprehensive measure of a company's overall profitability, showing the percentage of net profit generated from revenue from operations. It includes the effects of both operational and non-operational activities.

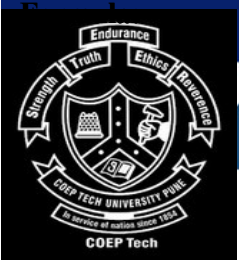
Formula:

$$\text{Net Profit Ratio} = \left(\frac{\text{Net Profit}}{\text{Revenue from Operations}} \right) \times 100$$

Significance:

- Indicates the net margin earned on sales after all expenses (operating and non-operating).
- A **higher ratio** reflects:
 - Strong cost control
 - Effective overall business management
 - Improved return for shareholders
- This ratio is crucial for:
 - Evaluating business efficiency
 - Measuring true profitability
 - Forming the basis for Return on Investment (ROI) and other performance indicators

From an investor's perspective, the Net Profit Ratio is of great significance, as it directly affects earnings per share and return on equity.



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1.5 Return on Capital Employed (ROCE) / Return on Investment (ROI)

Return on Capital Employed is a fundamental profitability ratio that measures how efficiently a business is utilizing its long-term funds to generate profit. It reflects the overall return earned on the capital invested in the enterprise.

Formula:

$$\text{ROCE or ROI} = \left(\frac{\text{Profit Before Interest and Tax (PBIT)}}{\text{Capital Employed}} \right) \times 100$$

Components:

• **Profit Before Interest and Tax (PBIT):**

• **Capital Employed** may be calculated in two ways:

1. Financial Approach:

Capital Employed = Shareholders' Funds + Debentures + Long-term Loans

2. Asset Approach:

Capital Employed = Non-Current Assets + Working Capital

(Where Working Capital = Current Assets – Current Liabilities)

Significance:

• Indicates the overall efficiency with which the business uses the capital entrusted to it by shareholders and lenders.

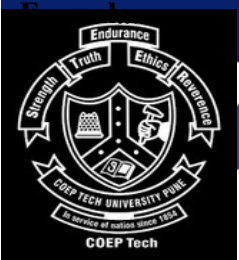
• A **higher ROCE** suggests:

- Effective and profitable use of long-term funds
- Strong financial management and operational performance

• Useful for:

- Inter-firm comparison (benchmarking against peers)
- Internal analysis to assess performance over time
- Investor evaluation of the company's ability to generate returns on their capital

ROCE is considered one of the most comprehensive measures of profitability and is especially useful for evaluating capital-intensive businesses.



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1.6 Return on Shareholders' Funds (Return on Net Worth - RONW)

This ratio evaluates how efficiently the company is using shareholders' funds to generate net profits. It is highly significant from a shareholder's perspective, as it shows the return on their investment.

Formula:

$$\text{Return on Shareholders' Funds (RONW)} = \left(\frac{\text{Profit after Tax}}{\text{Shareholders' Funds}} \right) \times 100$$

Where:

• **Shareholders' Funds** = Equity Share Capital + Reserves and Surplus – Accumulated Losses (if any)

Significance:

- Helps assess whether shareholders are earning a higher return than other capital providers (like lenders).
- Should ideally be higher than the Return on Capital Employed (ROCE).
- A key indicator of the profitability and performance of the business from the owner's viewpoint