CHAPTER IV

THEORETICAL FRAME WORK
ANALYSIS & INTERPRETATION OF FINANCIAL STATEMENTS.

CHAPTER IV

ANALLYSIS AND INTERPRETATION OF FINANCIAL STATEMENTS THEORETICAL FRAME WORK

4:1 MEANING OF ANALYSIS AND INTERPRETATION :

Analysis means breaking down a complete set of figures into simple elements or sagments. It compares resolving the statements by breaking them into simpler statements by a process of re-arranging, regrouping and the calculation of ratios to examine critically for the shake of better understanding the Natures.

Interpretation in short means explanation, explanation of the real significance of these scattered elements.

According to F. Wood to interpret means to put the meaning of a statement into the simple terms for the benefit of a person. It is the mental process of understanding the terms of such statements and forming opinions or inferences about the financial health. Interpretation gives meaning to the data contained in financial statements through analysis and comparision.

Financial analysis is the process of identifying the financial strength and weakness of the firm by

properly establishing relationships between the items of balance sheet and profit and loss account.

4:2 OBJECTIVES OF ANALYSIS AND INTERPRETATION :

The objectives for analysis and interpretation can be many few of them are as follows :-

(1) To Judge the financial health of the undertaking. Financial Manager is concern and with the financial health of the buisness. He has to ensure the proper management of funds. He has to procure them at a low cost and ensure that they are effectively utilised, as that repayment of such funds as and when they become due poses no problem.

(2) To Judge the earning performance of the company and the facility with which dividents can be paid from out of earnest profits. Potential investore are primarily interested in this aspect and the analysis and interpretation is done with a view to assertain the enterprise's position in this regard[11].

(3) In the case institutional investors such as LIC, UTI etc. analysis is carried over a long period with a view to identifying companies having

growth potential and sound financial base.

(4) To Judge the ability of the enterprise to pay the principal and interest arrangements for amortization of the debt and the security available for loans extended. Most of the companies raise a proportion of their capital requirement by using debentures. This is because a company pay about 10% to 12% interest on the funds so raised. The facilities the company to pay higher dividend on equity capital. The debenture holders as lenders of substantial funds have this objective in view while analysing the financial statements.[12]

(5) To Judge the solvency of the undertaking. Every business reduces its working capital requirements by availling trade creditors. But the business must be in a solvent position to pay the debts as and when they fall due so the trade creditors will be mainly interested in assessing the liquity position for which they look into the following.

(a) Whether the currnet assets are sufficient to pay off current liabilities.

(b) The proportion of liquid assets to current assets.

(c) Whether the debenture holders are secured by a floting charge on the current assets.

(d) The business prospects with reference to the future growth and earnings.

In the case bankers who provide short term working capital and of late even medium term credit, they generally look into the followings.

i) The purpose and period of loan.

ii) The manner in which the borrower proposes to repay the loan.

iii) The capacity of the business enterprise to repay as judged by the trend of profits.

iv) Banker's position is the event of forced liquidation.

v) The quality of the management and

vi) The history of the account in the past.[13]

From the above explanation it is clear that there are different objectives in analysis and interpretation and that there are different users, all of them usings the same.statement but for a different purpose. It is the job of the financial analysis to apply his techniques of analysis and interpret the statement for the user so as to anable him to take a proper and appropriate decision.

4:3 TYPES OF FINANCIAL ANALYSIS :

A distinction is sometimes made between various type of financial analysis either on the basis of material used or according to the modus operandi of the analysis and according to the objectives of analysis which is shown as follows :-

TYPES OF FINANCIAL ANALYSIS[14]

- According to Material uses
  - i) External
  - ii) Internal
- According to Modus operandi of Analysis
  - i) Horizontal
  - ii) Vertical

ACCORDING TO OBJECTIVES OF ANALYSIS

- Long Term
  - a) Solvency
  - b) Stability
  - c) Profitability
- Short Term
  - a) Working Capital Position
  - b) Profitability
  - c) Return Analysis

ACCORDING TO MATERIAL USED :

(1) External Analysis :

It is made by those who do not have any access to the detailed records of the firm this group, which has to depend almost entirely on published

financial statements includes investors, credit agencies, government agencies regulating a business in a nominal way.[15] The position of the external analyst been improved in recent times owing to the government regulations requiring business undertaking to make available detailed information to the public through audited accounts the main objective of such analysis varies from party to party.

(2) Internal Analysis :

This analysis is undertaken by those who have accoss to the books of accounts and all other informations related to business[16] while conducting. This analysis the analyst is part of enterprise he is analysing. Analysis for managerial purposes is the internal type of analysis and is conducted by the executives and employees of the enterprises as well as governmental and court agencies which may have major regulatory and other jurisdication over the business. The finance and accounting department of the enterprise have direct approach to all the relevant financial records. Such analysis emphases on the performance appraisal

and assessing the profitability of various activities and operations.

(3) Short Term Analysis :

The short term analysis of financial statements is primarily concerned with the working capital analysis, so that a forecast may be made of the prospects for future earnings, ability to pay interest, debt materilies both current and long term and probaility of a sound dividend policy. In fact such as analysis is the study of relationship among the various financial factors in a business as disclosed by a single set of statements and a study of the trends of those factors as such in a series of statements. In the short run, an enterprise must have ample funds readily available to most its current needs and sufficient borrowings capacity to meet its contingencies. Hence in short run analysis the current assets and current liabilities are properly analysed and cash position i.e. liquidity of the concern is determined more short run financial analysis therefore, the ratio analysis is very useful.

(4) Long Term Analysis :

In the long run the business enterprise must earn a minimum amount sufficient to maintain a suitable rate of returns on the investment to provide for the nacessary growth and development of the enterprise and to meet the cost of capital. In the long run analysis the emhasis is on the stability and earning potentiality of the concern. The fixed assets, long term debt structures and ownership. Interests are fully analysed in the long term analysis. In fact the short term and long term both types of analysis are important, proper planning for the future requires fairly sufficient knowledge of the enterprise's current position which may be determined from the short term financial analysis only.

(5) Horizontal Analysis :

The horizontal analysis are concerned with the relationship among items in succsive statements some expresed in terms of rupees and others in percentages.[17] In other words, in the horizontal analysis the some items on financial statements of two or more years are compared with

a view to find out the behaviour of each of the items, that is its increases and decreases with the passage of time. This is a dynamic type of analysis since it shows the changes which have taken place over the period of comparison.

(6) Verticall Analysis :

Vertical analysis are concerned with the evaluation of relationship among at a particular date. It simply means to calculate the percentage of such figure in each year's financial statements to a related total eg. each item of expenses and revenue account and also the net income may be expressed as a percentage of net sales. It is a static type of analysis or study of financial profit of the enterprise. The vertical analysis involves a study of -

i) Common size balance sheet and income statement.

ii) Structural ratios expressing relationship between different items in the balance sheet and income statement.

Regarding the complementory nature of horizontal and vertical measures, Myar John N observes "The two types of analysis horizontal

and vertical from the backbone of the financial statement analysis techniques. It is important for the analysis to become of similiar with the significance of each types. No conflict exists between them each gives its own pecular kind of information. Both kinds, static and dynamic are necessary for the complete analysis.

4:4 METHODS AND DEVICES USED IN ANALYSISING FINANCIAL STATEMENTS :

The fundamental objectives of any analytical method is to simplify or reduce the date under review to more understandable terms. It must be made simpler for any reader to understand the operating results and financial health of the business.

This is done with the help of the following devices of financial analysis.

i) Comparative Balance Sheet and Income statements.

ii) Common size percentages (statements)

iii) Trend Ratio and

iv) Ratio analysis.

These devices help the interested reader in giving tongue to the dumb helps of figures which

inturn help in achieving the ultimate aim of interpretation financial statements.

a) COMPARATIVE STATEMENTS :

The most common type of the horizontal analysis is that of comparative financial statements for two or more years with simple and percentage change shown for important items. In other words the comparison may be left entirely to the reader in which case only the regular figures of each of the two or more years are present when the figures of many years are given either for income statement or for balance sheet the trend changes easilly becomes apparent. This is also known as horizontal analysis since each accounting veriable for two or more years is analysed horizintely. In preparing these statements the items are placed inthe rows and firms or years are shown in the columns. Such arrangement facilities highlighting the difference and brings out the significance of such difference. The statement also provide for columns to indicate the change from one year to another in absolute terms and also in percentage. In calculating percentage, there is on difficulty namely, if the figure is negative percentage can not be calculated. Likewise, if the change is from or to a zero balance in accounts. It

is not possible to calculate the percentage. Thus comparative statements are made to show.

i) Absolute data (Money value)

ii) Increases and Decreases in absolute data in terms of money values.

iii) Increase or Decrease is absolute data is terms of percentages.

iv) Comparison expressed in ratios.

v) Percentage of totals.

USES :-

This method has following uses.

1) Comparative financial statements are very use ful to analyst as they provide information necessary for the study of financial and operating trends over a period of years.

2) Comparative statements indicate the duration of the movement with respect of the financial position and operating results.

3) The data become more meaningful when compared with similar data for a previous period or a number of prior, periods such statements are very helpful in measuring the effects of the conduct of a business during the period under consideration.

4) The comparative profit and loss account will present a review of the operating activities of the business. The comparative balance sheet shows the effect of operations of the assets and liabilities i.e. charge in the financial position during the period under consideration.

PRECAOTIONS :-

For making proper and effective use of the comparative financial statements, it is essential to bear in mind the following points :

1) Comparative statements must be based on the consistent application of generally accepted accounting principles over the period of time covered by the comparision.

2) It must be ascertained that change in procedure have been fully disclosed in the firm of footnotes to the financial statements.

3) The method and rate of depreciation must be the same over the period of comparison.

4) The assets and liabilities in the balance sheet and revenue expenses items must be uniformly classified for the periods of comparison Eg. if investments have been separately

classified in one year, this item must not be grouped under the fixed assets in the subsequent years.

PROCESS OF COMPARISON :

As a first step in the process of comparison the analyst has to arrange or even rearrange verious items in the balance sheet and profit & loss account. The whole exercise would depend on the nature or objective of the study. Eg. if the comparison is to be made by a banker, the primary consideration would be onthe position of current assets over a period of time in relation to current liabilities. The long term creditors are mainly concerned with the stability of earnings and the values of the fixed assets while the general investors might be interested in the continous growth of earning coupled with the book value of investments. Accordingly, the date in the financial statements may be arranged to suit the respective requirements.

LIMITATIONS :

The following are the limitations of this method

1) Interfirm comparison may be mis leading if the firm are not of the same age and size, follows

different accounting policies in relation to depreciation, valuation of stock etc. and do not carter to the same market.

2) Interposed compersion will be misleading if the period has witnessed frequent changes in accounting polities.

b) TREND ANALYSIS :

Another useful from of horizontal measurement is the trend analysis interoduced by Cilman as a substitute for the ratio technique percentage increase or decreases are quite satisfactory for the comparison of two sucessive statements but in comparing there or more statement it becomes difficult to interpret the series of percentages. The difficulty lies in the fact that the series lack contiunity. Much percentage expresses a relationship to a different base year, any, the sale of each year to its preceeding year. Unless a common base is used for comparison purposes, the percentage willl lack any meaning. The mere fact that there is a percentage increase in one year or a percentage decrease in another year does not mean very much.

The difficulty may, however, be over come when pattern of change from year to year is calculated by trend percentages. To do this, we select a base year and their divide the date for each of the other years during the period by the base year date. The figures on computed are in fact index numbers showing changes occuring throughout the period. Thus if we choose first year as the base year, all data for second, third, fourth or fifth year will be related to first year which is represented as 100 percent. It may be added that the base year may be any typical year in the comparison the first year, the last year or any of the other years. Trend ratio are calculated any for some important and items which can be logically connected with each others. Cost of goods sold, sales gross income and net income.

USES :-

The following are the uses of trend analysis.

1) It is a simple technique. It does not involve tedious calculations and requires trained experts.

2) It is a brief method to indicate the future trends.

3) It reduces the chances of errors as it provides the opportunity to compare the percentages with absolute figures.

WEAK LINKS :

This method has following weak links.

1) Accounting Practices :-

Trend percentages become un comparable if accounting practices reflected in accounts have not been consistantly followed year after year.

2) Price Level Changes :-

A change in price level makes comparison out of tune figures of the current year must be adjusted in the light of price level change before trend percentages are calculated.

3) Trend percentage :

Trend percentages must not be read without considering the absolute date on which they are based. In the absence of absolute date, the conclusions can be misleading.

c) COMMON SIZE STATEMENTS :

Financial statements when read with absolute figures are not easily understandable. Sometimes they are even misleading. It is, therefore, necessary that figures reported in these statements should be converted into percentage to some common base. In profit and loss account sales figures is assumed to be equal to 100 and all other figures are expressed as percentage of sales. Similarly, in balance sheet total of assets or liabilities is taken as 100 and all the figures are expressed as percentage of the total. There is a common basis for analysis and the statement therefore are referred to as common size statements. This is static relationship because it is a study of relationship existing at a particular date. The study of common size of statements can be made as.

i) Comparative Common Size Balance Sheet of One Unit :

The analysis of balance sheet of a business unit with the common size statement method would reveal whether the business unit is becoming more or less liquid, what are the danger in working capital items, whether fixed assets increasing more than proportionate change in the current assets. It also shows the percentage change of

share capital and loan capital and short term liabilities over the period of comparison.

ii) Common Size Balance Sheet of Two Units :

Sometimes the common size balance sheet of two firms may be utilised especially when the analyst is interested in asertaining the better prospects for profitable investments. For this purpose a comparative common size balance sheet of the two firms may be constructed as on a certain common dates.

iii) Common Size Income Statement of One Units :

Just as in the case of a common size balance sheet in which each asset is compared percentage wise with total assets and each liability and capital balance is likewise computed with the total of liabiliites and capital, as in the case of an income statement a comparison is made percentagewise of each item listed, thereon with the amount representing net sales. A statement in which a comparison is made is called commonsize income statement.

iv) Common Size Income Statement of Two Units :

The income statements of two units may be compared in the same manner as their balance

sheets. In comparing income statement of two units, the some fundamental problem is faced as in the comparison of two balance sheets that is, the problem of price level change and the uniform application of accounting principles. In a trading concern, for example, the cost of goods sold is affected by the basis on which the inventory is stated while in a manufacturing enterprises it is affected by both that a inventories and that of fixed assets because the cost contains depreciation.

d) STATEMENT OF CHANGES IN WORKING CAPITAL :

To know an increase or decrease in working capital ever a period time, the preparation of a statement of change in working capital is also very useful. The statement gives an accurate summary of the events that effected the amount of working capital. The amount of networking capital is determined by deducting the total current liabilities from the total of the current assets.

It is a rough estimate which may be arrived at by using a balance sheet date only. But it does not explain the detailed reasons for the changes in working capital and methods of financing additional

requirements of working capital. Hence the preparation of funds flow statement became necessary.

e) FUNDS - FLOW AND CASH FLOW ANALYSIS :

The statement of sources and application of funds also called where got where gone statement provide the musing link in the complement of final account statements. It demonstrates the manner by which priods acitivities call upon and generate financial resources of the business unit and the resultant add and flow of there resource through the temperory reservoirs of firms assets. In the process, it high lights the changes in the financial structure of an undertaking. Fund flow analysis is a valuable and to the financial executive and creditor, for evaluating the uses of funds by the firm and determining how these uses were financed. It indicates where funds come from and the where it was used during the period under review. These statements can be prepared separately also. These are important tools of communication and every helpfull for financing executive in planning the intermediate and long term financing of the firm.

f) RATIO ANALYSIS :

The individual figues in financial statements are not much significance in themselves but however acquire significance when viewed in relation to other figures in the same statements or in companion reports and for the corresponding date of other periods. In other wards, it may be asserted that relationship are likely to be more meaningful than specific account balance or total of related balance.

In the analysis of financial statemnts the relaltionship of accountive data, stated quantitatively, are comonly referred to as financial ratios or simply ratios. Financial analysis depends to a large extent on the use a ratios, ratio analysis for business enterprises contres an efforts to derive gurantitative measures as guide concerning the expcted capacity of the firm to meet its future financial obligation on expectations. Present and past data are used for the purpose of whatever extra polations. Appear warranted they are made to provide an indication of future performance.

Raboot Anthoney defines a ratios simple one number expressed in term of another. It is the process of determining and interpreting numerical

relationship based on financial statements. Ratio is the quantitative relationship between two similar magnitude determined by the number of times one contans the others intergrally or fractionally.

The term accounting ratio and used to describe significant relationship which exists between figures shown in a balance sheet, profit and loss accounts on any point of accounting organisation.

4:5 CLASSIFICATION OF RATIO OR TYPES OF RATIOS :

(I) STRUCTURAL GROUP OR LEVERAGE RATIO :

(a) Funded debt to total capitalisation :

The term 'total' capitalisation comprises long-term-debt, capital stock and reserves and surplus. The ratio of funded debt to total capitalisation is computed by dividing funded debt by total capitalisation. It can also be expressed as percentage of the funded debt by total capitalisation. No hard and fast rule can be set down as to what a proper relationship should be earning power of company may justify a higher percentage. It is, however, necessary to note that a too heavy debt burden reduces the margin of safty for lenders, increases fixed

charges upon earnings, decreases earnings available for distrubution to share holders, and in the case of continued inadequate or no profits may invite in solvency and force reorganisation.

(b) Debt to equity :

Due care must be given to the computation and interpretation of this ratio. The definition of debt takes two forms : One includes current liabilities while the other excludes them. The difference in the meaning of debt is confusing in general. The amount of debt that firm can resonably carry depends on varied factors. A public utility with stable earnings and favourable prospects can safely finance a much larger percentage of its assets with debt as against a manufacturer with an erratic record of profitability. Whether praticular ratio depicts a good or bad condition has to be concluded.

(c) Equity (Net Worth) to net fixed assets :

This ratio gives an indication of the extent to which equity capital is invested in net fixed assets. In case of net fixed assets being in excess of net worth, difficulties may

arise to provide depreciation resulting in a reduction in profits. In addition, the more the shareholder's contrubution is tied up in fixed assets, the less is the amount available for investment in current assets, which, in other words, means that creditors have contrubuted towards large proportion of the net fixed assets. The higher this ratio the less the protection for creditors. Whether net fixed assets exceed net worth it may be a signal for many industrial concerns which should plan for an additional equity capital.

d) Net fixed assets to funded debt :

This ratio acts as a supplementary measure to determine security for the lender. A ratio of 2:1 would mean that for every rupee of long term indebtedness, there is a book value of two rupees of net fixed asset. But book value and actual liquidating value may be greatly at variance and in interpreting this ratio, this fact must be born in mind.

e) Funded (long term) debt to net working capital

This ratio is calculated by dividing long term debt by the amount of the net working

capital. It helps in examing creditor's contribution to the liquid assets of the firm. Funded debt should not exceed net working capital for most industrial concerns, in fact it should be less. If net working capital is less than funded debt, difficulty in meeting financial obligations is likly to arise over the long run.

II) LIQUIDITY RATIOS :

It is extremely essential for a firm to be able to meet its obligations as they become due liquidity ratios measure the ability of the firm to meet its current obligations. In fact, analysis of liquidity needs the preparation of cash budgets and cash flow statements but liquidity ratios, by establishing a relationship between cash and other current assets to current obligations.

(i) Current ratio, (ii) Quick ratio.

(i) Current Ratio :-

Current ratio is calculated by dividing current assets by current liabilities.

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Current assets includes - cash and those assets which can be converted in to cash within a year. Such as marketable securities, debtors and stock.

Current Liabilities means all obligations maturing within a year are included in current liabilities. The current liabilities includes creditors, bills payable, accrued expenses, bank O.D. Income Tax and long term debt maturing in the year.

The current ratio is a crude-and-quik measure of the firms liquidity.

(ii) Quick Ratio or Acid-test Ratio :-

This ratio is more refined measure of the firms liquidity.

$$\text{Quick Ratio} = \frac{\text{Quick or Liquid Assets}}{\text{Current Liabilities}}$$

Liquid Assets :- If it can be converted in to cash immediately or reasonably soon without a loss of value. Cash is the most liquid asset.

It is a supplementary of liquidity and places more emphasis on immediate conversion of assets in to cash than does the current ratio. A quick ratio

of 1:1 has usually been considered favourable since for every rupee of current liabilities there is a rupee of quick assets. But accounts receivables may not be convertable into cash at face value on a short notice like current ratio a reasonable standared for acid test ratio varies from season to season in company and from company to company in an industry.

III) PROFITABILITY RATIO :

A company should earn profits to survive and grow over a long period at time. Profits are essential but it would be wrong to assume that every action initiated by management of a company should be simed at maximising profits irrespective of social consequences. It is a fact that sufficient profits must be earned to sustain the operations of the business to be able to obtain funds from investors for expansion and to contribute towards the social overheads for the welfare of the society.

Profit is the difference between total revenues and total expenses over a period of time profit is the ultimate out put of a company and it will have no future if it fails to make sufficient profits. Therefore, the financial manager should continuosly evaluate the efficiency of its company in terms of

profits. The profitability ratios are calculated to measure the operating efficiency of the company. Creditors are also interested in the profitability of the firm. Creditors want to get interest regularly and return of principal at maturity. Owners want to get a reasonable return on this, investment. This is possible only when the company earns enough profits.

Generally, two major types of profitability ratios are calculated :-

1) Profitability in relation to sales.

2) Profitability in relation to investment.

A company should be able to produce adequate profits on each rupee of sales. If sales do not generate sufficient profits, it would be very difficult for the firm to cover operating expenses and interest charges and as a result will fail to earn any profit for owners. The profitability of the company should also be evaluated in terms of capital contributed by creditors and owners. If the company is unable to earn a satisfactory return on investment, its survival is threatened.

PROFITABILITY IN RELATION TO SALES :-

Gross Profit Margin :

The first profitability ratio in relation to the sales is the gross profit margin. It is calculated by dividing the gross profit by sales.

$$\text{Gross Profit Margin} = \frac{\text{Sales} - \text{Cost of goods sold}}{\text{Sales}}$$

$$= \frac{\text{Gross Profit}}{\text{Sales}}$$

The gross profit margin reflects the efficiency with which management produces each unit of product. Their ratio indicates the average spread between the cost of goods sold and the sales revenue. A high gross profit ratio is a sign of good management. A gross margin ratio may increase due to many of the following factors.

1) Higher sales prices, cost of goods sold remaining constant.

2) Lower cost of goods sold, sales prices remaining constant.

3) A combination of variations in sales prices and costs the margin widening.

4) An increase in the sales of proportionately higher profit margin items.

A low gross profit margin ratio should be carefully investigated. It may reflect a higher cost of goods sold due to the firms inability to purchases at favourable terms inefficient utilisation of plant and machinery or investment in plant and machinery resulting in higher cost of production. The ratio will also be low due to a fail in prices in the market or market in reduction in selling prices by the firm in an attempt to obtain large sales valume. The cost of goods sold remaining unchanged.

NET PROFIT MARGIN :

Net profit is obtained when operating expensesand income tax are substracted from the gross profit. The net profit margin ratio is measured by dividing net profit after tax by sales.

$$\text{Net Profit Margin} = \frac{\text{Net Profit after tax}}{\text{Sales}}$$

This ratio establishes a relatioinship between net profit and sales indicating managements efficiency in manufacturing, administrating,, selling. The product, this ratio is the overall measure of the firm ability to turn each rupee of sales into net profit.

If the net margin is inadguate, the firms will fail to achieve satisfactory return on owners equity. This ratio also indicates the firms capacity to with teand adverse economic conditions. A firm with high not margin ratio would be in an advantageous position to survive in the face of falling sales prices rising costs of production of declining demand for the product. It would really be difficult for a low net margin firm to withstand. These adversties similarly, a firm with high net profit margin can make better use of favourable conditions, such as rising sales prices failing costs of production or increased demand for the product such a firm will be able to accelerate its profits, at faster rate them a firm with low net profit margin.

An analyst will be able to interpret the firms profitability more meaningfully if he evaluates both the ratios gross profit margin and net profit margin jointly.

PROFITABILITY IN RELATION TO INVESTMENT :

Return on Investment (ROI) :

The profitability of firm is also measured in relation to investment. The term investment may refer to total assets. Capital employed or the owner

equity. Accordingly, may profitability ratio in relation to investment can be calculated. The important area :-

1) Return on assets (ROA).

2) Return on shareholder equity (ROSE).

1) RETURN ON ASSETS :

The return on assets or profit to assets ratio is net profit plus interest charges divided by total assets.

$$\text{Return on Assets} = \frac{\text{Net Profit after taxes, interest}}{\text{Total assets}}$$

The return on assets is a useful measure of the profitability of all financial resources invested in the firms assets. It evaluates the sources of funds. This ratio is particularly useful to evaluate the performance of divisions in a multi - divisional firm. Generally, these divisions have their responsibility of using and controling assets without any responsibility toward the raising and utilising funds.

2) RETURN SHAREHOLDERS EQUITY :

The return on shareholders equity is net profit after tax dividend by the common shareholders

equity. The common shareholders are the residual owners in the real sense of the word. They assume the maximum risk and have the highest stake in the company. The rate of dividend is fixed for preference shareholders, but not in the case of common shareholders. Preference share holders generally recive dividends, whenever the company makes profits, but the earnings of common shareholders can be retained in the business. Since common shareholders are the real owners of the company. The performance of its operations is judged on the basis of return earned on common equity. The return on common equity is the net profit after taxes and after preference dividends divided by the shareholders equity.

$$\text{Returns on Common Equity} = \frac{\text{Net Profit after taxes}}{\text{Common Shareholders Equity}}$$

The ratio indicates how well the firm has used the resource of the owners. In fact, that ratio is one of the most important relationships in ratio analysis. The earning of a satisfactory return in the most desirable objective of a business. The ratio of net profit to owners equity reflects the extent to which this objective has been accomplished. The ratio is thus of great interest to present as well as prospective shareholders and also of great

concerned to management which has the responsibility of maximising the owners welfare.

EARNINGS PER SHARE (EPS) :

The profitability of the common shareholders investment can be measured by calculating the earnings per share. The earnings per share are calculated by dividing the net profit after taxes less preference divided by total number of common shares outstanding.

$$EPS = \frac{\text{Net profit after taxes - preference dividend}}{\text{Number of common shares outstanding}}$$

The earnings per share calculations made over years indicate whether or not the firms earning power on as per share basis has changed over the period. The earnings per share simply show the profitability of the firm as a per share basis. It does not reflect how much is paid as dividend and how much is retained in the business.

DEBT RATIO :

The debt position of the firm indicate the amount of other people's money that is being used in generating profits. Typically, the financial analyst is most concerned with long term do its. Since these

commit the firms to pay interest over the long run and eventually repay the sum borrowed. Since the claims of creditors must be satisfied prior to the distribution f earnings to share holders, present and prospective shareholders pay close attention to degree of indebtness and ability to repay debts, lenders are also concerned about the firm's degree of indebtness the more the indebtors present, the higher the probability that the firm will be unable to satisfy the claims of all its creditors management abviously must be concerned with indebtness, since it recognizes the attention paid to it by other parties and sicne it certainly does not wish to see the firm become insolvent.

The degree of indebtness is typically measured using only balance sheet data. The most commonly used measures is - Debt Equity Ratio.

DEBT EQUITY RATIO :

The debt equity ratio is the measure of the relative claims of creditors and owners against the firm assets. One view is to calculate the debt equity ratio is long term debts divided by the shareholders' equity common shareholder's equity plus preference shareholder's equity.

$$\text{Debt Equity Ratio} = \frac{\text{Long Term debt}}{\text{Shareholder's Equity}}$$

It shows the extent to which debt financing has been used in business. A high ratio shows that the claims of creditors are greater than those of owners. A very high ratio is unfavourable from the firm's oprations due to the increasing interferance and presures from creditors. A high debt company is able to borrow funds on very restrictive terms and conditions. The loan agreement one require a firm to maintain a certain level of working capital or a minimum of the current ratio or restrict the payment of dividends and so on. During the period of low.

Profits a highly debt financed company suffers great straine, it cannot earn sufficient profits, even to pay the interest charges of creditors. To meet their working capital needs the firm finds it difficult to get credit. It may have to borrow on unfavourable term.

A low debt equity ratio implies a greater claim at owners than creditors form the point of view of creditors it represents a satisfactory capital structure of the business since a high preperation

of equity provides a larger margin of saftey to them. During the periods of low profits. The debt servicing will prove to be less burden some for a company with low debt equity ratio. The higher the debt equity ratio the longer. The shareholders' earnings, when the cost of debt is less than the firms' overall rate of return on investment. Thus, there is need to strike a proper balance between the use of debt and equity combination would involve a trade off between return and risk.

IV) ACTIVITY RATIOS :

The funds of creditors and owners are invested in various kinds of assets to generate sales and profit. The better the management of assets the longer the amount of sales. Activity ratios are engage to evaluate the efficiency with which the firm manager and utilisers its assets. These ratios are also called turnover ratios because they indicate the speed with which assets are being converted or turned over into sales activity ratios. Thus involve a relationship between sales and various assets and presume that there exists an appropriate balance between sales and the various assets. A proper balance between sales and assets generally reflects

that assets are managed well. Several activity ratios can be calculated to judge the effectiveness of assets utilisation. Various activity ratios as follows :-

a) Fixed assets turnover ratio.

b) Current assets turnover ratio.

c) Totall assets turnover ratio.

Fixed Assets Turnover :-

The fixed assets turnover ratio measures the efficiency with which the firm is utilising its investment in fixed assets, such as land, building, plant & Machinery, furniture etc. It also indicates the adequacy of sales in relation to the investment in fixed assets the fixed assets, turnover ratiois sales divided by not fixed assets.

$$\text{Fixed Assets Turnover} = \frac{\text{Sales}}{\text{Net Fixed Assets}}$$

The firms fixed assets turnover ratio should be compared with past and future ratios, generally, a high fixed assets turnover ratio indicates efficient.

Utilisation of fixed assets in generating sales, while low ratio indicates inefficient management and

utilisation of fixed assets. A firm whose plant and machinery has considerably depreciated, any show higher fixed assets turnover ratio than the firm which has purchased plant and machinery recently.

CURRENT ASSETS TURNOVER :-

The current assets turnover ratio measures the efficiency with which the firm is utilising its investment in current assets.

The current assets turnover ratio is calculated as sale divided by current assets.

$$\text{Current Assets Turnover} = \frac{\text{Sales}}{\text{Current Assets}}$$

Generally, a high current assets turnover ratio indicates efficient utilisation of current assets in generally sales. While low ratio indicates inefficient management of current assets.

TOTAL ASSETS TURNOVER :-

The firm must manage its total assets efficiently and should generate maximum sales through their proper utilisation. The total assets turnovers is calculated dividing sales by total assets of the firm :

$$\text{Total Assets Turnover} = \frac{\text{Sales}}{\text{Total Assets}}$$

The total assets turnover ratio indicates the sales generated per rupee of investment in total assets. The total assets turnover ratio is significent ratio since it shows the firms ability of generating sales from all the financial resources commited to the firm as their ratio increases. There is more revenue generated per rupee of total investment in assets, the firm's ability to produce a large volume of sales as on a small total assets base is an important part of the firms overall performance in terms of profits. Idle or improperly used assets increased the firms need for costly financing and the expenses for maintainance and up keep change in it.

4:7 USES OF ACCOUNTING RATIOS :

Accounting ratio serve many purposes, they assist Management in its basic function i.e., planning, co-ordination control and communication. According to J. Batlay Sone of the possible uses of accounting ratio are as follows :-

i) Part ratio indicate trends in costs sales profits or relevant facts and so they can be used for forecasting likely events in the future.

ii) The plans made can be signpasted by accounting ratios. These ratios thereby become on integral part of the accounting and budgetory control system.

iii) Ideal ratios can be established and the relationship between primary ratio may be used to establish the desirable co-ordination or balance.

iv) Control may be materially assisted by use of ratios, thus includes in control of preformance as well as control of costs.

v) Ratios play an important role in importing knowledge within the business as to outsides shareholders or other interested parties.

vi) Ratio may be used as measures of efficiency an financial stability.

INTERPETATION OF THE RATIOS :

Broadly speaking those are there different ways in which ratios may be interpreted.

i) Ratio may be interpreted by explaning the analysis and considering a group of serveral related ratios.

ii) The second approuch to interpretion to ratios involves making comparision over times ie. over a period of year.

iii) The ratios of any given firm may be compared with the ratios of otherr firms in the same industry. Co-ordination of these methods can only bringout required informatioin, about the firm under study.

ROLE OF RATIO ANALYSIS :-

Basically ratios analaysisis usefull to the some extent and in the some way for the financial analysis as statistics are usefull in the study of numerical aspect of a problem. It simplifies, summaries and systematics a long array of accounting figures. It main contribution lies in bringing in to bold relief the interrelationship which existe between various

segments of business, as expressed through accounting statements, and in avoiding any distortions that may result from on absolute study of accounting information. It is an instrument for disagrees of the financial, aspects of the conduct of business like liqudity, solvency, profitability, capital gaining etc. and such evaluation enables to arrive at requirements and capabilities of business unit.

Ratios analysis of valuable and to management in planning, dcision making because by analytical study of the past performance of the business, helps in prediction and projecting the future. It assets in communication by conveyings information which is use full to these for what it is meant ratio analysis payee the way for effective control of business operations by undertaking an appraisal of both the physical and monetary targets.

R E F E R N C E S

1) John N. Myer - Financial Statement Analysis Practice. Hall of India Pvt. Ltd., New Delhi 1974 - page No.3.

2) R.L.Gupta & M. Radhasswamy. Financial Statement Analysis - Sultan Chand & Sons, New Delhi, 1980, Page No. 1.

3) Ibid - Page No. 12.

4) J.R.Monga Topics in Financial Accounting, National Publishing House, New Delhi, 1981. Page No.66.

5) Ibid - Page No. 66

6) R.L.Gupta & M. Radheswamy - Sultan Chand & Sons, New Delhi, Page No. 18.

7) J.R.Monga, Topics in Financial Acounting, National Publishing House, New Delhi, 1981, Page No. 66.

8) Ibid - Page No. 50.

9) Ibid - Page No. 67.

10) R.L.Gupta & M.Radheswamy, Sultan Chand & Son, New Delhi, Page No. 19.

11) Ibid - Page No. 18.

12) Ibid - Page No. 19.

13) Ibid - Page No. 20.

14) Dr. Varma & Aggarwal, Management Accounting Forward Book Depot. New Delhi 6, 1984, Page No. 15, 10.

15) Man Mohan & S.N.Goyal, Principles of Management Accounting, Sahilya Bhavan Agros, 1975, Page No.336.

16) Dr.Varma & Agrawal, Management Accounting, Forward Book Dept., New Delhi 1984, Page No. 15, 10.

17) J.R.Monga, Topics in Financial Accounting, National Publishing House, New Delhi, 1981, Page No.150.

18) Ibid - Page No. 150.

19) Ibid - Page No. 150.

20) R.L.Gupta & M. Radhaswammy, Financial Statement Analysis, Sultan, Chand & Sons, 1980, Page No.20.

21) J.R.Monga, Topics in Financial Accounting, National Publishing House, Delhi, 1981, Page No. 150.

22) R.L.Gupta & R.M.Radhaswamy, Financial Statement Analysis, Sultanchand & sons, 1980, Page No. 21.

23) J.R.Monga, Topics in Financial Accounting, National Publishing House, New Delhi, 1981, page No. 134.

24) Ibid - Page No. 135.

25) Ibid - Page No. 135.

26) J.R.Monga, Topics in Financial Accounting, National Publishing House, Delhi 1981, Page No. 135.

27) R.L.Gupta & M. Radhaswamy, Sultanchand & Sons, New Delhi, 1980, Page No. 23.

28) J.R.Monga, Topics in Financial Accounting,National Publishing House, New Delhi, 1981, Page No. 153.

29) S.C.Kuchal, Financial Management, Chaitany Publishing House, Alahabad, 1976, Page No. 58.

30) Dr. Varma & Aggrawala, Management Accounting, Forward Book Depot., Delhi 1984, Page No.

31) J.R.Monga, Topics in Financial Accounting, National Publishing House, Delhi, 1981, Page no. 160.

32) J.R.Monga, Topics in Financial Accunting,National Publishing House, New Delhi, 1981, Page No. 161.

33) J.Betty, Management Accounting, English Language Book Society & Macdonald & Evane Ltd., Lodon, 1975 Page No. 431.

****