

Ratio Analysis

I Profitability Ratios

↓
① Gross Profit Ratio = $\frac{\text{Gross Profit}}{\text{Net Sales}} \times 100$

→ Gross Profit = Net Sales - Cost of Goods sold

→ Cost of Goods sold = Opening Stock + Purchase
+ Direct Exp. - Closing Stock

② Operating Ratio = $\frac{\text{Total Operating Cost}}{\text{Net Sales}} \times 100$

→ Total operating cost = Cost of Goods sold +
Other operating Expenses

③ Expenses Ratio = $\frac{\text{Any Expenses}}{\text{Net Sales}} \times 100$

④ Operating Profit Ratio = $\frac{\text{Operating Profit}}{\text{Net Sales}} \times 100$

$$\rightarrow \text{operating Profit} = \text{Net Profit} + \text{Non operating Expenses} - \text{Non operating Income}$$

OR

$$\rightarrow \text{operating Profit} = \text{Net Sales} - \text{operating cost} + \text{General Expenses}$$

$$\rightarrow \text{operating cost} = \text{Cost of Goods Sold} + \text{Adm. and office Expenses} + \text{Selling and Distribution Expenses}$$

$$\textcircled{E} \quad \underline{\text{Net Profit Ratio}} = \frac{\text{Net Profit}}{\text{Net Sales}} \times 100$$

II- Overall Profitability Ratios

$$\text{Capital Employed} = \text{Total Assets} - \text{Current Liabilities}$$

OR

$$\text{" " " " " = Share holders Fund} + \text{Long term liabilities}$$

$$\textcircled{A} \quad \underline{\text{Return on Total Assets}} = \frac{\text{Net Profit before interest and Tax}}{\text{Total Assets}} \times 100$$

$$\textcircled{B} \text{ Return on Capital Employed = } \frac{\text{Net Profit before interest + and tax}}{\text{Capital Employed}} \times 100$$

OR

$$\text{Return on Capital Employed} = \text{Assets Turnover} \times \text{Net Profit Ratio}$$

$$\rightarrow \text{Assets Turnover} = \frac{\text{Sales}}{\text{Capital Employed}}$$

$$\rightarrow \text{Net Profit Ratio} = \frac{\text{Net Profit}}{\text{Sales}} \times 100$$

Return on Shareholders Funds

$$\textcircled{C} \text{ (1) Return on Total Shareholder's Fund} = \frac{\text{Net Profit after interest + and Tax}}{\text{Total Shareholders Fund}} \times 100$$

(11) Return on Equity Shareholder's Fund

$$= \frac{\text{Net Profit after Tax and Preference Dividend}}{\text{Equity Shareholders Fund}} \times 100$$

(III) Earning Per Share (EPS) .

$$EPS = \frac{\text{Net Profit after tax on Preference Shares}}{\text{Number of Equity Shares}}$$

(IV) Dividend Per Share (DPS)

$$DPS = \frac{\text{Dividend Paid to Equity Shareholders}}{\text{Number of Equity Shares}}$$

(V) Dividend Pay-out Ratio (DIP)

$$DIP \text{ Ratio} = \frac{\text{Dividend Paid to Equity Shareholders}}{\text{Earning Per Share}} \times 100$$

(VI) Price Earning Ratio (PER)

$$\text{Price Earning Ratio} = \frac{\text{Market Price Per Share}}{\text{Earning Per Share}}$$

(VII) Earning Yield Ratio = $\frac{\text{Earning Per Share}}{\text{Market Price Per Share}} \times 100$

(VIII) Dividend Yield Ratio = $\frac{\text{Dividend Per Share}}{\text{Market Price Per Share}} \times 100$

(IX) Dividend ~~Per~~ Cover = $\frac{\text{Earning Per Share}}{\text{Dividend Per Share}}$