CHAPTER VI

RATIO ANALYSIS
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6.1 INTRODUCTION

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6.1: INTRODUCTION

Ratio analysis of business enterprises centers on efforts to derive quantitative measures or guides concerning the firm to meet its future financial obligations or expectations. Ratio analysis simply defined "refers to the anlaysis and interpretation of financial statements through ratio."1

Ratio is an expression of relationship between one figure and other figure which are mutually interdependent. Thus ratio is one figure expressed in terms of another. A ratio shows the interrelationship which exists among various accounting data. J.Battey points out, that term accounting ratio is used to describe significant relationships between figures shown on balance sheet, in a profit and loss account, in a budgetary control system or in any other part of the accounting organization. "The ratio may be expressed in several ways. I) As a pure ratio. II) As so many times and III) as a percentage."2

6.2: IMPORTANCE OF RATIO ANALYSIS

The importance of ratio analysis lies in the face that it presents facts on a comparative basis and enables the drawing of inferences regarding the performance of a firm. "Ratios simplifies, summarizes, and systematizes a long array of accounting figures."3. Ratio analysis is relevant in assessing the performance of a firm in respect of the following aspects.

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2 Dr. N.K. Sharma, Management Accounting, RBSC Publishers, Jaipur, 1993, P.11.
Liquidity Positions

With the help of ratio analysis conclusion can be drawn regarding the liquid position of a firm. The liquidity position of firm would be satisfactory if it is able to meet its current obligations when they become due. A firm can be said to have the ability to meet its short-term liabilities if it has a sufficient liquid funds to pay the interest on its short maturing debt usually within a year as well the principal. This ability is reflected in the liquidity ratios of a firm.

Long-term Solvency

Ratio analysis is equally useful for assessing the long-term financial viability of a firm. This aspect of financial position of a borrower is of a concern to the long-term creditors security analysts and the present and the potential owners of a business. The long-term solvency is measured by the leverage/capital structure and profitability ratios which focus on earning power and operation efficiency. Ratio analysis reveals the strength and weakness of a firm in this respect.

Operating Efficiency

Another dimension of the usefulness of the ratio analysis, relevant from the view point of management, is that it throws light on the degree of efficiency in the management and utilization of its assets. It would be recalled that the various activity ratios measure this kind of operational efficiency. In fact, the solvency of a firm is in the ultimate analysis, dependent upon the sales revenues generated by the use of its assets-total as well as its components.

Overall Profitability

Unlike the outside particles, which are interested in one aspect of the financial position of a firm, the management is constantly concerned about
the overall profitability of the enterprise. That is they are concerned about the ability of the firm to meet its short term as well as long term obligations to its creditors, to ensure a reasonable return to its owners and secure optimum utilization of the assets of the firm. This is possible if as integrated view is taken and all the ratios are considered together.

**Inter firm Comparison**

Ratio analysis not only throws light on the financial position of a firm but also serves as a stepping stone to remedial measures. This is made possible due to inter firm comparison/comparison with industry averages. A single figure of particular ratio is meaningless unless it is related to some standard or normal. One of the popular techniques is to compare the ratios of a firm with the industry average. It should be reasonably expected that the performance of a firm should be in broad conformity with that of the industry to which it belongs. An inter firm comparison would demonstrate the relative position vis‐à‐vis its competitors. If the results are at variance either with the industry average or with those of the competitors, the firm as can seek to identify the probable reasons and in the light, take remedial measures.

**Trend Analysis**

Ratio analysis enables a firm to take the time dimension in to account. In other words, whether the financial position of a firm is improving or deteriorating over the years. This is made possible by the use of trend analysis. The significance of the trend analysis of ratios lies in fact that the analysts can know the direction of movement, i.e. whether the movement is favorable or unfavorable.
6.3 : TYPES OF RATIOS

The following ratios were used for the present study along with their computational formula.

- Liquidity Ratios
- Activity Ratios, or turnover Ratios, and
- Profitability Ratios (in relation to sales)

The following formulas were used in this study.

Current Ratio = \( \frac{\text{Current assets}}{\text{Current liabilities}} \)

Quick Ratio = \( \frac{\text{Current assets} - \text{Inventory}}{\text{Current liabilities}} \)

Inventory turnover Ratio = \( \frac{\text{Sales}}{\text{Inventory}} \)

Net assets turnover Ratio = \( \frac{\text{Sales}}{\text{Net Assets}} \)
Total assets turnover

\[
\text{Ratio} = \frac{\text{Sales}}{\text{Total assets}}
\]

Working Capital turnover Ratio

\[
= \frac{\text{Sales}}{\text{Net working Capital}}
\]

Gross Profit Ratio

\[
= \frac{\text{Gross profit} \times 100}{\text{Sales}}
\]

Net Profit Ratio

\[
= \frac{\text{Net profit} \times 100}{\text{Sales}}
\]

The ratio analysis is presented in table No 6.1. The study revealed that there was a satisfactory progress in Allied Founders, Protech Founders and Kapeel Founders. These ratios were developed on the basis of annual reports submitted by the respondents of the Allied Founders, Protech Founders and Kapeel Founders units.

Current Ratio

The current ratio is calculated by dividing current assets to current liabilities. The current ratio is a measure of firms short term solvency. It indicates the availability of the current assets in rupees for every one rupee of current liability. This ratio indicates the extent of the soundness of the current financial position of an undertaking and the degree of safety provided to the creditors. The higher the current ratio, the longer amount of rupee available per rupee of current liability, the more the firms ability to meet current obligations and the greater safety of funds of short-term creditors current assets are those assets which can be converted in to cash within a year current liabilities and provisions are
those liabilities that are payable within a year. As a conventional rule, a current ratio of 2 to 1 or more is considered satisfactory. The current ratio is quite satisfactory in Allied Founders, Protech Founders and Kapeel Founders. Current ration stood at 2.1, 2.74 and 2.61 in case of Allied Founders, protech Founders and Kapeel Founders respectively, which is more than accepted norm i.e. 2:1. This clearly shows that all these three units are sufficiently liquid, if the current liabilities were 1 their current assets were 2.1, 2.74 and 2.61 it mean that person granting short term debt need not wait for immediate recovery of their claims, since the Allied Founders, protech Founders and Kapeel Founders are possess sufficient current assets.

**Quick Ratio**

This ratio is also known as ‘liquid ratio’ or ‘acid test ratio’. It express the relationship between quick format assets and current liabilities. While calculation of quick ratio, inventories are excluded from current assets, since inventories cannot be converted in to cash in short time without loss of value. This ratio is a more refined tool to measure the liquidity of an organization. It is a better test of financial strength than the current ratio, because it excludes very slow moving inventories and the items of current assets which cannot be converted into cash easily. This ratio shows the extent of protection provided from the quick assets to the current creditors. Generally a quick ratio of 1 to 1 is considered to represent a satisfactory current financial condition. The quick ratio is quite satisfactory in Allied Founders, Protech Founders and Kapeel Founders. Quick ratio stood at 1.78, 2.19 and 1.92 in case of Allied Founders, protech Founders and Kapeel Founders respectively, which is more than accepted norm i.e 1.1. This clearly shows that all these three units are sufficiently liquid. If the current liabilities were 1 there quick assets were 1.78, 2.19 and 1.92 these figure reveal that the Allied...
Founders, Protech Founders and Kapeel founders easily meet their current obligations, since all these three units possess sufficient quick assets.

**Inventory Turnover Ratio**

The ratio establishes relationship between the sales with average stock. It measures the velocity of converting stock into sales. This ratio indicates the effectiveness and efficiency of the inventory management. This ratio shows how speedily the inventory is turned into accounts receivable through sales. The higher the ratio, the more efficient the inventory is said to be managed and vice-versa. A higher ratio indicates efficient management of inventory because more frequently the stocks are sold, the lesser amount of money is required to finance the inventory and vice-versa. A low ratio indicates inefficient management of inventory because less frequently the stocks are sold the more amount of money is required to finance the inventory. The accepted norm for inventory turnover ratio is 5 times to 6 times. This means inventory should be used at least 5 times or more in accounting cycle. Inventory turnover ratios for Allied Founders, Protech Founders and Leepal Founders were 22.13, 12.94 and 19.42 times respectively. These figure reveal that all these three units are properly utilized their inventory. This kind of inventory management is improving the working capital position of these units and shows that the entrepreneurs are adopted scientific inventory management.

**Net Assets Turnover Ratio**

Net assets indirectly assist in improving the sales, there by improving the working capital position, Net assets turnover ratio explains the quantum of amount invested in net assets in comparison with sales. This ratio was 4.07 times for Allied Founders, 3.32 times for Protech Founders and 0.55 times for Kapeel Founders. This clearly shows that
net assets turnover ratio is highly unsatisfactory in the case of Kapeel Founders and Satisfactory in the case of Allied Founders and Protech Founders. The reason for this weak ratio in Kapeel Founders is due to the fact that their investment in net assets is less than their sales guarantee.

**Total Assets Turnover Ratio**

This ratio expresses relationship between the amount invested in the assets and the result accruing in terms of sales. This is calculated by dividing the net sales by total assets. Total assets turnover ratio indicates the efficiency with which assets of the firm have been utilized. A higher ratio would mean better utilization and a lower ratio would mean inefficient utilization. This ratio was 2.20 times for Allied Founders, 2.26 times for Protech Founders and 3.92 times for Kapeel Founders. This clearly shows that total assets turnover ratio is highly satisfactory in the case of Allied Founders, Protech Founders and Kapeel Founders. The overall analysis of these ratios shows that all these three units are invested more in total assets.

**Working Capital Turnover Ratio**

This is done by dividing the net working capital into net sales indicating whether the business is being operated as a small or large amount of networking capital in relation to sales.

A high working capital turnover ratio may be the result of favorable turnover of inventories and receivables or may reflect as inadequacy of net working, capital accompanied by low turnovers of inventories and receivables. On the other hand, a low turn over of net working capital may be the outcome of an excess of networking capital, slow turnover of inventories and receivables, a large cash balance or investor investments. Thus in interpreting the net working capital turnover ratio the analyst should exercise considerable caution because the working capital
turnover ratio is a composite of a number of relationships, each one of which should be analyzed carefully to account for changes from year to year or between companies.

A high ratio may indicate over trading, while a low ratio may indicate under trading. Working capital turnover ratios for Allied Founders, Protech Founders, and Kapeel Founders were 4.78, 4.09 and 8.34 times respectively. These figures reveal that all these three units properly utilized their working capital. This kind of working capital management is improving the working capital position of these units and it shows that the entrepreneurs adopted a scientific approach in deciding the working capital requirement.

**Gross Profit Ratio**

This is very important and significant ratio. It reveals the amount of gross profit for each rupee of sales. Earning capacity of the business can be confined by taking the margin between cost of goods and sales. The higher the ratio, greater will be the margin and that is why it is also called margin ratio. Gross profit ratio is very useful as a test of profitability and management efficiency. Gross profit ratio of 20 percent to 30 percent is considered normal.

The gross profit ratio in Allied Founders is 14.79 percent followed by 10.08 percent in case of Protech Founders and 21.36 percent for Kapeel Founders. This clearly reveals that in Allied founders and Protech Founders gross profit ratio is well below the norm, if this position continues the survival of these units will be in difficulty. Only Kapeel Founders attempted to earn normal profits. Creditors and shareholders are the interested parties and like to have a good high profit margin ratio or at least equal to the accepted norm.
Net Profit Ratio

It is the ratio of net profit to sales and expressed as a percentage. This ratio offers one of the useful tools to measure the operational efficiency of the firm and in turn its success in achieving the objectives. That is why it is called “Operating profit ratio.” The higher the net profit ratio greater will be the profitability and higher return for the proprietor. 15 percent to 20 percent net profit ratio may be considered normal.

The net profit ratios for Allied Founders, Protech Founders and Kapeel Founders were 2.16 percent, 4.09 percent, and 8.09 percent respectively. This clearly demonstrates that in all these three units net profit ratio is well below the norm. A low net profit ratio implies absence of effective utilization of working capital. This warrants the Allied Founders, Protech Founders and Kapeel Founders to exercise effective control over the various components of working capital.
Table 6.1: Ratio Analysis

<table>
<thead>
<tr>
<th>Ratios</th>
<th>Allied Founders</th>
<th>Protech Founders</th>
<th>Kapeel Founders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Ratio</td>
<td>2.1</td>
<td>2.74</td>
<td>2.61</td>
</tr>
<tr>
<td>Quick Ratio</td>
<td>1.78</td>
<td>2.19</td>
<td>1.92</td>
</tr>
<tr>
<td>Inventory Turnover Ratio</td>
<td>22.13</td>
<td>12.94</td>
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</tr>
<tr>
<td>Net assets Turnover Ratio</td>
<td>4.07</td>
<td>3.32</td>
<td>0.55</td>
</tr>
<tr>
<td>Total assets Turnover Ratio</td>
<td>2.20</td>
<td>2.26</td>
<td>3.92</td>
</tr>
<tr>
<td>Working Capital Turnover Ratio</td>
<td>4.78</td>
<td>4.09</td>
<td>8.34</td>
</tr>
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<td>Gross profit Ratio</td>
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</table>

Source: Annual Reports.