

B.COM 4TH SEMESTER (HONS+ PROGRAM)

MANAGEMENT ACCOUNTING

UNIT 5 RATIO ANALYSIS (HONS)

UNIT 4 RATIO ANALYSIS (PROG)

Ratio : A ratio is a number expressed in terms of another. A ratio indicates the quantitative relationship between two figures.

Accounting / Financial Ratio : It is a ratio between two accounting figures or data expressing the relationship between the two accounting variable.

Accounting / Financial Ratio analysis: It is an analytical tool used for financial analysis. It is a process of determination and interpretation of the numerical data published by business in periodical statement.

Classification of Ratio:

1. On the basis of Source :
 - (i) Balance Sheet Ratio
 - (ii) Revenue Statement Ratio
 - (iii) Mixed Ratio
2. On the basis of Purpose/ Economic aspect/ Operation
 - (i) Short term solvency Ratio
 - (ii) Long term solvency Ratio
 - (iii) Efficiency/Turnovers Ratio
 - (iv) Profitability Ratio

Balance Sheet Ratio

1. **Current Ratio** =
$$\frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Standard 2 : 1

2. **Quick/ Liquid / Acid Test Ratio** =
$$\frac{\text{Current Assets} - \text{Inventory} - \text{Prepaid Expenses}}{\text{Current Liabilities} - \text{Bank overdraft}}$$

Standard 1 : 1

Current Assets : Stock/Inventory, Trade Receivable (Debtors+ Bills Receivable, Prepaid Expenses, Cash at Bank, Cash in Hand, Accrued Income.

Current Liabilities: Trade Payable (Creditors + Bills Payable) Bank Overdraft, Outstanding Expenses, Proposed dividend, Prov. For Tax.

3. **Debt – Equity Ratio** =
$$\frac{\text{Long term Debts (Long term loan + Debenture)}}{\text{Shareholders' Fund}}$$

Shareholders' Fund: Equity share capital + Pref, Sh,Capital+ Reserve & Surplus – Fictitious Assets.

4. **Fixed Assets – Proprietorship Ratio**=
$$\frac{\text{Fixed Assets}}{\text{Proprietors' Fund}}$$

5. **Current Assets – Proprietorship Ratio**=
$$\frac{\text{Current Assets}}{\text{Proprietors' Fund}}$$

Proprietors' Fund: Equity share capital + Pref, Sh,Capital+ Reserve & Surplus – Fictitious Assets.

6. Capital Gearing Ratio=

$$\frac{\text{Fixed charge bearing securities (Pref.Sh+ Debenture)}}{\text{Equity Shareholder' Fund}}$$

Equity Shareholder' Fund: Equity share capital + Reserve & Surplus – Fictitious Assets.

7. Cash Position Ratio=

$$\frac{\text{Cash + Cash Equivalent}}{\text{Total Assets}}$$

8. Cash to Current Liabilities Ratio/ Absolute Cash Ratio=

$$\frac{\text{Cash + Cash Equivalent}}{\text{Total Assets}}$$

B. Revenue Statement Ratio

1. Gross Profit Ratio=

$$\frac{\text{Gross Profit}}{\text{Net Sales}} \times 100$$

2. Net Profit Ratio=

$$\frac{\text{Net Profit}}{\text{Net Sales}} \times 100$$

3. Operating Cost Ratio=

$$\frac{\text{Operating Cost} \times 100}{\text{Net Sales}}$$

4. Operating Profit Ratio=

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

Operating Profit: Net profit + Non operating expenses – Non operating income. Or
Operating Profit: Sales – Operating Cost.

5. Interest Coverage Ratio=

$$\frac{\text{Earnings before interest and Tax}}{\text{Annual Interest Charges}}$$

C. Mixed Ratio

1. Stock Turnover Ratio=

$$\frac{\text{Cost of Goods Sold}}{\text{Average Stock}}$$

Cost of Goods Sold: Sales – Gross Profit or

Cost of Goods Sold: Op. Stock + Purchase + Carriage- Cl. Stock.

Average Stock: $\frac{\text{Op. Stock} + \text{Cl. Stock}}{2}$

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2. Debtors Turnover Ratio=

$$\frac{\text{Credit Sales}}{\text{Average Receivable}}$$

Average Receivables:

$$\frac{\text{Op. Debtors} + \text{Op. B/R} + \text{Cl. Debtors} + \text{Cl. B/R}}{2}$$

3. Creditors Turnover Ratio=

$$\frac{\text{Credit Purchase}}{\text{Average Payable}}$$

Average Payable:

$$\frac{\text{Op. Creditors} + \text{Op. B/P} + \text{Cl. Creditors} + \text{Cl. B/P}}{2}$$

4. Total Assets Turnover Ratio=

$$\frac{\text{Cost of Goods Sold}}{\text{Total Assets}}$$

5. Fixed Assets Turnover Ratio=

$$\frac{\text{Cost of Goods Sold}}{\text{Fixed Assets}}$$

6. Capital Turnover Ratio=

$$\frac{\text{Sales}}{\text{Capital Employed}}$$

OR

$$\frac{\text{Cost of Goods Sold}}{\text{Average Capital Employed}}$$

7. Return on Capital Employed=

$$\frac{\text{Profit/Earning before Interest and Tax} \times 100}{\text{Capital Employed}}$$

Capital Employed: Fixed Assets + Current Assets- Current Liabilities **OR**

Capital Employed: Share Capital + Reserve & Surplus +Debenture – Fictitious Assets.

8. Return On Shareholder Equity=

$$\frac{\text{Net Profit After Tax} \times 100}{\text{Equity/ Owner Fund}}$$

9. Debt- Coverage Ratio =

$$\frac{\text{Cash Profit earned before Interest}}{\text{Interest + Installment Due}}$$

10. Earning Per Share =

$$\frac{\text{Earnings Available to Equity Shareholder}}{\text{Number of Equity Share}}$$

11. Price – Earning Ratio =

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

12. Dividend Pay out Ratio =

$$\frac{\text{Dividend Per Share}}{\text{Earning Per Share}}$$

At first read and understand the formula then solve the problem.

The above notes is prepared by Prof. S Ghosh of Commerce Department of Raniganj Girls' College, with the help of books of Financial Accounting of Amitabha Basu., Dey and Dutta.

