

Financial analysis

Ratio analysis

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Ratio Analysis

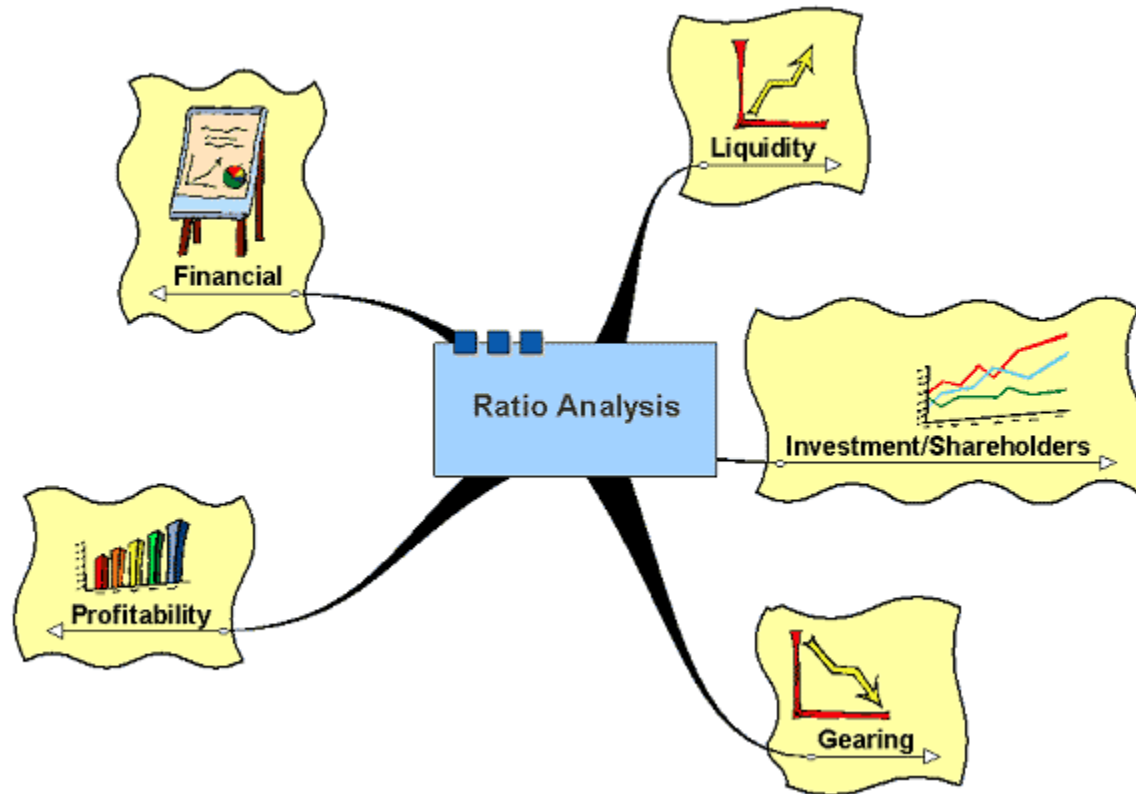
◎ **Definition** : Ratio is the indicated quotient of two mathematical expressions which establishes the relationship in the quantity, amount or size between two things.

Ratio analysis expresses the relationship between selected financial data.

These relationships can be expressed as:

- ◎ percentages
- ◎ rates, or
- ◎ proportions

Kinds of Ratios



Ratio Analysis

Liquidity Ratios: The Firm's ability to meet its current obligations

S.No	Ratio	Formula	Interpretation
1	Current Ratio	$\text{Current Assets} / \text{Current Liabilities}$	Measures Short-term solvency, Margin of safety
2	Acid Test or Quick Ratio	$(\text{Current Assets} - \text{Inventories}) / \text{Current Liabilities}$	More penetrating test of liquidity than Current Ratio
3	Cash Ratio	$(\text{Cash} + \text{Marketable Securities}) / \text{Current Liabilities}$	Even if the firm has less cash it need not be worrisome

Leverage Ratios

They judge the long term financial position of the company

S. No.	Ratio	Formula	Interpretation
1	Debt-Equity Ratio	Total Debt/ Net Worth	High proportion of debt adds to the risk; No debt or very less debt mean that the firm is not getting tax advantage
2	Debt Ratio	Total Debt/ Capital Employed	Outside liabilities are related to the total capitalization of the firm

Activity Ratios

Employed to evaluate the efficiency with which the firm utilizes its assets

S. No.	Ratio	Formula	Interpretation
1	Inventory Turnover	$\frac{\text{Cost of Goods Sold}}{\text{Average Inventory}}$	Low ratio implies excessive inventory levels or slow moving inventory; High ratio indicates low level of inventory which can lead to stock out situations
2	Stock Velocity	$\frac{365}{\text{Inventory Turnover}}$	Indicated no. of days it takes for stock to move out. Higher days – Money Locked.

Activity Ratios

S. No	Ratio	Formula	Interpretation
3	Receivables (debtors) Turnover ratio	$\frac{\text{Credit Sales}}{\text{Average Debtors}}$	Indicates how quickly the debtors are converted into cash
	Average Collection Period	$\frac{\text{Days in a year}}{\text{Debtors Turnover}}$	Measures the quality of debtors
4	Assets Turnover ratio: (a) Net Assets Turnover	$\frac{\text{Sales}}{\text{Net Assets}}$	Indicates the firm's ability to produce a certain volume of sales for a given amount of net assets

Profitability Ratios

S. No	Ratio	Formula	Interpretation
1	Return on Investment (ROI): Return on Total Assets	$\frac{\text{EBIT}(1-t)}{\text{Total Assets}}$	Higher the ratio, more efficient is the use of capital employed; Great concern of management and shareholders wealth maximization
	Return on Net Assets	$\frac{\text{EBIT}(1-t)}{\text{Net Assets}}$	
2	Return on Equity (ROE)	$\frac{\text{Profit after Taxes}}{\text{Net worth}}$	Indicates profitability of owner's investment