CHAPTER FOUR

THEORETICAL BACKGROUND

4.1 INTRODUCTION:

As stated in the 'Statement of Problem' (1.2, ante), the present study is an attempt to analyze the financial performance of select fertilizer manufacturing units in the country. Hence, under this investigation, the term 'financial performance' is used in the sense of financial aspect of the units, such as share-capital, working-capital, own funds, assets and liabilities. In order to know the sample units'situation vis-a-vis these aspects, the researcher has sought the help of 'ratio analysis' and 'trend analysis' and has accordingly, analyzed the sample units' financial statements against the following fourteen ratios:

1. Current Ratio,
2. Liquid Ratio,
3. Debt:Equity Ratio,
4. Solvency Ratio,
5. Inventory Turnover Ratio,
6. Debtors Turnover Ratio,
7. Working Capital Turnover Ratio
8. Total Assets Turnover Ratio,
9. Fixed Assets Turnover Ratio,
10. Current Assets Ratio,
11. Gross Profit Ratio,
12. Net Profit Ratio,
13. Return on Total Capital Employed,
14. Net Profit to Total Assets

4.2 RATIO ANALYSIS - MEANING:

'Ratio analysis' is a technique of analyzing and interpreting the mathematical relationship based on financial statements. It is the process of establishing and interpreting various ratios for helping in making certain decisions and is very important from the viewpoint of the financial analysis of an enterprise.

'Ratio' means a number expressed in terms of another and can be worked out by dividing one number by another. The ratios are classified as per the requirement or the purpose of analysis. Some such classifications are mentioned herebelow:

I. Analysis of Short-term Financial Position (Test of Liquidity): Liquidity Ratios:

'Liquidity' indicates the ability of an enterprise to meet its current obligations. To measure the liquidity of the sample fertilizer units, their following ratios have been calculated:

(1) Current Ratio:

This ratio shows the relationship between 'current assets' and 'current liabilities'. Current Ratio is a measure of general liquidity and useful to make the analysis of a short-term financial position of a firm. It is calculated as below:

Current Ratio = Current Assets / Current Liabilities.

(2) Liquid Ratio:

This ratio indicates relationship between 'liquid assets' and 'current liabilities'. Liquid Ratio can be calculated by dividing the total of liquid assets by total current liabilities, as follows:

Liquid Ratio = Liquid Assets / Current Liabilities.

II. Management of Capital Structure:

For the assessment of management of capital structure, Debt:Equity Ratio and Solvency Ratio usually are computed:

(3) Debt:Equity Ratio:

This ratio indicates the relationship between the external equities or outsiders funds and internal equities or shareholders funds and is calculated as follows:

Debt:Equity Ratio = External Equities / Internal Equities.

(4) Solvency Ratio:

This ratio indicates the relationship between the total liabilities to outsiders to total assets of a firm and can be calculated as follows:

Solvency Ratio = Total Liabilities to Outsiders / Total Assets.

III. Efficiency/Activity Ratios:

Activity ratios measure the efficiency with which a firm manages its assets. These ratios indicate the speed with which the assets are converted into cash. Following ratios have been calculated to measure the efficiency:

(5) Inventory Turnover Ratio:

This ratio indicates whether inventory has been efficiently used or not. Inventory Turnover Ratio indicates the number of times the stock has been turned over during the period. This ratio is calculated as follows:

Inventory Turnover Ratio = Cost of Goods Sold / Inventory.

(6) Debtors Turnover Ratio:

This ratio shows the velocity of debt collection of a firm. It indicates the number of times, the debtors are turned over during the year, thus:

Debtors Turnover Ratio = Total Sales / Average Trade Debtors.

(7) Working Capital Turnover Ratio:

This ratio indicates the velocity of the utilization of net working capital. The ratio shows the number of times the working capital is turned over in the course of a year. This ratio can be calculated as:

Working Capital Turnover Ratio = Cost of Goods Sold/Working Capital.

(8) Total Assets Turnover Ratio:

This ratio indicates the efficiency in the utilization of the assets of the Company. This ratio shows whether there is over-investment in assets and can be calculated as below:

Total Assets Turnover Ratio = Net Sales / Total Assets.

(9) Fixed Assets Turnover Ratio:

This ratio indicates relationship between fixed asets and net sales. This ratio denotes the contribution of fixed assets to sales. This is an important measure of judging the efficiency in the use of fixed assets. It can be calculated as below:

Fixed Assets Turnover Ratio = Net Sales / Fixed Assets.

(10) Current Assets Ratio:

This ratio indicates circulation of current assets, frequent repetition of operating cycle and more liquidity in current assets. The ratio can be calculated as below:

Current Assets Ratio = Net Sales / Current Assets.

IV. Profitability Analysis:

Profitability in the select fertilizer units has been assessed with the help of the following ratios:

(A) Profitability in relation to Sales:

It is analysed with the help of: -

(11) Gross Profit Ratio:

This ratio indicates the relationship of gross profit and net sales. It is calculated by dividing the gross profit by sales:

Gross Profit Ratio = (Gross Profit/Sales) X 100.

(12) Net Profit Ratio:

This ratio indicates the efficiency of the management in manufacturing, selling, administration and other activities of the firm. It measures the overall profitability and is calculated as:

Net Profit Ratio = (Net Profit after Tax/Net Sales) X 100.

(B) Profitability in relation to Investment:

The profitability in this respect has been analyzed in two senses:

(13) Return on Total Capital Employed:

This ratio establishes the relationship between the profit and the total capital employed and it is calculated as under:

$$\text{Return on Total Capital Employed} = \frac{\text{Debt Interest + Other Interest + Net Profit}}{\text{Net Worth + Long Term Loans + Loan and Advances}} \times 100.$$

(14) Net Profit to Total Assets:

This ratio measures the overall efficiency and profitability of the concern. A higher percentage indicates more economical or profitable use of the resources. It is calculated as below:

Return on Total Assets (%) = (Net Profit / Total Assets) X 100.

REFERENCES:

The above theoretical background has been extracted from

1. Sharma, R.K. and S.Gupta (1982): "Management Accounting - Principles and Practice", New Delhi: Kalyani Publishers.
2. Pandey, I.M.(1993): "Financial Management" (6th Rev.Edn.), New Delhi: Vikas Publishing House Pvt.Ltd.

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