

# Analysis of Financial Statements

## CHAPTER - 11

### Financial Statement Analysis

#### Meaning of Financial Analysis

Financial statements present a mass of complex data in absolute monetary terms and reveal little about the liquidity solvency and profitability of the business. In financial analysis, the data given in financial statements is classified into simple groups and a comparison of various groups is made with one another to pin-point the strong points and weaknesses of a business. For instance, if all items relating to non-current assets are placed in one group while all items relating to non-current liabilities are placed in another group, the comparison between the two groups will provide useful information. Actually the figures given in financial statements do not speak anything themselves. The analysis of these figures helps the interested reader by giving tongue to these mute heaps of figures.

#### In the words of Finney and Miller

“Financial analysis consists in separating facts according to some definite plan, arranging them in groups according to certain circumstances and then presenting them in a convenient and easily read and understandable form.”

The main features of financial analysis are:

- (i) To present the complex data contained in financial statements in simple and understandable form.
- (ii) To classify the items contained in financial statements in convenient and rational groups.
- (iii) To make comparisons between various groups to draw various conclusions

#### Types or Methods of Financial Analysis

Two basic approaches or types of analysis are

- (i) Horizontal Analysis
- (ii) Vertical Analysis

(i) **Horizontal Analysis-** In such type of analysis, financial statements for a number of years are reviewed and analysed. Figures for two or more years are contained in such type of analysis and these figures are placed side-by-side to facilitate comparison. Such analysis indicates the increase or decrease in these items not only in absolute figures but also in percentage form. Thus, it involves making comparisons and establishing relationship among related items of an enterprise for a number of years. When data about sales, cost of production, revenue, profits etc are compared for two or more years of a firm, they indicate the areas of strength and weakness of the enterprise. It also helps in knowing the trend of the business. Since such type of analysis is based on the data from year-to-year rather than only one year, it is also called ‘Dynamic Analysis’.

(ii) **Vertical Analysis-** In such type of analysis, financial statements for a single year or on a particular date are reviewed and analysed with the help of proper devices like ratios. It involves a study of the quantitative relationship among various items of Balance Sheet or Statement of Profit & Loss of a single period. The items in the financial statement are expressed as a percentage to total and the total is taken as equivalent to 100. Statements containing such analysis are termed as ‘Common Size Statements’

The Common Size Statement of Profit & Loss shows each element of Cost as a percentage of sales. It helps in analysing costs and operating results of the year. Similarly, in a common size Balance Sheet various assets can be expressed as percentage of total assets.

Since such type of analysis is based on the data of a single year. it is also called 'Static Analysis' Vertical analysis is useful in comparing the performance of several companies of same group or departments in the same company.

Vertical analysis is not very useful for a proper analysis of the company's financial position because it depends on the data of a single period whereas the business is a dynamic process. In comparison to vertical analysis, the horizontal analysis is more useful because it brings out more clearly the nature and trends of current changes affecting the enterprise. Horizontal presentation emphasises the fact that statement for a series of periods are far more significant than those for a single period and that the accounts for one period are but an instalment of what is essentially a continuous history.

### Objectives or Purpose of Financial Analysis

The purpose of financial analysis depends on the needs of the person who is analysing these statements. These varying needs may be

- (1) **To Measure the Earning Capacity or Profitability:** The overall objective of a business is to earn a satisfactory return on the funds invested in it, consistent with maintaining a sound financial position. Financial analysis helps in ascertaining whether adequate profits are being earned on the capital invested in the business. It is also disclosed by analysis of financial statements whether these profits are increasing or decreasing over the years.
- (2) **To Measure the Solvency:** It can be ascertained from financial analysis whether the business is in a position to pay its short-term and long-term liabilities in time. For example, the liquidity ratios (current ratio and quick ratio) are calculated to ascertain whether the business enterprise has sufficient liquid funds to meet its short term liabilities and Debt Equity Ratio is calculated to ascertain whether the business enterprise has got the ability to repay the long term liabilities.
- (3) **To Measure the Financial Strength:** The purpose of financial analysis is to assess the financial potential of the business. Analysis helps in providing answers to the following questions
  - (i) Funds required for the purchase of new machinery, furniture and equipments will be available from internal resources of the business or not?
  - (ii) Based on the current goodwill of the business, how much funds can be raised from external sources?
- (4) **To Make Comparative Study with other Firms:** The purpose of financial analysis is to help the management to make a comparative study of the profitability of various firms engaged in same trade. Such comparison helps the management to study the position of their firm in respect of sales, expenses, profits and working capital etc in comparison to other firms.

- (5) **To Measure the Capability of Payment of Interest and Dividend:** The purpose of analysis is to assess whether the firm will have sufficient profits to pay the amount of interest in time and whether it has the capacity to pay the dividend in future at a higher rate. Analysis also indicates the number of times the profit is in comparison to interest. Analysis further indicates the extent to which the profit of the firm may decrease without in any way affecting its ability to meet interest and dividend obligations.
- (6) **To Identify the Trend of the Business:** When data about sales, cost of production, profitability etc are compared for two or more years of a firm, they indicate the direction in which a business is moving. If sales are increasing continuously along with increase in profit margins, it is an indication of a good growth trend of the business. Such analysis helps in ascertaining whether the business is progressive or not
- (7) **To Judge the Efficiency of Management:** The purpose of financial analysis is to judge that the financial policies adopted by the management are proper or not. For example, if the actual ratios calculated on the basis of financial statements are in accordance with their standard ratios, the policies of the management may be said to be proper and good.
- (8) **To Provide Useful Informations to the Management:** The object of financial analysis is to find out the weaknesses of the business, so that the management can take remedial measures to remove those weaknesses.

### Uses of Financial Analysis:

Financial analysis can be used to take variety of decisions in the following areas

- (1) **For taking Investment Decisions:** Analysis of financial statements helps an investor to know whether the firm is fulfilling his expectations regarding the payment of dividend, increase in the value of investments made by him and safety of his investment. It helps him to take decision about continuation or discontinuation of his investment in the firm.
- (2) **For taking Credit Decisions:** Analysis of financial statements is useful in making a decision whether to grant or extend credit to a customer
- (3) **For taking Dividend Decisions:** Such analysis is useful in deciding about how much portion of the profit is to be distributed as dividend and how much to retain for future uses.
- (4) **For Estimating Trend of the Business:** Analysis of financial statements for a number of years reveals the trend of cost of production, sales, profits etc. It helps in assessing the future growth potential of the firm.
- (5) **For Taking Various Managerial Decisions-** Analysis of financial statements discloses the liquidity solvency and profitability of the business enterprise. It helps in locating the weak spots of the business. Such information enables the management to take various decisions.

### Significance or Importance of Financial Analysis

At present, the analysis of financial statements has become of general interest. Various parties have become interested in the financial of a company due to various reasons. Different persons look at the same financial statement from different angles i.e., there are different users of financial statements, all of them using the same statement but for a different purpose. For example a shareholder would be interested in the profitability and increase in value of his investment whereas a short-term creditor would be concerned about the liquidity i.e., the firm's ability to pay its current liabilities.

- (1) **Significance for Management-** Management of a firm is always interested in the solvency profitability and the capital structure of the firm. They want to make sure that the business must be in a solvent position to pay the debts as and when they fall due. Similarly, they are interested not only in the current years' profit but also in the capacity of the business to earn more profits in future.
- (2) **Significance for Investors-** Investors and shareholders of the business are interested in the longevity of the business enterprise and therefore, they want to know the earning capacity of the business and its prospects for future growth and prosperity. Analysis of financial statements of a company helps them a great deal in assessing the capacity of the business to pay dividend at a higher rate and also the safety of their investments
- (3) **Significance for Creditors:** There are two types of creditors, (i) Short-term creditors, and (ii) Long-term creditors
  - (i) Short-term creditors want to know the liquidity of the business, i.e., to know whether the company will have sufficient current assets and cash to pay their debts or not. Current ratio and quick ratio calculated on the basis of financial statements help them in assessing this.
  - (ii) Long-term creditors want to know two things namely : (1) Whether the company will be able to pay the interest consistently and (2) Whether the company will be able to pay their debts when they fall due. On the basis of interest coverage ratio they can ascertain whether the company will be able to pay the interest regularly or not and on the basis of debt-equity ratio they can ascertain whether the company will be able to pay their debts on maturity.
- (4) **Significance for Government:** Government can judge on the basis of analysis of financial statements, which industry is progressing on the desired lines and which industry needs the financial help. Government can take a decision to reduce the excise duty in those industries where the profit margins are low in comparison to the cost of production. On the contrary if the profit margins are too high in comparison to the cost of production. Government can increase the excise duty or can enforce the price regulations.

- (5) **Significance for Financial Institutions:** All the financial institutions which provide finance to the industries such as Banks, Insurance companies, Unit Trust etc. want to know the profit earning capacity of the business and its long-term solvency. They want to assess not only the present position of the business enterprise but also its likely position in the future. Analysis of financial statements helps them in ascertaining this.
- (6) **Significance for Employees:** Analysis of financial statements helps the employees in determining the profitability of the business enterprise. They can ascertain as to how much bonus and increase in their salary is possible from the profits of the company.
- (7) **Significance for Stock Exchange Authorities-** They analyse the financial statements of a company to determine its price earning ratio and earning per share (E.P.S.). With the help of such analysis, the market price of a company's share is determined.
- (8) **Significance for Taxation Authorities-** They analyse the financial statements of a company to know whether the financial statements have been prepared in accordance with the legal provisions and whether the figures of production, sales and profits are correct for the purpose of assessment of excise duties, sales tax and income tax respectively
- (9) **Significance for Researchers:** Analysis of financial statements of a company is of much importance to a researcher who is conducting research in respect of the profitability, solvency, efficiency, financial soundness and future growth potential of that company
- (10) **Significance for Other Parties:** Some other parties may also be interested in the analysis of financial statements of a company from their own point of view, such as, economists, trade associations, consumer organisations etc

### Limitations of Financial Analysis

- (1) **Limitations of Financial Statements:** Financial analysis is based on financial statements. But financial statements themselves suffer from certain limitations, hence the limitations of financial statements are also the limitations of their analysis. For example, Sometimes the informations given in financial statements are incomplete and unauthentic.
- (2) **Affected by Window-dressing:** Some firms resort to window-dressing their financial statements to cover up bad financial position on the eve of accounting date. For example, they may not record the purchases made at the end of the year or they may overvalue their closing stock. In such cases, the results obtained by analysis of financial statements will be misleading.

- (3) **Do not Reflect Changes in Price Level:** Figures given in financial statements do not show the effect of changes in price level. As such, the comparison of past year figures with current year figures may lead to misleading conclusions. For example if in 2012 a firm sells 20,000 metre of cloth for 25 lakhs and the same firm in 2013 sells the same type of 10,000 metre of cloth for 37.5 lakhs. it discloses an increase of 50% in sales, whereas, in actual, the sales have not increased at all. As such, sufficient adjustments must be made for changes in price level before making the analysis
- (4) **Different Accounting Policies:** If two firms adopt different accounting policies, the comparison between the two will be unreliable. For example, one firm may provide depreciation on original cost method, whereas the other firm may adopt the written-down value method for providing the depreciation.
- (5) **Effect of Personal Ability and Bias of the Analyst:** Figures given in financial statements do not speak by themselves, hence, any conclusion can be drawn from these figures. Conclusions obtained from the analysis of these figures are affected to a great extent by the personal ability and knowledge of the analyst. For example for calculating return on capital' one analyst may consider the profits after taxes, whereas, the other analyst may consider the profits before taxes. Similarly the term 'Capital' may mean only the 'Shareholder's Funds' for one analyst, whereas the other analyst may take the 'Shareholder's Funds and Long Term Debts as capital.
- (6) **Difficulty in Forecasting:** Financial statements are a record of past events and historical facts In the fast changing and developing modern business, the analysis of past information may not be of much use in future forecasting. Continuous changes take place in the demand of the product, policies adopted by the firm, the position of competition etc. As such, no estimate based on the analysis of historical facts can be made for future
- (7) **Lack of Qualitative Analysis:** Financial statements record only those events and transactions which can be expressed in terms of money. Qualitative aspects of business units are omitted from the books at all as these cannot be expressed in monetary terms. Thus, changes in management, reputation of the business, cordial management-labour relations, firm's ability to develop new products, efficiency of management, satisfaction of firm's customers etc which have a vital bearing on the profitability of the company are all ignored and omitted from being recorded because all of these are qualitative in nature.
- (8) **Limited Use of Single Year's Analysis of Financial Statements** Results obtained from financial analysis assume significance only when compared with the figures of previous periods. For example. the profit of a firm to sales is 12%, whether this is satisfactory or not depend upon the figures of previous years. If the firm earned 10% of sales as profit in the previous year, it may be considered to have done better this year However, the financial statements of two years may not be comparable due to the changes in accounting policies.

## QUESTIONS FOR PRACTICE

### MCQ

- Bankers and Lenders are interested in financial analysis to judge:
  - Profitability
  - Liquidity
  - Solvency
  - Both (b) and (c)
- Main objective of analysis of financial statements is:
  - to make comparative study with others
  - to make the financial strength
  - to know the efficiency of management
  - All of these
- Which of the following is a limitation of financial analysis?
  - It does not reflect price level changes.
  - It judges the ability of the firm to repay debts.
  - It identifies the reason for change in financial position.
  - It ascertains the relative importance of different components of the financial position of the firm.
- \_\_\_ analysis deals with different items of same period.
  - Dynamic
  - Horizontal
  - Vertical
  - Internal
- Which of the following is not a objective of Financial Statement Analysis?
  - To judge the efficiency of management
  - To help the management in decision making
  - To assess liquidity and solvency of business
  - To measure price level changes
- For whom, analysis of financial statements is not significant?
  - Share market
  - Taxing officer
  - Chief Military Officer
  - Shareholder
- Analysis of financial statements is significant for :
  - Investors
  - Financial Institutions
  - Management
  - All of these
- Why is creditor interested in analysis of financial statements?
  - To decide whether or not the borrower has the ability to repay interest and principal on borrowed funds.
  - To determine the concern's capital structure



- (c) To determine the concern's future earning stream  
 (d) To decide whether or not the concern has operated profitably or not.
9. Which of the following is a limitation of financial analysis?  
 (a) It is just a study of reports of the company.  
 (b) It judges the ability of the firm to repay its debts.

- (c) It identifies the reasons for change in financial position.  
 (d) It ascertains the relative importance of different components of the financial position of the firm.
10. \_\_\_\_ analysis deals with same items of different period.  
 (a) Static (b) Horizontal  
 (c) Vertical (d) Internal

### SUBJECTIVE QUESTIONS

1. What is meant by Financial Analysis?"
2. List any one objective of analysing the financial statements.
3. What is Horizontal Analysis?
4. What is Vertical Analysis?
5. List any two uses of analysing the financial statements
6. Give one limitation of financial analysis.
7. What is the interest of shareholders or Investors in the analysis of financial statements?
8. State the interest of tax authorities in the analysis of financial statements.
9. What is the interest of lenders or Bankers in the analysis of financial statements?

10. Give two areas of interest for management while analysing the financial statements.
11. How can the financial strength of a business enterprise be judged?
12. How the solvency of a business is assessed by Financial Statement Analysis?
13. How the 'Earning Capacity of a business' is assessed by Financial Statement Analysis?
14. How is 'window dressing' a limitation of Financial Statement Analysis?
15. How does 'subjectivity' become a limitation of Financial Statement Analysis?

### SOLUTION FOR PRACTICE QUESTIONS

#### SOLUTION FOR MCQ QUESTIONS

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|--------|--------|--------|--------|---------|
| 1. (d) | 3. (a) | 5. (d) | 7. (d) | 9. (a)  |
| 2. (d) | 4. (c) | 6. (c) | 8. (a) | 10. (b) |

#### SOLUTIONS FOR SUBJECTIVE QUESTIONS

1. Financial analysis is a systematic process of classifying the data into simple groups and making a comparison of various groups with one another to pin-point the strong points and weaknesses of the business.
2. (i) To measure the earning capacity of the business.  
 (ii) To make comparative study with other firms.
3. When financial statements for a number of years are analysed, the analysis is called horizontal analysis. Such analysis is mostly in the form of Comparative financial statements
4. When financial statements for a single year are analysed, the analysis is called vertical analysis. The items in the financial statement are expressed as a percentage to total

and the total is taken as equivalent to 100. Statements containing such analysis are termed as 'Common Size Statements'

5. (i) Helpful in taking investment decisions.  
 (ii) Helpful in taking credit decisions.
6. (i) Do not reflect price level changes.  
 (ii) Comparison is unreliable if different firms adopt different accounting policies.
7. (i) They want to judge the present and future earning capacity of the business.  
 (ii) They want to judge the safety of their investment.
8. (i) To judge whether the financial statements have been prepared in accordance with the legal provisions.

- (ii) To judge whether various types of taxes have been paid appropriately
- 9. (i) To judge the financial soundness of the business to repay their debts at maturity
- (ii) To judge that the enterprise has sufficient profits so as to make payment of interest regularly throughout the term of loan.
- 10. (i) To know the profitability of the business enterprise.
- (ii) To know the short-term and long-term solvency position of the statements.
- 11. The financial strength of a business enterprise can be judged on the basis of
  - (i) its earning capacity. i.e., profitability, and
  - (ii) its ability to repay the loans and pay dividends.
- 12. Solvency of a business is assessed through solvency ratios, debt equity ratio, total assets to debt ratio and proprietary ratio.
- 13. Earning Capacity is assessed through 'Profitability' ratios.
- 14. Window dressing refers to the manipulation of accounts to conceal vital facts and presentation of the 'Financial Statements' in a way so as to show a position better than what it actually is. On account of such a situation financial analysis may give false information to the users
- 15. Subjectivity means using personal judgment in making a choice out of alternatives available, i.e., choice in the method of depreciation or choice in the method of inventory valuation. Since the subjectivity is inherent in personal judgment, the financial statements are not free from bias.