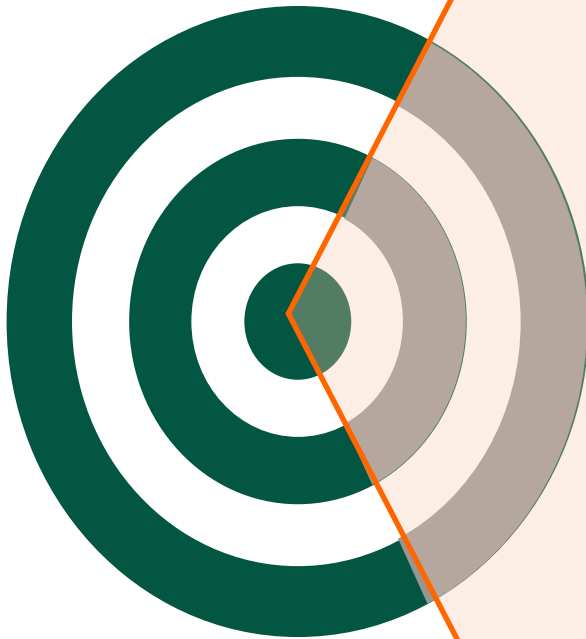


Introduction to Ratios

IMARTICUS
LEARNING





In this session, you will learn about:

- Introduction to Ratio Analysis
- Types of Ratios
- Profitability Ratios
- Activity Ratios
- Liquidity Ratios
- Solvency Ratios

Absolute numbers are not good enough to **understand performance**

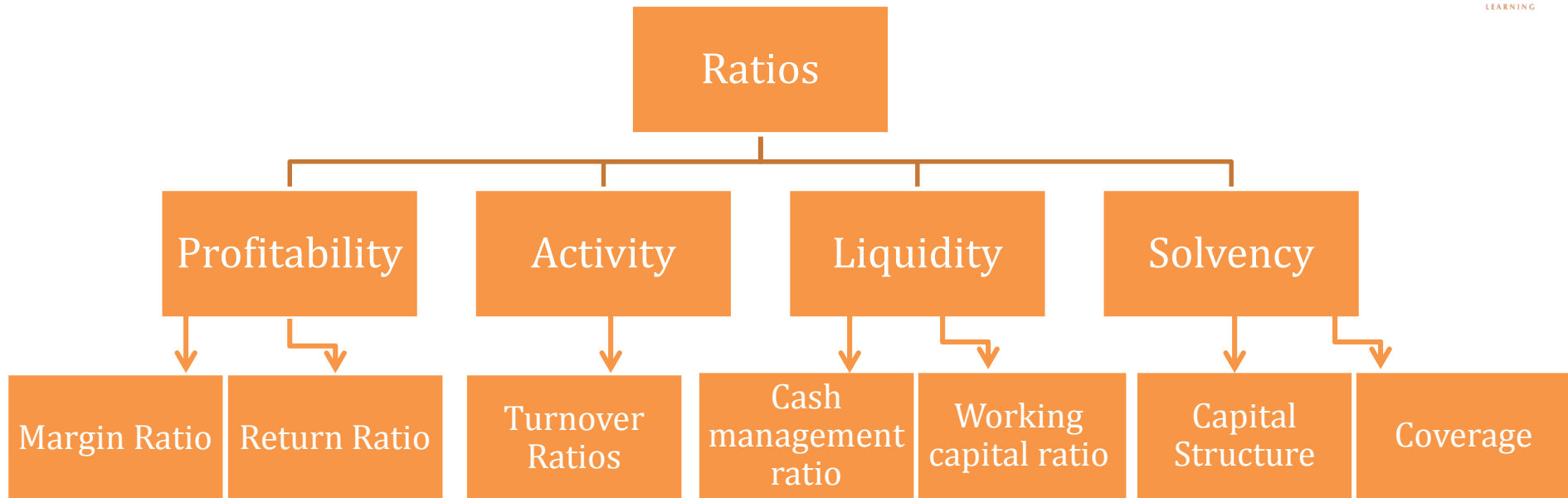
- Ratio analysis help put financial **numbers in their context** by expressing one number in **relation** to another
- Financial ratio explains **numerical relationship** of financial variable with another variable with which it has a **theoretical relationship**
- They enable readers to **analyze the performance** of a company, assess the **financial stability** and in **decision making**



Example

\$100 profit on sales of \$200 is impressive; but \$100 profit on sales of \$10,000 is not.

Types of Ratios



Profitability Ratio: Margin Ratios

Margin ratio relate profits to its sales and reflect the **amount of sales** that is **realized as profits**

GROSS MARGIN	$\text{Gross Profit} \div \text{Sales}$
OPERATING MARGIN	$\text{Operating Profit} \div \text{Sales}$
NET PROFIT MARGIN	$\text{Net Profit} \div \text{Sales}$



Profitability Ratio: Return Ratios

Return ratios try to measure the **annual return that an investor gets for every one unit of investment** made in the business

ROE	$\text{Net Profit} \div \text{Equity Share Capital}$
ROCE	$\text{Operating profit} * (1 - \text{tax rate}) \div (\text{Equity Share Capital} + \text{Net Debt})$



Can be computed either from the perspective of **equity capital invested** or from the perspective of **total investment** in the business

Activity Ratios : Turnover Ratio

Used to evaluate the **efficiency** of company management

Fixed Asset Turnover	$\text{Sales} \div \text{Fixed Assets}$
Debtor Turnover Ratio	$\text{Sales} \div \text{Average Debtors}$
Debtor Collection Period	$365 \div \text{Debtor Turnover Ratio}$



Activity Ratios : Turnover Ratio

Used to evaluate the **efficiency** of company management

Inventory Turnover Ratio	$\text{Cost of Sales} \div \text{Average Inventory}$
Inventory conversion period	$365 \div \text{Inventory Turnover Ratio}$
Creditor Turnover Ratio	$\text{Cost of sales} \div \text{Average Creditors}$
Creditor payment period	$365 \div \text{Creditor Turnover Ratio}$
Cash Cycle	$\text{Inventory conversion period} + \text{Debtor collection period} - \text{Creditor payment period}$

Measures the company's ability to meet its **short-term obligations**

Current Ratio

$\text{Current Assets} \div \text{Current Liability}$

Quick Ratio (or) Acid
Test Ratio

$(\text{Current Asset} - \text{Inventory}) \div \text{Current Liability}$

Cash adequacy ratio

$\text{Cash} \div \text{Fixed expense per day}$



Solvency Ratios: Capital Structure Ratio

Focuses on the **funding structure** of the company; used to determine the **long term financial stability**

Debt Equity Ratio	$\text{Total Debt} \div \text{Equity}$
Debt to Capital Employed Ratio	$\text{Total Debt} \div (\text{Equity} + \text{Net Debt})$



Solvency Ratios: Capital Structure Ratio

Calculation gets **complicated** when a company has **hybrid instruments** such as convertible debt and preferred shares



Treating hybrid instrument as debt or equity depends on the circumstances

- If a convertible **debt** is more **likely to be converted, then** it can be treated as **equity** else as debt
- If the **preferred shares** have a **definite redemption date,** then it can be treated as **debt,** else it can be treated as equity

Solvency Ratios: Coverage ratio

Focuses on assessing the ability of a company to meet its debt related repayment obligations through internal accruals.

Interest Coverage
Ratio

$EBIT \div \text{Interest Expense}$

Debt Service Coverage
Ratio

$(\text{Net Profit} + \text{D\&A} + \text{Interest}) \div (\text{Interest Expense} + \text{Principal repayment obligation})$





**Thank You
For Your
Attention**

For internal use only