RESEARCH PAPER | Commerce | Volume : 2 | Issue : 1 | October 2012 | ISSN - 2249-555X

An Emparical Study of Ratio Analysis

KEYWORDS: Classification of ratios: Profitability ratio, Coverage ratio, Turnover ratios, Financial ratios: liquidity ratio and stability ratio, Advantages of ratio ananlysis, Limitation of ratio analysis.

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ABSTRACT *Ratio analysis is a technical of presenting internal and external events affecting the business transactions relating to its operations, operating results and attainment of pre-determined goals and objectives of a business in brief and summary form. Ratio analysis is the process of determining and presenting the relationship of items or group of items in the financial statements. In ratio analysis, a definite conclusion is drawn by establishing quantitative relationship between two or more items of financial statements. External parties such as investors, shareholders, creditors etc. require information about the financial soundness or weakness of the concern. Therefore, ratio analysis is used by all these parties including management to evaluate the performance of the concern. With the help of these ratios, the liquidity position, long-term solvency, operating efficiency or profitability and efficiency of a concern can be evaluated.*

INTRODUCTION

Ratios are relationship expressed in mathematical terms between figures which are connected with each other in some manner. Obviously, no purpose will be served by comparing two sets of figures which are not at all connected with each other. Moreover, absolute figures are also unfit for comparison. Thus, a ratio is a simple arithmetical expression of the relationship of one number to another and is obtained by dividing the former by the later, In other words, ratios are simply a means of highlighting, in arithmetical terms, the relationship between figures drawn from financial statements. In shortly, Ratio analysis is the process of determining and presenting the relationship of items or group of items in the financial statements.

CLASSIFICATION OF RATIOS

Ratio can be classified into different categories depending upon the basis of classification. The traditional classification has been on the basis of the financial statement to which determinates of a ratio belong. On this basis the ratio could be classified as:

1. Profit & Loss account Ratio
2. Balance Sheet Ratio
3. Composite Ratio

However the above basis of classification has been found to be crude and unsuitable because analysis of balance sheet and income statement can not be done in isolation.. In order that ratio serves as a tool for financial analysis, they are now classified are:

1. Profitability Ratio
2. Coverage Ratio
3. Turn Over Ratio
4. Financial Ratio

1. PROFITABILITY RATIO

Profitability is an indication of the efficiency with which the operations of the business are carried on. Bankers, financial institutions and other creditors look at the profitability ratio as an indicator whether or not the firms earns substantially more than it pays interest for the use of borrowed funds and whether the ultimate repayment of their debt appears reasonably certain. The following are the important profitability ratio:

Earning Per Share (EPS)

The earning per share helps in determining the market price of the equity share of the company. A comparison of earning per share of the company with another will also help in deciding whether the equity share capital is being effectively used or not. It also helps in estimating the company's capacity to pay dividend to its equity share holders.

Gross Profit Ratio

This is also known as gross margin. It is calculated by dividing gross profit by Sales Gross Profit is the result of the relationship between prices, sales volume and costs. High ratio of gross profits to sales is a sign of good management as it implies that the cost of production of the firm is relatively low. A relatively low gross margin is definitely a danger signal, warranting a careful and detailed analysis of the factors responsible for it.

Net Profit Ratio

The net profit margin is indicative of "management's ability" to operate the business with sufficient success not only to recover from revenues of the period, the cost of merchandise or services, the expenses of operating the business and the cost of the borrowed funds but also to leave a margin of reasonable compensation to the owners for providing the capital at risk.

Operating Ratio

This ratio is a complementary of net profit ratio. In case the net profit ratio is 20% it means that the operating ratio is 80%.This ratio is the test of the operational efficiency with which the business is being carried. The operating ratio should be low enough to leave a portion of sales to give a fair return to the investors.

2. COVERAGE RATIO

These ratio indicate the extent to which the interests of the persons entitled to get a fixed return or a scheduled repayment as per the agreed terms are safe. The higher the cover, the better as it is. These ratios are of three types:

Fixed Interest Cover

The ratio is very important from the lender's point of view. It indicated whether the business would earn sufficient profits to pay periodically the interest charges. The higher the number the more secure the lender is in respect of his periodical interest income.

Fixed Dividend Cover

The ratio is important for preference share holders entitled to get dividend at a fixed rate in priority to other shareholders.

Debt Service Coverage Ratio

The interest coverage ratio as explained above, does not tell us anything about the ability of a company to make payment

Volume : 2 | Issue : 1 | October 2012 | ISSN - 2249-555X

of principal amounts also on time.

3. TURNOVER RATIOS

The turnover ratios are also known as activity or efficiency ratio. They indicate the efficiency with which the capital employed is rotated in the business. The turnover ratio is calculated as follows:

Fixed Asset Turnover Ratio

The ratio indicates the extent to which the investments in fixed assets contribute towards sales. If compared with a previous period, it indicates whether the investment in fixed assets has been judicious or not. When, the ratio has been decline in the fixed assets turnover ratio though absolute figures of sales have gone up.

Working Capital Turnover Ratio

This is also known as working capital leverage ratio. This ratio indicates whether or not working capital has been effectively utilized in making sales. In case a company can achieve higher volume of sales with relatively small amount of working capital, it is an indication of the operating efficiency of the company.

Debtor's Turnover Ratio (Debtor's Velocity)

Debtors constitute an important constituent of current assets and therefore the quality of debtors to a great extent determines a firm's liquidity. Sales to Accounts Receivables Ratio indicate the efficiency of the staff entrusted with collection of books debts. The higher the ratio, the better it is, since it would be indicating that debts are being collected more promptly. For measuring the efficiency, it is necessary to set up a standard figure, a ratio lower than the standard will indicate inefficiency.

Creditor's Turnover Ratio (Creditor's Velocity)

It is similar to debtor's turnover ratio. It indicates the speed with which the payments for credit purchase are made to the creditors.

Stock Turnover Ratio (Turnover Ratio)

The ratio indicates whether investment in inventory is efficiently used or not. It, therefore, explains whether investment in inventories is within proper limits or not. A high inventory turnover ratio indicates brisk sales. A low inventory turnover ratio results in blocking of funds in inventory which may ultimate result in heavy losses due to deteriorate in quality.

4. FINANCIAL RATIOS

Financial ratios indicate about the financial position of the company. It is a sound principle of finance that the short term requirements of funds should be met out of short term funds and long term requirements should be met out of long term funds.

Financial ratio can be divided into two broad categories.

1) Liquidity Ratio
2) Stability Ratio

1. Liquidity Ratio

These ratios are also termed as 'working capital ratio' or 'short term solving ratio'. An The important liquidity ratios are as follows:

Current Ratio

The ratio is an indicator of the firm's commitment to meet the short term liabilities. Current Assets means assets that will either be used up or converted into each within a year's time or during the normal operating cycle of the business, whichever is longer. Current liabilities mean liabilities payable within a year or during the operating cycle, whichever is longer, out of the existing current assets or by creation of current liabilities.

Quick Ratio

This ratio is also termed as 'acid test ratio' or 'liquidity ratio'. This ratio is ascertained by comparing the liquid assets,

2. Stability Ratio

The capacity of the firm to meet the last requirement can be ascertained by computing the various coverage ratios, already explained in the preceding pages. For the other two requirements, the following ratio can be calculated.

Fixed Asset Ratio

This ratio explains whether the firm has raised adequate long term funds to meet its fixed assets requirements. Fixed assets include 'Net Fixed Assets' and trade investments including shares in subsidiaries. Long term funds include share capital reserves and long term loans.

Capital Gearing Ratio

Capital gearing refers to the proportion between fixed interest and dividend bearing funds and non fixed interest or dividend bearing funds in the total capital employed in the business.The gearing ratio is useful in indicating the extra residual benefits accruing to the equity shareholders.

Debt-Equity Ratio

The debt-equity ratio is determined to ascertain the soundness of the long term financial policies of the company. It is also known as 'External Internal Equity Ratio'.

ADVANTAGES OF RATIO ANANLYSIS:

Following are some of the advantages of ratio analysis:

- Simplifies Financial Statements: Ratio analysis simplifies the comprehension of financial statements ratio tell the whole story of changes in the financial condition of the business.
- Facilities Inter Firm Comparison: Ratio analysis provides data for inter firm comparison. Ratio highlights the factors associated with successful and unsuccessful firms. They also reveal strong firms and week firms, over valued and under valued firms.
- Makers Intra Firm Comparison Possible: Ratio analysis also makes possible comparison of the performance of the different divisions of the firm. The ratios are helpful in deciding about their efficiency or otherwise in the past and likely performance in the future.
- Helps in Planning: Ratio analysis helps in planning & forecasting over a period of time a firm or industry develops certain norms that may indicate future.

LIMITATION OF RATIO ANALYSIS

The important limitations are identified as follows.

- Need for Comparative Analysis: A single ratio would not be able to convey anything, as the single ratio in itself is meaningless, it does not furnish a complete picture. Neither it can be explained, nor can any decision be taken on this basis.
- Qualitative Factors Ignored: Ratio are arithmetical expressions, so that qualitative aspects cannot be presented through ratios. Normally, qualitative factors that may influence the conclusions drawn are ignored while computing ratios.
- Possibility of Window-dressing: Window-dressing means manipulation of accounts in a way so as to present a better picture than what it actually is. By doing so, it is possible to cover up bad financial position.
- Different in Accounting Methods and Systems: Comparability of financial statements is affected when various different are traced out in accounting methods and systems followed by different firms.

CONCLUSION

Ratio analysis is one of the techniques of financial analysis where ratios are used as a yardstick for evaluating the financial condition & performance of a firm. Analysis and interpretation of various accounting ratio gives a skilled and experienced analyst a better understanding of the financial condition and performance of the firm than what he could have obtained only through a perusal of financial statements.