



Financial Ratios

Understanding and Analyzing Key Financial Ratios

What are Financial Ratios

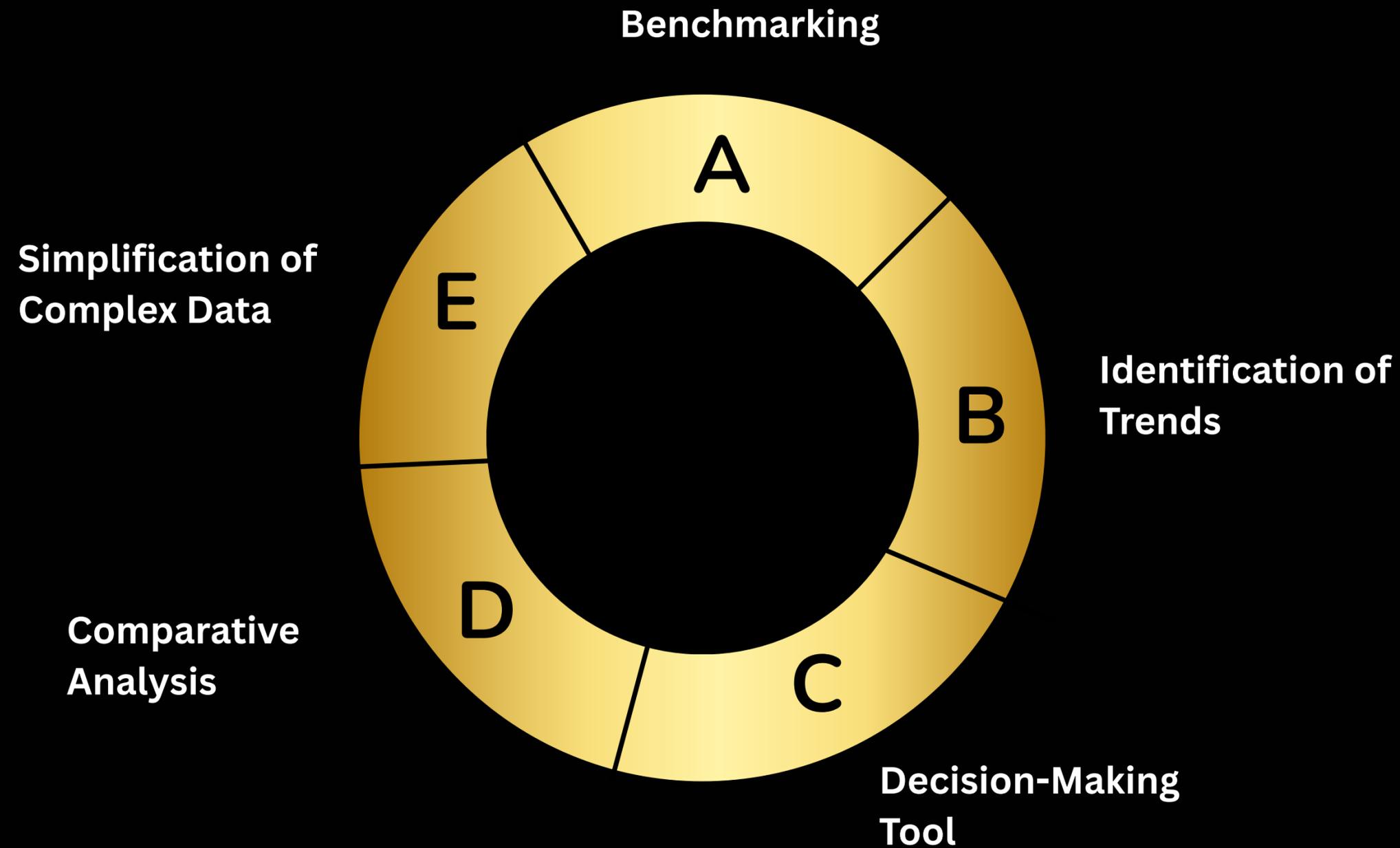
What are Financial Ratios

Financial Ratios are quantitative metrics derived from a company's financial statements, including the balance sheet, income statement, and cash flow statement. These ratios provide insights into a company's performance, financial health, and operational efficiency.



**Why are they
important**

Why are they important



How do Financial

Ratios help

How do **Financial Ratios** help Help in Comparing Companies

Financial ratios allow stakeholders to compare companies on a standardized basis, enabling them to make informed decisions based on relative performance rather than absolute figures.

Standardization
Across Companies

Standardization

Across Companies

Ratios normalize financial data, making it possible to compare companies of different sizes or within different sectors. For example, comparing the profitability of Hindustan Unilever (FMCG) with Nestle India (FMCG) using Return on Equity (ROE) provides insights that raw financial data alone might obscure.

Cross-Industry

Comparisons

Cross-Industry Comparisons

Although industries have different norms, financial ratios can be adapted to compare companies across different sectors. For example, comparing the current ratio of Maruti Suzuki (Automobile) with ITC (FMCG) can highlight differences in liquidity management between the sectors.

Identification of Strengths

and Weaknesses

Identification of Strengths and Weaknesses

By comparing key ratios such as Debt to Equity (D/E) or Return on Assets (ROA), investors can identify strengths (e.g., higher profitability) and weaknesses (e.g., higher leverage) of companies like Tata Motors versus Mahindra & Mahindra.

Benchmarking Against

Industry Standards

Benchmarking Against Industry Standards

Ratios allow companies to benchmark themselves against industry averages, helping them understand how they fare relative to competitors. For instance, analyzing the inventory turnover ratio of Dabur (FMCG) against the industry average can provide insights into operational efficiency.

Investment and Lending

Decisions

Investment and Lending Decisions

Investors use these comparisons to decide where to allocate capital, while creditors assess the financial health of companies before extending credit. Ratios like Interest Coverage Ratio are critical for these assessments.

Categories of Financial

Ratios

Categories of Financial Ratios

1

Liquidity
Ratios

2

Profitability
Ratio

3

Efficiency
Ratio

4

Solvency
Ratio

5

Market
Ratio

Liquidity Ratios

Liquidity Ratios

Purpose: Measure the company's ability to meet short-term obligations.

Examples:

- **Current Ratio:** Shows the proportion of current assets to current liabilities.
- **Quick Ratio:** A more stringent measure, excluding inventory from current assets.

Profitability Ratios

Profitability Ratios

Purpose: Assess the company's ability to generate profit relative to sales, assets, or equity.

Examples:

- **Gross Profit %, Operating Profit %, Net Profit %**
- **Return on Assets (ROA):** Indicates how efficiently the company is using its assets to generate profit.
- **Return on Equity (ROE):** Reflects the return generated on shareholders' equity.

Efficiency Ratios

Efficiency Ratios

Purpose: Valuate how effectively a company uses its assets and liabilities in operations.

Examples:

- **Inventory Turnover:** Measures how quickly inventory is sold.
- **Accounts Receivable Turnover:** Indicates how efficiently the company collects receivables.

Solvency Ratios

Solvency Ratios

Purpose: Analyze the company's long-term stability and ability to meet long-term obligations.

Examples:

- **Debt to Equity (D/E) Ratio:** Compares the company's total debt to its shareholders' equity.
- **Interest Coverage Ratio:** Assesses the company's ability to pay interest on its debt.

Market Valuation

Ratios

Market Valuation Ratios

Purpose: Provide insights into the company's market value relative to its earnings, book value, or dividends.

Examples:

- **Price to Earnings (P/E) Ratio:** Measures the price investors are willing to pay per dollar of earnings.
- **Price to Book (P/B) Ratio:** Compares the market value of a company's stock to its book value.
- **Dividend Yield:** Shows the annual dividend income relative to the stock price.

Profitability Ratios

Return on Assets

(ROA)

Return on Assets (ROA)

- **Purpose:** ROA indicates how efficiently a company is using its assets to generate profit.
- **ROA= Net Income / Total Assets×100**
- **Ideal Value:** Generally, a higher ROA is better, with industry benchmarks varying.
- For FMCG companies, a ROA between 5% to 15% is common, while for automobile companies, it can range between 2% to 10%

Return on Equity

(ROE)

Return on Equity (ROE)

- **Purpose:** ROE measures the profitability relative to shareholders' equity, indicating how well a company is using equity investments to generate earnings.
- **ROE= Net Income / Total Equity ×100**
- **Ideal Value:** Generally, a higher ROE is better, with industry benchmarks varying.
- **FMCG companies typically have an ROE of 15% to 25%, while automobile companies may have an ROE of 10% to 20%.**

Efficiency Ratios

Inventory Turnover

Inventory Turnover

- Measures how many times a company's inventory is sold and replaced over a specific period.
- **Ratio= COGS / Average Inventory**
- **Ideal Value:** A higher turnover rate is typically better, indicating efficient inventory management.
- For FMCG companies, a ratio between 5-10 is common, while for automobile companies, it can range between 3 to 8

AR Turnover

AR Turnover

- Measures how efficiently a company collects revenue from its customers.
- Ratio= Net Credit Sales / Average Account Receivables
- Ideal Value: A higher ratio indicates efficient collection.
- For FMCG companies, a ratio between 8-12 is common, while for automobile companies, it can range between 6 to 10

Asset Turnover

Asset Turnover

- Measures how efficiently a company uses its assets to generate sales.
- **Ratio= Net Sales / Average Total Assets**
- **Ideal Value:** A higher ratio indicates better utilization of assets.
- For FMCG companies, a ratio between 1-2 is common, while for automobile companies, it can range between 0.5 to 1.5

Solvency Ratios

Debt to Equity (D/E)

Ratio

Debt to Equity (D/E) Ratio

- The D/E ratio compares a company's total debt to its shareholders' equity, indicating the proportion of debt used to finance the company's assets relative to equity.
- **D/E = Total Debt / Total Equity**
- **Ideal Value:** A lower D/E ratio generally indicates a more financially stable company.
- For FMCG companies, a ratio will be almost negligible, while automobile companies, it can range between 0.1 to 0.5

Interest Coverage

Ratio

Interest Coverage Ratio

- The ratio measures how easily a company can pay interest on its outstanding debt with its earnings before interest and taxes (EBIT).
- **Ratio= EBIT / Interest Expense**
- **Ideal Value:** A higher ratio suggests better debt-servicing ability.
- For FMCG companies, a ratio will be high, while automobile companies, it can be moderate

Valuation Ratios

EPS

(Earnings per share)

EPS (Earnings per share)

- EPS measures the portion of a company's profit allocated to each outstanding share of common stock.
- $EPS = \text{Net Income} / \text{Weighted Avg. Shares Outstanding}$
- **Ideal Value:** Higher EPS indicates greater profitability per share, making the stock more attractive to investors.

P/E Ratio

(Price-to-earnings)

P/E (Price-to-earnings) Ratio

- The P/E ratio measures the price investors are willing to pay for each rupee of earnings.
- $P/E = \text{Share Price} / \text{EPS}$
- **Ideal Value:** A higher P/E ratio can indicate expectations of future growth, but it may also suggest overvaluation.

P/B (Price-to-book)

Ratio

P/B (Price-to-book) Ratio

- The P/B ratio compares a company's market value to its book value, indicating how much investors are willing to pay for net assets.
- **P/B = Share Price / Book Value per share**
- **Ideal Value:** A P/B ratio below 1 may indicate undervaluation, while a ratio above 3 could suggest overvaluation.

Dividend yield

Dividend yield

- Dividend yield shows the annual dividend income relative to the stock price, reflecting the return on investment from dividends alone.
- **Ratio= Annual Dividend per share/ Price per share * 100**
- **Ideal Value:** Higher yields are attractive for income-focused investors, while lower/ zero yields are attractive for growth-focused investors

Comparing Companies

Using Financial Ratios to Compare Companies

Using **Financial Ratios** to Compare Companies

Financial ratios provide a standardized way to compare companies within the same industry or across different industries. This comparison helps stakeholders make informed decisions regarding investments, performance evaluation, and strategic planning.

Step 1:

Select relevant ratio

Step 1:

Select relevant ratio

Choose ratios that are most pertinent to the industry and the specific companies being analyzed. For instance, in the FMCG sector, profitability ratios like ROE and efficiency ratios like Inventory Turnover are crucial. In the automobile sector, solvency ratios such as the Debt to Equity Ratio and market valuation ratios like the P/E Ratio may be more relevant.

Step 2:

Gather Comparable Data

Step 2:

Gather Comparable Data

Ensure that the financial data for the companies being compared is from the same period and is consistent in terms of accounting practices. This ensures that the ratios calculated are directly comparable.

Step 3:

Benchmark Against Industry
Standards:

Step 3:

Benchmark Against Industry Standards:

Compare the selected companies' ratios against industry benchmarks to assess relative performance. For example, compare Hindustan Unilever's ROE to the FMCG industry average, or Maruti Suzuki's D/E Ratio to the average in the automobile sector.

Step 4:

Analyze Trends

Step 4:

Analyze Trends

Look at the trends in these ratios over multiple periods to understand whether a company's performance is improving or deteriorating relative to its peers. For instance, has ITC's P/E ratio been increasing over time compared to Nestle India?

Step 5:

Contextualize the Results:

Step 5:

Contextualize the Results:

Understand the broader context that may impact these ratios. For example, a higher D/E ratio in Tata Motors might be acceptable if the company is heavily investing in new technologies or expanding its operations. Similarly, a lower ROA in Mahindra & Mahindra may still be favorable if it reflects strategic long-term investments.

Key Takeaways:

Key Takeaways:

FMCG Industry: Generally, higher profitability and efficiency ratios are expected due to the nature of the business. High P/E ratios reflect strong brand value and growth potential.

Automobile Industry: More capital-intensive, leading to higher solvency ratios and slightly lower efficiency ratios. However, careful management of these ratios can indicate financial health and operational success.

Limitation of Ratios

Key Limitations:

Historical Nature:

Financial ratios are based on historical financial statements, reflecting past performance rather than predicting future outcomes.

For example, a strong ROE for Hindustan Unilever might not indicate future performance if the company faces upcoming market disruptions or regulatory changes.

Key Limitations:

Industry-Specific Benchmarks:

Ratios can vary significantly across industries, making cross-industry comparisons difficult.

Comparing the **P/E ratio of Maruti Suzuki** (Automobile) with that of **Nestlé India** (FMCG) could be misleading due to differences in capital intensity, growth prospects, and business models.

Key Limitations:

Accounting Differences:

Variations in accounting policies, such as depreciation methods or inventory valuation, can impact financial ratios.

For example, differences in how Tata Motors and Mahindra & Mahindra (both in the automobile sector) account for depreciation can lead to discrepancies in their ROA, even if their operational efficiency is similar.

Key Limitations:

Seasonality & Cyclicity:

Ratios may be affected by seasonal factors or economic cycles, leading to fluctuations that do not necessarily reflect long-term trends.

The inventory turnover ratio for an FMCG company like Dabur may be higher during festive seasons due to increased demand, which could **skew year-round performance** analysis.

Key Limitations:

Short term focus:

Some ratios focus on short-term performance and may not capture long-term strategic initiatives or investments.

Maruti Suzuki might have a **lower ROE in a particular year** due to heavy investment in new technology, which could lead to long-term benefits not immediately reflected in the ratio.

Key Limitations:

One Dimensional:

Financial ratios provide a one-dimensional view and may not capture the full complexity of a company's operations or strategy.

A **low current ratio** for ITC might signal liquidity issues at first glance, but if the company has strong cash flows and access to credit, it might not be a cause for concern.

Key Limitations:

One Dimensional:

Financial ratios provide a one-dimensional view and may not capture the full complexity of a company's operations or strategy.

A **low current ratio** for ITC might signal liquidity issues at first glance, but if the company has strong cash flows and access to credit, it might not be a cause for concern.

Best Practices

Best Practices

Use a Combination of Ratios:

- **Analyze a mix of liquidity, profitability, efficiency, solvency, and market valuation ratios to get a comprehensive view of the company's financial health.**

Best Practices

Consider the broader context:

- **Look beyond the numbers by considering industry trends, economic conditions, and company-specific factors.**

Best Practices

Regular Updates:

- **Reevaluate ratios periodically to capture the latest financial data and trends, ensuring that analysis remains relevant.**

Best Practices

Qualitative Factors:

- **Complement ratio analysis with qualitative assessments such as management quality, market position, and competitive landscape.**

How to use AI