Introduction to Ratios

Agenda

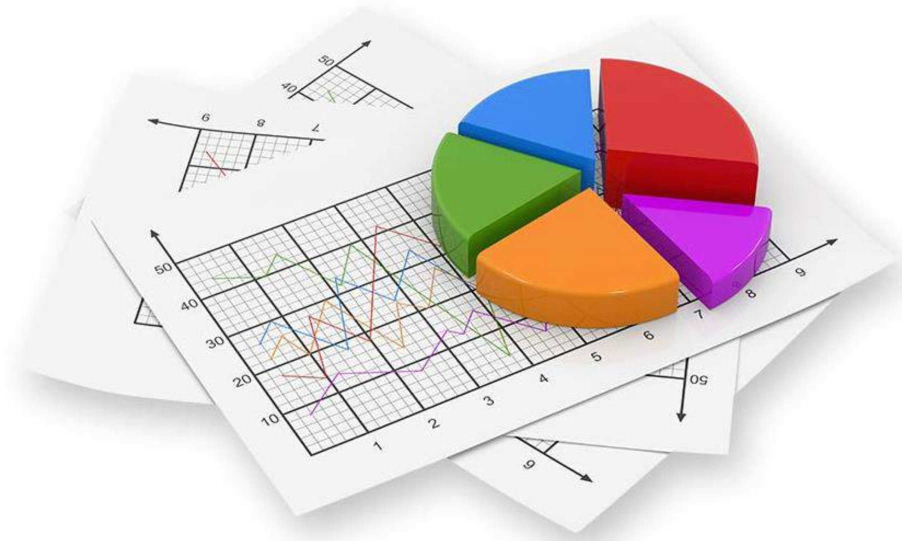
In this session, you will learn about:

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

Introduction to Ratio Analysis

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**

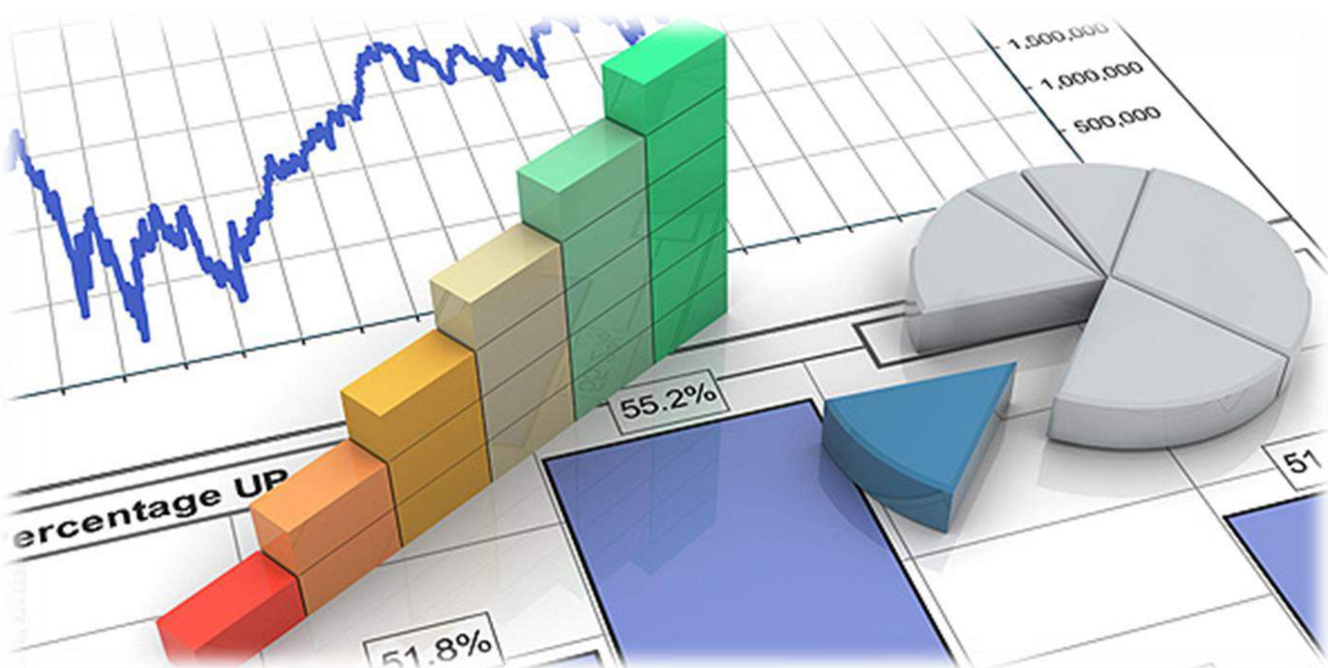


Example

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

Types of Ratios

- Ratios
  - Profitability
    - Margin Ratio
    - Return Ratio
  - Activity
    - Turnover Ratios
  - Liquidity
    - Cash management ratio
    - Working capital ratio
  - Solvency
    - Capital Structure
    - Coverage



Profitability Ratio: Margin Ratios

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

GROSS MARGIN	Gross Profit ÷ Sales
OPERATING MARGIN	Operating Profit ÷ Sales
NET PROFIT MARGIN	Net Profit ÷ 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	Net Profit ÷ Equity Share Capital
ROCE	Operating profit * (1 – tax rate) ÷ (Equity Share Capital + 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	Sales ÷ Fixed Assets
Debtor Turnover Ratio	Sales ÷ Average Debtors
Debtor Collection Period	365 ÷ Debtor Turnover Ratio

Activity Ratios : Turnover Ratio

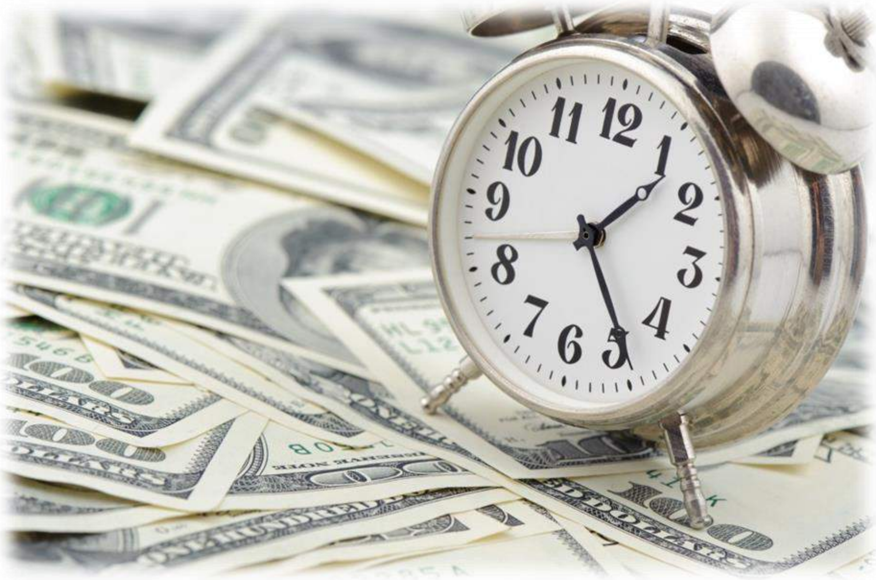
Used to evaluate the **efficiency** of company management

Inventory Turnover Ratio	Cost of Sales ÷ Average Inventory
Inventory conversion period	365 ÷ Inventory Turnover Ratio
Creditor Turnover Ratio	Cost of sales ÷ Average Creditors
Creditor payment period	365 ÷ Creditor Turnover Ratio
Cash Cycle	Inventory conversion period + Debtor collection period – Creditor payment period

Liquidity Ratios

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

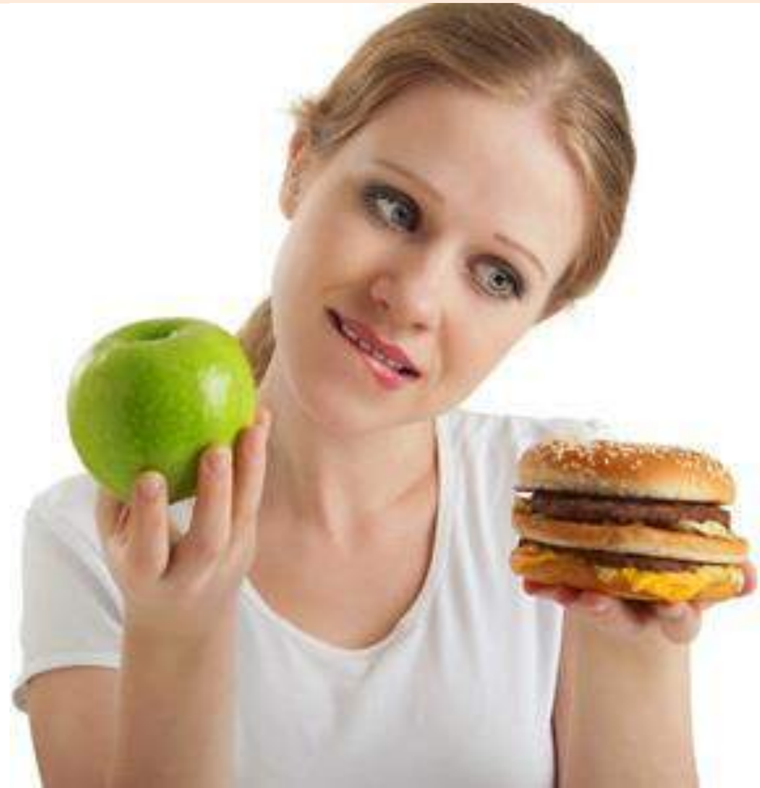
Current Ratio	Current Assets ÷ Current Liability
Quick Ratio (or) Acid Test Ratio	(Current Asset – Inventory) ÷ Current Liability
Cash adequacy ratio	Cash ÷ Fixed expense per day



Solvency Ratios: Capital Structure Ratio

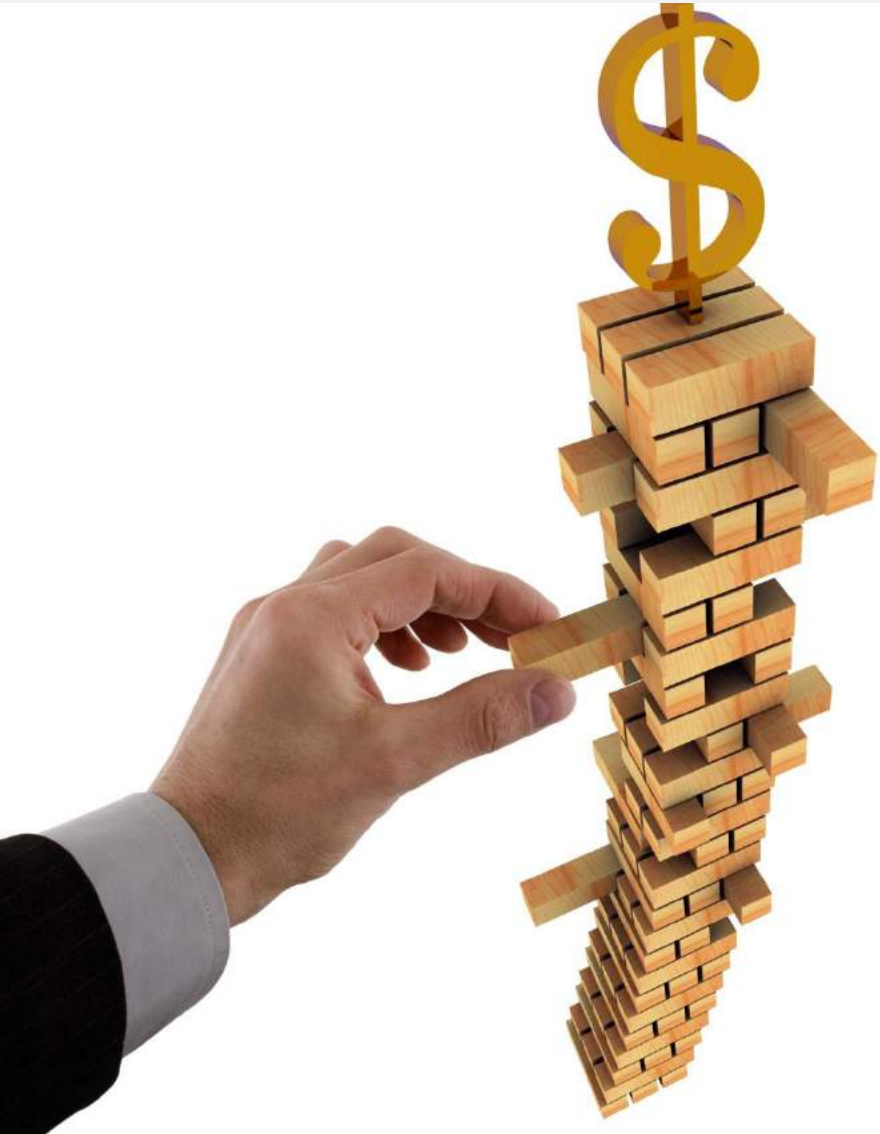
Focuses on the **funding structure** of the company; used to determine the **long term financial stability**

Debt Equity Ratio	Total Debt ÷ Equity
Debt to Capital Employed Ratio	Total Debt ÷ (Equity + 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 ÷ Interest Expense
Debt Service Coverage Ratio	(Net Profit + D&A + Interest) ÷ (Interest Expense + Principal repayment obligation)

Q&A

Thank You For Your Attention