

## Ratio Analysis

\* Ratio Analysis is a simple arithmetical expression of the relationship of one number to another. It also conducted by one number is divided by another number.

\* According to Myers, "Ratio Analysis is a study of relationship among the various financial factors in a business."

\* According to Robert N. Anthony, "A ratio is simple one number expression in term of another."

It's can be classified into following form :-

(i) Simple Ratio =  $\frac{x}{y}$ ,  $\frac{4}{8}$

(ii) Percentage Ratio = n's  
= n = number.

(iii) Ratio ratio = n times.  
 $\Rightarrow$  1 times  
 $\Rightarrow$  2 times.

(iv) Accounting ratio — Accounting ratio is a term of ratio which explain the relationship between one item of accounting with another item of company.

\* According to Kohler, "Accounting ratio is the relationship between two

accounting record.

It is expressed in the form of integer, decimal, fraction or percentage, etc."

- \* According to Wixon, Kell & Bedford,  
"A accounting ratio is an expression of the quantitative relationship between two numbers."

In other word,

Ratio analysis is a technique of analysis & interpretation of financial statement. It is the process of establishing & interpreting various ratio for helping in making certain decisions.

- \* Importance or Objectives of Accounting Ratio.

Ratio analysis is important for analysis of financial statement. Following are the important of accounting ratio :-

- rts. In case financial statement ends are incorrect on the data upon which ratios are based is incorrect, ratios calculation will also be false & defective.

The accounting system itself suffers from many

inherent weakness. So the ratio based upon it cannot be said to be always reliable.

- (i) Limited comparability — The ratio of the one firm cannot always be compared with the performance of other firm, if uniform accounting policies are not adopted by them.
- (ii) Limited use of a single ratio — A single ratio, usually does not convey much of a sense. They make a better interpretation a number of ratios have to be calculated which is likely to confuse the analyst then help him in making any meaningful conclusion.
- (iii) Personal Bias — Ratio are only means of financial analysis & not an end in itself. Ratio have to be interpreted & different people may interpret the same ratio in different ways.
- (iv) Ignoring qualitative factors — Ratio analysis is the quantitative measurement of the performances of the business. It ignores the qualitative aspects of the firm, how so ever important it may be. It shows that ratio is only one sided approach to measure the efficiency

of the business.

(vi) No single Standard Ratio — There is not a single standard ratio which can indicate the true performance of the business at all time & in all circumstances.

(vii) No idea of probable happening in future — Ratio are an attempt to make an analysis of the past financial statements. So they are historical documents. Now-a-days keeping in ~~the~~ <sup>new</sup> view complexities of the business; it is important to have an idea of the probable happening in future.

\* Interpretation of Ratio Analysis.

The interpretation of ratios is an important factor.

The interpretation of the ratio can be made in the following ways:-

(i) Single absolute ratio — One cannot draw any meaningful conclusion on the basis of a single ratio. But single ratio may be certain ~~set~~ <sup>set</sup> rules of thumb which are based upon well proven conventions.

(9) Group ratios — Ratio may be interpreted by calculating a group of related ratios. A single ratio supported by another related additional ratio become more understandable & meaningful.

(10) Historical comparison — One of the exist & more popular ways of evaluating the performance of the firm is to compare its present ratios with the past ratios called comparison over time.

(11) Project Ratios — Ratio can be calculated for future standard based, upon the projected or performance financial statements. These future ratio may be taken upon on standard ratios calculated on actual financial statements. can be compared with the standard ratios to find out variances, if any. Such variances help in interpreting & taking corrective action for improvement in future.

(12) Inter-firm comparison — Ratio of one firm can also be compared with the ratios of some to ~~be~~ earn the profit. Profit earning is considered essential for the survival of the business.

\* In the words of Lord Keynes, "Profit is the engine that drives the business enterprise."

An enterprise needs profit not only for its existence but also for expansion & diversification.

The investors want an adequate return on their investment. Workers want higher wages, creditors want higher security & getting interest on time. So, an enterprise can discharge its obligation to the various segments of the society only through earning profits.

Hence, we say that profit are useful measure of overall efficiency of a business.

Profitability refers to operating net profit & net sales.

Where operating net profit in a certain case:

formula

$$\frac{\text{Gross profit} + \text{Operating income} - \text{Operating expenses}}{\text{Net sales}} \times 100$$

Net operating profit ratio =  $\frac{\text{Net operating profit}}{\text{Net sales}} \times 100$

Operating ratio - Operating ratio is the difference between 100 % net sales ratio.

This ratio indicates the preparation that cost of good sold bears to sales.  
Formula,

$$\text{Operating ratio} = \frac{\text{Cost of good sold} + \text{oper. exp}}{\text{Sales}} \times 100$$

$$\text{Operating ratio} = 100 - \text{net profit ratio}$$

c) Expenses ratio - In order to determine & scrutinise the operational efficiency of the business, every expenditure has to be matched with sales. And in case of the expenses ratio is increase profit ratio will decrease.

So every business should calculate their business expenditure meticulously for knowing the position of profit.

$$\text{Formula, Expenses ratio} = \frac{\text{Particular exp}}{\text{Net sales}} \times 100$$

\* Limitation of ratio analysis :-

① The firm can make some year-end changes to their financial statements, to improve their ratio. Then the ratio end up being nothing but window dressing.

(ii) Ratio ignore the price level changes due to inflation. Many ratios are calculated using historical costs, & they overlook the changes in price level between the periods. This does not reflect the correct financial situation.

(iii) Accounting ratio completely ignore the qualitative aspects of the firm. They only take into consideration the monetary aspects (quantitative).

(iv) There are no standard definitions of the ratio. So firms may be using different formula for the ratios.

(v) And finally, accounting ratio do not resolve any financial problems of the company. They are means to the end, not the actual solution.

\* Classification of ratio analysis :-

(i) Liquidity Ratio — It measure the adequacy of current & liquid assets & help evaluate the ability of the business to pay its short - term debts.

Two commonly used of this are -



- a) Current ratio or working capital ratio
- b) Quick ratio or acid test ratio
- c) Absolute liquid ratio
- d) Current cash debt coverage ratio.

(ii) Profitability ratio — It measures the efficiency of management in the employment of business resources to earn profits. The ratio indicate the success or failure of a business enterprise for a particular period of time.

(iii) Activity ratio — It measures the efficiency of a firm or company in generating revenues by converting its production into cash or sales. Generally a fast conversion increase revenues & profits.

(iv) Solvency ratio — It measure the ability of a business to survive for a long period of time. These ratio are very important for stock holders & creditors.

Some long-term solvency ratio are —

- a) Debt to equity ratio
- b) Times interest earned ratio
- c) Proprietary ratio
- d) Fixed assets to equity ratio
- e) Current assets to equity ratio
- f) Capital gearing ratio.