Ratio is an expression of relationship between two or more items in mathematical terms. Exhibition of meaningful and useful relation between different accounting data is called Accounting Ratio. Ratio may be expressed as \( \frac{a}{b} \), in terms of simple fraction, integer, or percentage.

If the current assets of a concern is Rs 4,00,000 and the current liabilities is Rs 2,00,000, then the ratio of current assets to current liabilities is given as \( \frac{4,00,000}{2,00,000} = 2 \). This is called simple ratio. Multiply a ratio by 100 to express it in terms of percentage.

We can express the ratio between 200 and 100 in any of the following ways:

- 2 : 1
- 2/1
- 200%
- 2 to 1
- 2

Ratios are extremely useful in drawing the financial position of a concern.

**Accounting Analysis**

Comparative analysis and interpretation of accounting data is called Accounting Analysis. When accounting data is expressed in relation to some other data, it conveys some significant information to the users of data.

**Ratio Analysis and its Applications**

Ratio analysis is a medium to understand the financial weakness and soundness of an organization. Keeping in mind the objective of analysis, the analyst has to select appropriate data to calculate appropriate ratios. Interpretation depends upon the caliber of the analyst.

Ratio analysis is useful in many ways to different concerned parties according to their respective requirements. Ratio analysis can be used in the following ways:

- To know the financial strength and weakness of an organization.
- To measure operative efficiency of a concern.
- For the management to review past year’s activity.
- To assess level of efficiency.
- To predict the future plans of a business.
- To optimize capital structure.
- In inter and intra company comparisons.
- To measure liquidity, solvency, profitability and managerial efficiency of a concern.
- In proper utilization of assets of a company.
- In budget preparation.
- In assessing solvency of a firm, bankruptcy position of a firm, and chances of corporate sickness.

**Advantages of Ratio Analysis**

- It is powerful tool to measure short and long-term solvency of a company.
• It is a tool to measure profitability and managerial efficiency of a company.
• It is an important tool to measure operating activities of a business.
• It helps in analyzing the capital structure of a company.
• Large quantitative data may be summarized using ratio analysis.
• It relates past accounting performances with the current.
• It is useful in coordinating the different functional machineries of a company.
• It helps the management in future decision-making.
• It helps in maintaining a reasonable balance between sales and purchase and estimating working capital requirements.

Limitations of Ratio Analysis

Although Ratio Analysis is a very useful accounting tools to analyze and interpret different accounting equations, it comes with its own set of limitations:

• If the data received from financial accounting is incorrect, then the information derived from ratio analysis could not be reliable.
• Unauthenticated data may lead to misinterpretation of ratio analysis.
• Future prediction may not be always dependable, as ratio analysis is based on the past performance.
• To get a conclusive idea about the business, a series of ratios is to be calculated. A single ratio cannot serve the purpose.
• It is not necessary that a ratio can give the real present situation of a business, as the result is based on historical data.
• Trend analysis is done with the help of various calculated ratios that can be distorted due to the changes in the price level.
• Ratio analysis is effective only where same accounting principles and policies are adopted by other concerns too, otherwise inter-company comparison will not exhibit a real picture at all.
• Through ratio analysis, special events cannot be identified. For example, maturity of debentures cannot be identified with ratio analysis.
• For effective ratio analysis, practical experience and knowledge about particular industry is essential. Otherwise, it may prove worthless.
• Ratio analysis is a useful tool only in the hands of an expert.

Types of Ratio

Ratios can be classified on the basis of financial statements or on the basis of functional aspects.

Classification on the Basis of Financial Statement

Balance Sheet Ratios

Ratios calculated from taking various data from the balance sheet are called balance sheet ratio. For example, current ratio, liquid ratio, capital gearing ratio, debt equity ratio, and proprietary ratio, etc.

Revenue Statement Ratio

Ratios calculated on the basis of data appearing in the trading account or the profit and loss account are called revenue statement ratios. For example, operating ratio, net profit ratio, gross
mixed or composite ratio.

Mixed or Composite Ratio

When the data from both balance sheet and revenue statements are used, it is called mixed or composite ratio. For example, working capital turnover ratio, inventory turnover ratio, accounts payable turnover ratio, fixed assets turnover ratio, return of net worth ratio, return on investment ratio.

Classification of Ratios on the Basis of Financial Statements

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<tr>
<th>Balance Sheet Ratios</th>
<th>Profit and Loss A/c Ratios</th>
<th>Composite or Mixed Ratios</th>
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<td>Ratio of Current Assets to Fixed Assets</td>
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<td>Return on Shareholders Fund</td>
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<td></td>
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<td>Capital Turnover Ratio</td>
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</tbody>
</table>

Classification on the Basis of Financial Aspects

Ratios can be further classified based on their functional aspects as discussed below.

Liquidity Ratios

Liquidity ratios are used to find out the short-term paying capacity of a firm, to comment short term solvency of the firm, or to meet its current liabilities. Similarly, turnover ratios are calculated to know the efficiency of liquid resources of the firm, Accounts Receivable Debtors Turnover Ratio and Accounts Payable Creditors.

Long-Term Solvency and Leverage Ratios

Debt equity ratio and interest coverage ratio are calculated to know the efficiency of a firm to pay long-term debts and to meet interest costs. Leverage ratios are calculated to know the proportion of debt and equity in the financing of a firm.

Activity Ratios

Activity ratios are also called turnover ratios. Activity ratios measure the efficiency with which the resources of a firm are employed.

Profitability Ratios

The results of business operations can be calculated through profitability ratios. These ratios can also be used to know the overall performance and effectiveness of a firm. Two types of profitability
ratios are calculated in relation to sales and investments.

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<th>Profit Abilities Ratios</th>
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<td>A In relation to sales</td>
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<tr>
<td>Current Ratio</td>
<td>Debt/Equity Ratio</td>
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<td>Liquid Ratio</td>
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<td>Absolute Liquid or Cash Ratios</td>
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<td>Interval Measure</td>
<td>Cash Flow/ Debt</td>
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<td>Capital Gearing</td>
<td>Working Capital Turnover Ratio</td>
<td>Net Profit Ratio</td>
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<tr>
<td>B</td>
<td></td>
<td>Payable Turnover Ratio</td>
<td>Expenses Ratio</td>
</tr>
<tr>
<td>Debtors Turnover Ratio</td>
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<td>Capital Employed Turnover Ratio</td>
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<tr>
<td>Creditor Turnover Ratio</td>
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<tr>
<td>Inventory Turnover Ratio</td>
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</tr>
</tbody>
</table>

A In relation to sales
- Gross Profit Ratio
- Operating Ratio
- Operative Profit Ratio
- Net Profit Ratio
- Expenses Ratio

B In relation to investments
- Return on Investment
- Return on Capital
- Return on Equity
- Return on Total
- Resources
- Earnings per Share
- Price Earnings Ratio