

# **Diploma in Accounting**

DIA-6

# FINANCIAL ACCOUNTING

Block

# 1

Unit-I

Analysis of Financial Statement-I

Unit-II

Analysis of Financial Statement-II

Unit-III

**Comparative and Common size Statement** 



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# **Material Production**

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# Unit – I Analysis of Financial Statement-I

#### Learning Objectives :

After reading this chapter, students should be able to know :

- Meaning, definitions and features of financial statement analysis
- Stepwise procedure for financial analysis
- Briefs the types and techniques of financial statement analysis
- Source of financial information
- Role of financial analyst
- Limitations of financial statement analysis

#### **Structure :**

- 1.1 Introduction
- 1.2 Meaning of Financial Statement Analysis
- 1.3 Objectives of Financial Statement Analysis
- 1.4 Procedure of Financial Statement Analysis
- 1.5 Type of Financial Statement Analysis
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- 1.15 Further Readings
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# **1.1 Introduction**

Business is mainly concerned with the financial activities. In order to ascertain the financial status of the business every enterprise prepares certain statements, known as financial statements. Financial statements are mainly prepared for decision making purposes. But the information as is provided in the financial statements is not

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adequately helpful in drawing a meaningful conclusion. Thus, an effective analysis and interpretation of financial statements is required. Analysis means establishing a meaningful relationship between various items of the two financial statements with each other in such a way that a conclusion is drawn. By financial statements we mean two statements:



- (i) Profit and loss Account or Income Statement
- (ii) Balance Sheet or Position Statement

These are prepared at the end of a given period of time. They are the indicators of profitability and financial soundness of the business concern.

Financial statement analysis is an exceptionally powerful tool for a variety of users of financial statements, each having different objectives in learning about the financial circumstances of the entity.

#### **1.2 Meaning of Financial Statement Analysis**

Properly comparing a balance sheet with the corresponding profit and loss account to determine the strengths and weaknesses of a business describes financial statement analysis. Financial analysis determines a company's health and stability. The data gives you an intuitive understanding of how the company conducts business. Stockholders can find out how management employs resources and whether they use them properly. Governments and regulatory authorities use financial statements to determine the legality of a company's fiscal decisions and whether the firm is following correct accounting procedures. Finally, government agencies, such as the Internal Revenue Service, use financial statement analysis to decide the correct taxation for the company.

# **1.3 Objectives of Financial Statement Analysis**

The term financial analysis is also known as analysis and interpretation of financial statements. It refers to the establishing meaningful relationship between various items of the two financial statements i.e. Income statement and position statement. It determines financial strength and weaknesses of the firm.

Analysis of financial statements is an attempt to assess the efficiency and performance of an enterprise. Thus, the analysis and interpretation of financial statements is very essential to measure the efficiency, profitability, financial soundness and future prospects of the business units. Financial analysis serves the following purposes:

#### (i) Measuring the profitability

The main objective of a business is to earn a satisfactory return on the funds invested in it. Financial analysis helps in ascertaining whether adequate profits are being earned on the capital invested in the business or not. It also helps in knowing the capacity to pay the interest and dividend.

# (ii) Indicating the trend of Achievements

Financial statements of the previous years can be compared and the trend regarding various expenses, purchases, sales, gross profits and net profit etc. can be ascertained. Value of assets and liabilities can be compared and the future prospects of the business can be envisaged.

#### (iii) Assessing the growth potential of the business

The trend and other analysis of the business provide sufficient information indicating the growth potential of the business.

#### *(iv)* Comparative position in relation to other firms

The purpose of financial statements analysis is to help the management to make a comparative study of the profitability of various firms engaged in similar businesses. Such comparison also helps the management to study the position of their firm in respect of sales, expenses, profitability and utilizing capital, etc.

#### (v) Assess overall financial strength

The purpose of financial analysis is to assess the financial strength of the business. Analysis also helps in taking decisions, whether funds required for the purchase of new machines and equipments are provided from internal sources of the business or not if yes, how much? And also to assess how much funds have been received from external sources.

## (*vi*) Assess solvency of the firm

The different tools of an analysis tell us whether the firm has sufficient funds to meet its short term and long term liabilities or not.

# **1.4 Procedure of Financial Statement Analysis**

A common procedure is followed for financial statement analysis. Such procedure is briefly explained below.

*i. Objective of Analysis:* The objective of analysis is differing from one interested party to another. In other words, the user of financial statement analysis fixes or determines the objectives of analysis.

*ii. Decide the Extent of Analysis:* The extent of analysis is also decided by the interested party. For example: Shareholder considers long term solvency of the business concern. The debenture holder considers short term solvency of the business concern.

*iii. Scope of Analysis*: It means that an analyst should determine the depth of the analysis. This can be decided depending upon the nature of problem.

*iv. Going through the Financial Statements:* The analyst should go through every item of the financial statements. If not so, the hidden facts cannot be found out through analysis.



*v. Pooling of Relevant Data:* The analyst should collect relevant data from the financial statements. If not so, he/she can get relevant information from the published financial statements.



*vi. Rearrangement of Financial Data:* The contents of the financial statements are rearranged before making actual analysis and interpretation. Under this step, approximation of figures, consolidation of items etc. is done.

*vii. Understanding:* The analyst should go through financial documents and other documents for clearly understand the problem.

*viii. Classification:* After understanding the problem, the collected relevant data are to be classified according to the needs of the problem to find out a correct solution.

*ix. Analysis:* After making above preparation, actual analysis is done. Any one of the tools or techniques of financial statement analysis can be used.

*x. Interpretation and Conclusion:* The interpretation is made and the inferences are drawn only on the basis of analysis.

*xi. Report Form:* All the inferences and interpretation should be presented in a report form to the management.

# **1.5 Type of Financial Statement Analysis**

There are two key methods for analyzing financial statements. The first method is the use of horizontal and vertical analysis. Horizontal analysis is the comparison of financial information over a series of reporting periods, while vertical analysis is the proportional analysis of a financial statement, where each line item on a financial statement is listed as a percentage of another item. Typically, this means that every line item on an income statement is stated as a percentage of gross sales, while every line item on a balance sheet is stated as a percentage of total assets. Thus, horizontal analysis is the review of the results of multiple time periods; while vertical analysis is the review of the proportion of accounts to each other within a single period. The following links will direct you to more information about horizontal and vertical analysis:

- (i) Horizontal analysis
- (ii) Vertical analysis

The second method for analyzing financial statements is the use of many kinds of ratios. You use ratios to calculate the relative size of one number in relation to another. After you calculate a ratio, you can then compare it to the same ratio calculated for a prior period, or that is based on an industry average, to see if the company is performing in accordance with expectations. In a typical financial statement analysis, most ratios will be within expectations, while a small number will flag potential problems that will attract the attention of the reviewer.

There are several general categories of ratios, each designed to examine a different aspect of a company's performance. The general groups of ratios are:

*(i) Liquidity ratios.* This is the most fundamentally important set of ratios, because they measure the ability of a company to remain in business.



(ii) Activity ratios. These ratios are a strong indicator of the quality of management, since they reveal how well management is utilizing company resources.

*(iii) Leverage ratios.* These ratios reveal the extent to which a company is relying upon debt to fund its operations, and its ability to pay back the debt.

(iii) *Profitability ratios.* These ratios measure how well a company performs in generating a profit.

# **1.6 Sources of Financial Information**

Published financial statements provide the primary source of data about any organization's financial condition and performance. A company's annual report, quarterly reports, and financial news releases provide a wealth of information about the firm. A brief discussion is given below.

- *(i) Company Reports:* Every company publishes annual reports. These contain director's report, financial statements, schedules and notes to the financial statements, auditors' report etc.
- *(ii) Stock Exchanges:* Stock exchanges maintain a library of annual reports of companies. They publish consolidated reports of company's performance.
- (iii) Business Periodicals: Business newspapers such as Business Standard, Economic Times; business magazines such as Business India, Business World, Dalal Street Journal are also source of financial information.

# **1.7 Role of Financial Analyst**

Financial Analysts use the company's financial statements (i.e. income statement, balance sheet and cash flow statements). One of the most common approaches is to use financial ratios (e.g. profitability ratios, debt ratios) to compare against those of another company or against the company's own historical performance. The Financial Analyst researches and models macroeconomic and microeconomic conditions and company fundamentals to make business, sector and industry recommendations and decisions. The Financial Analyst collects and analyzes financial information such as budgets, operations performance data, economic forecasts, trading volumes and cash flow to provide advice for their company or their company's clients.

Financial Analysts are employed across industries, including the financial services sector (e.g. in banks, brokerage houses, insurance companies and mutual fund companies). They sit within corporate finance departments, in particular lines of business or work for a specific product or service team. Despite the variety of employment settings, the core functions of a Financial Analyst remain the same.

While the core of the Financial Analyst role may be the same, there are different types of financial analysts, depending on their area of focus: For example:



**Corporate Finance:** There are often several areas of specialization for analysts in the corporate finance department.

*Financial Reporting Analyst*: These Analysts are involved in analyzing their firm's financial statements (e.g. income statement, balance sheet, statement of retained earnings, cash flow statement) or various components of the statements. They look at trends and/or variances in the financial data (actual versus budget) and generate possible explanations.

*Management Reporting/Performance Analyst:* These Analysts play a role in analyzing the performance of specific parts of a firm. They may analyze financial data by product line, department, or geography. For example, a property and casualty insurance company may have analysts to review the performance of both the firm's car insurance and home insurance lines of business. The products may be analyzed against performance measures such as revenue/premiums, claims payout and industry profitability ratios.

**Treasury Analyst:** These analysts focus on analyzing the cash flow of the firm. They may reconcile bank deposits and withdrawals against bank statements, expenditures against cash balances, produce interest schedules, or track inter-company loans and the related interest payments to ensure that the organization and its departments have adequate cash flow.

**Taxation Analyst:** These analysts play a role in helping the organization meet their income tax reporting and compliance obligations. They may be responsible for portions of the Canadian quarterly tax provision process, assist in the preparation of federal and provincial income tax returns or collect data from other areas of the organization to build the tax fact base.

# **1.8 Users of Financial Statement Analysis**

There are a number of users of financial statement analysis. They are:

- i. *Creditors.* Anyone who has lent funds to a company is interested in its ability to pay back the debt, and so will focus on various cash flow measures.
- ii. *Investors.* Both current and prospective investors examine financial statements to learn about a company's ability to continue issuing dividends, or to generate cash flow, or to continue growing at its historical rate (depending upon their investment philosophies).
- iii. *Management*. The company controller prepares an ongoing analysis of the company's financial results, particularly in relation to a number of operational metrics that are not seen by outside entities (such as the cost per delivery, cost per distribution channel, profit by product, and so forth).

iv. *Regulatory authorities.* If a company is publicly held, its financial statements are examined by the Securities and Exchange Commission (if the company files in the United States) to see if its statements conform to the various accounting standards and the rules of the SEC.



#### **1.9 Limitations of Financial Statement Analysis**

Although analysis of financial statement is essential to obtain relevant information for making several decisions and formulating corporate plans and policies, it should be carefully performed as it suffers from a number of the following limitations.

#### i. Mislead the user

The accuracy of financial information largely depends on how accurately financial statements are prepared. If their preparation is wrong, the information obtained from their analysis will also be wrong which may mislead the user in making decisions.

#### ii. Not useful for planning

Since financial statements are prepared by using historical financial data, therefore, the information derived from such statements may not be effective in corporate planning, if the previous situation does not prevail.

#### iii. Qualitative aspects

Then financial statement analysis provides only quantitative information about the company's financial affairs. However, it fails to provide qualitative information such as management labor relation, customer's satisfaction, management's skills and so on which are also equally important for decision making.

#### iv. Comparison not possible

The financial statements are based on historical data. Therefore comparative analysis of financial statements of different years can not be done as inflation distorts the view presented by the statements of different years.

#### v. Wrong judgement

The skills used in the analysis without adequate knowledge of the subject matter may lead to negative direction. Similarly, biased attitude of the analyst may also lead to wrong judgement and conclusion.

#### vi. Dependence on historical costs

Transactions are initially recorded at their cost. This is a concern when reviewing the balance sheet, where the values of assets and liabilities may change over time. Some items, such as marketable securities, are altered to match changes in their market values, but other items, such as fixed assets, do not change. Thus, the balance sheet could be misleading if a large part of the amount presented is based on historical costs.

# vii. Inflationary effects

If the inflation rate is relatively high, the amounts associated with assets and liabilities in the balance sheet will appear inordinately low, since they are not being adjusted for inflation. This mostly applies to long-term assets.

#### viii. Intangible assets not recorded

Many intangible assets are not recorded as assets. Instead, any expenditures made to create an intangible asset are immediately charged to expense. This policy can drastically underestimate the value of a business, especially one that has spent a large amount to build up a brand image or to develop new products. It is a particular problem for startup companies that have created intellectual property, but which have so far generated minimal sales.

#### ix. Subject to fraud

The management team of a company may deliberately skew the results presented. This situation can arise when there is undue pressure to report excellent results, such as when a bonus plan calls for payouts only if the reported sales level increases. One might suspect the presence of this issue when the reported results spike to a level exceeding the industry norm.

#### x. No predictive value

The information in a set of financial statements provides information about either historical results or the financial status of a business as of a specific date. The statements do not necessarily provide any value in predicting what will happen in the future. For example, a business could report excellent results in one month, and no sales at all in the next month, because a contract on which it was relying has ended.

The limitations mentioned above about financial statement analysis make it clear that the analysis is a means to an end and not an end to itself. The users and analysts must understand the limitations before analyzing the financial statements of the company.

# 1.10 Problems with Financial Statement Analysis

While financial statement analysis is an excellent tool, there are several issues to be aware of that can interfere with your interpretation of the analysis results. These issues are:

(i)) Comparability between periods. The company preparing the financial statements may have changed the accounts in which it stores financial information, so that results may differ from period to period. For example, an expense may appear in the cost of goods sold in one period, and in administrative expenses in another period.

(ii) Comparability between companies. An analyst frequently compares the financial ratios of different companies in order to see how they match up against each other. However, each company may aggregate financial information differently, so that the



results of their ratios are not really comparable. This can lead an analyst to draw incorrect conclusions about the results of a company in comparison to its competitors.



*(iii) Operational information.* Financial analysis only reviews a company's financial information, not its operational information, so you cannot see a variety of key indicators of future performance, such as the size of the order backlog, or changes in warranty claims. Thus, financial analysis only presents part of the total picture.

# 1.11 Inter-Firm Comparison (IFC)

#### Meaning:

Inter-firm comparison is a natural outcome of uniform costing system. Uniform costing is the foundation stone over which the structure of IFC is developed and adopted in a large scale. Inter-firm comparison can be defined as the technique of evaluating the relative performance, efficiency, costs and profits of firms in a given industry'. The meaning of IFC can be easily explained by considering the main object of the system.

#### In other words IFC consists of following procedure:

(a) Data are collected from participating organization or firm by their trade organization or centre of inter-firm comparison.

(b) The management of an organisation is provided with information which will allow them to determine the efficiency being achieved, measured by comparing the performances of other business.

(c) An attempt is made to show why results vary from one business to another, i.e., any weakness is highlighted.

(d) Extensive use is made of financial and cost ratios.

#### **Objects of Inter Firm Comparison:**

The main purpose of IFC is improvement of efficiency by showing the management of participating firm its present achievements and possible weaknesses. These firms have to contribute their data to the central body which acts as a neutral body. This central body ensures confidence and it gives report regarding comparisons only to participants.

#### Following are important objectives of inter-firm comparison:

(a) IFC analyses costs of different firms with a view to spot out relative efficiency.

(b) IFC provides aid to management in enforcing and reviewing budgetary control and standard costing. These techniques enforced in one firm are compared with those in other firms making more efficient use of the same. Inadequacies of standard costing and budgetary control are located by making inter-firm comparisons and remedial measures are introduced.

(c) IFC helps to prepare a comprehensive and detailed plan for firms or units to obtain optimum use of human and material resources.

The main objection of IFC is the improvement of efficiency and identification of weak points. IFC is a scheme consisting of exchange of information with regard to cost, profit, productivity and efficiency between the participating firms through a central organisation. IFC focuses the remedial measure of a number of problems related to profit, sales and production.

#### Method or Approach for Inter-Firm Comparison:

Firms wishing to obtain the benefits of inter-firm comparison have to approach the central body or apex body constituted for IFC. A fee may be charged for carrying out comparisons. The method of approach adopted by the central body will be governed by the type of industry or trade and the problems and circumstances present.

#### The possible procedure may be as below:

1. Firms which are to participate in an inter-firm comparison have to submit their data to the central body. These figures are compiled on the basis of uniform definitions of terms, procedures, methods and accounting periods.

2. After all necessary steps have been taken to ensure that the participating firms can benefit from the comparison, a number of ratios are compiled. These ratios are shown in a summary form distinguishing.

(a) Ratios for the group of firm participating in the inter-firm comparison.

(b) Ratios for a single firm.

Each firm is given a report compiled along these lines.

3. The ratios for the group and the ratios for the single firm are compared one by one.

4. Once any significant deviation from the norm (average return on capital employed) is established, the possible reasons for this deviation may be located by examining other ratios.

# **Ratios of Inter-Firm Comparison:**

Ratios used in the inter-firm comparison are of four types:

(i) Primary Ratios

- (ii) Supporting Ratios
- (iii) General Explanatory Ratios
- (iv) Specific Explanatory Ratios

# These additional ratios are briefly explained below:

# (A) Ratios of Performance Measurement:

- 1. Value of Direct Material/Value of Production
- 2. Cost of Materials/Quantity Produced
- 3. Cost of Scrap / Cost of Raw Material

- 4. Quantity of Scrap / Quantity of Raw Material
- 5. Cost of Rejection / Cost of Production
- 6. Total Output / No. of Workers
- 7. Cost of Production/Machine Hours or Labour Hours
- 8. P.V. Ratio i.e., Contribution x 100/Sales
- 9. Contribution / Labour Hours
- 10. Wages/No. of Workers
- 11. Total Fringe Benefits/No. of Workers
- 12. Idle Time / Total Time
- 13. Overtime Hours / Total Labour Hours
- 14. Standard Hours for Actual Production / Actual Hours
- 15. Actual Hours / Budgeted Hours
- 16. Power Cost / Machine Hours
- 17. Repair and Maintenance Cost / Cost of Production
- 18. Advertising Cost / Selling Cost

#### (B) Ratios to Judge Profitability:

These ratios show how profitable are company's operations.

1. Gross Profit Ratio i.e., (GP/Sales) ×100

2. Net Profit Ratio i.e., (NP / Sales)  $\times$  100

GP ratio indicates manufacturing or trading efficiency while NP ratio shows overall profitability

3. Return on capital employed i.e., Profit / Capital employed

ROLE indicates overall performance from the stand point of profitability. It is primary ratio in the pyramid of ratios

#### (C) Ratios related to Turnover:

Turnover Ratio show how efficiently company is managing current assets.

1. Stock turnover ratio i.e., cost of sales/Average stock

This ratio shows the efficiency of inventory management. Average stock is average of opening and closing stock

2. Debtors Turnover Ratio i.e., Debtors \* Days or Months in a year / Annual Credit Sales

Debtor's turnover measures the efficiency in collection of debts



3. Creditors Turnover Ratio i.e., (Creditors x No. of days of months in a year)/Annual Credit Purchases.

This ratio measures the efficiency of purchase department in realizing credit facilities

## **(D)** Liquidity Ratios:

These ratios show the liquidity position of the company to meet its day to day needs of working capital

1. Current Ratio i.e., Current Assets/Current Liabilities

Current Ratio shows the ability of the company to meet its maturing current liabilities. An ideal ratio is 2:1 but it may differ due to nature of business.

2. Quick Ratio or Acid Test Ratio i.e., Quick Assets i.e., Current Assets excluding inventory/ Current Liabilities

Quick Ratio indicates ability of the company to meet its immediate current liabilities out of readily realizable current assets.

#### **Reporting:**

The central body collects and analysis the data supplied by participating firm, calculates relevant ratios and prepares report to be sent to individual member firm. Normally code numbers are used in place of names of the firms so that information may remain confidential. The results and interpretations are presented in the report in such a way that individual firm data could not be identified.

On receipt of the comparative data and report of inter-firm comparison, it is the job of the management of the firm to compare operating and other results and the corresponding ratios with ratio furnished by the central body of IFC.

# Advantages of Inter-Firm Comparison:

1. Under IFC the weakness of participating firms are revealed and the management will be guided to remedial actions.

2. The firm will come to know the trend of sales, profit and cost of an industry or trade as shown by different ratios. If all firms are suffering from falling sales, it will be indicated by sales to capital or asset employed ratio. When an individual firm compares its own ratio with the ratio of the group, it will see that there are general reduction sales.

3. Management of participating firm are provided with most significant facts on the basis of ratios carefully selected by the central body. The firm will have to do only the study of the ratios and the necessary action.

4. Whether firm is doing better or worse than other firms is made known through the ratios. The firm can take positive steps to improve efficiency.

5. The experience of the central body is at the disposal of participating firms. This knowledge can be very valuable in the analysis of performance and profitability of the firm.



6. Participating firm provide information willingly knowing that this remains confidential.



7. IFC develops cost consciousness among participating firm.

8. IFC leads to avoidance of unfair competition. It guides in the direction of proper and positive efforts towards improvement of performances.

9. Inter-firm comparisons and related data help in representing the problem of the industry to regulating authorities and the Government in an effective and convincing matter. Information regarding entire industry can be presented before the Government and not the isolated problem of individual firm.

10. Collective information provided under IFC can help the industry in its negotiations with trade unions.

#### **Limitations of IFC:**

It is obvious that inter-firm comparison is useful in improving productivity, efficiency and profitability. But benefits are obtained only when ratios are properly calculated and impartially used. The limitations of ratio analysis should be taken into consideration. It should be noted that a single ratio is of a limited value and their trend is most important. Moreover the limitation of uniform costing should also be taken into consideration because uniform costing provides the very basis of inter-firm comparison

It should also not be ignored that certain extraneous factors such as prolonged strike, power shortage may also adversely affect the performance of the industry in a particular period. Limitations and short comings of annual returns and data may also affect the reliability of conclusions.

It can also be pointed out that there are practical limitation in the formation and maintenance of an independent central agency for inter-firm comparisons. The cost of introducing uniform costing may make the management of firm reluctant to participate in a scheme of inter-firm comparison

#### 2. Purpose of Inter-Firm Comparison:

It has already been stated above that the purpose of inter-firm comparison is to compare the efficiency of one firm with that of other belonging to the same group of industry and helps the management to locate the problems or reasons for such inefficiency (if any) and to take the corrective measures for its improvement.

It has also mentioned in the earlier paragraph that there must be a central body/agency (like Chamber of Commerence) who will work i.e., will collect and analyze the information on behalf of the members by which many snags or drawbacks can be controlled However, some of the problems are enumerated below

(i) Is profit adequate ?

(ii) How efficient is production ?

(iii) How efficient is selling ?

- (iv) Is Working Capital sufficient?
- (v) Is stock-turnover adequate ?

# (i) Is Profit Adequate ?

The principal motivating force of all commercial firms is to earn profit i.e., whether the firm is successful or not, the same is measured by the amount of profit in relation to capital employed i.e., percentage of Return on Capital Employed (ROCE).

After careful comparison, if it is found that the earning power of a firm does not at least equal that of the other similar firms there are some factors which are not operating efficiently. These may be isolated by means of certain ratios: viz.,

- (a) supporting ratios;
- (b) general explanatory ratios, and
- (c) specific explanatory ratios

It should be remembered that while calculating capital employed, current replacement values of the assets should be taken into consideration and not the historical cost or nominal value.

# (ii) How Efficient is Production ?

Usually the production departments have to produce an adequate volume of output at a reasonable cost so that profit will be maximized.

# Thus, the costs of sales may be splitted up into:

- (i) Direct material
- (ii) Direct wages and
- (iii) Production overhead in relation to sales value.

It is needless to say that comparison with the figures of other firms may locate a possible source of inefficiency e.g., machine or labour utilisation.

# (iii) How Efficient is Selling ?

Question of profit does not arise if the goods which are produced by the firm are not sold The amount of total sales to operating profit and to capital employed are the primary ratios while considering profit earnings capacity which are known as supporting ratios.

The operating profit to sale ratio reveals the total profit earned by the amount of sales and the same may also be expressed in terms of percentage. The sales to capital employed, however, expresses how many times capital employed is covered by the amount of sales or it may be stated that how much is sold per rupee invested.

# (iv) Is Working Capital Sufficient ?

This is a very significant aspect while making a comparison between the two firm. A firm having an inadequate working capital cannot be compared with a firm having



adequate working capital. If there is insufficient working capital, production process cannot be carried on smoothly and miscellaneous problems will arise relating to liquidity, solvency and profitability of the firm.



#### (v) Is Stock-Turnover Adequate ?

If the Stock-Turnover ratio (i.e., cost of goods sold/sales to average stock) is very low, the firm will experience a problem of liquid funds.

Thus, the inter-firm comparison will become ineffective if one firm has a low Stock-Turnover ratio in comparison with the other firms having a high or normal Stock-Turnover ratio. This ratio is also very significant for the purpose of measuring liquidity, solvency and profitability position of a firm.

#### 3. Advantages of Inter-Firm Comparison:

#### Proper inter-firm comparison presents the following notable advantages:

(i) There is no uncertainty in it as it is taken from a successful firm and as such, it helps the management to take corrective measures for its improvement in efficiency in near future.

(ii) Inter-firm comparison locates or points out the snags and weakness of the firm and thus assist the management to take all possible steps in order to improve the productivity of all factors which are directly connected.

(iii) It also helps the business world to run in the correct way.

(iv) This comparison helps the Government to regulate the prices of the commodity in the country.

(v) Since the data are collected and presented by the central agency/body, biasness is absent.

(vi) Inter-firm comparison develops the cost consciousness amongst its members since various ratios are known.

(vii) Inter-firm comparison presents not only the difference between the two firms, it also explains the reasons for such difference and suggest the possible remedies for its improvement both for liquidity and profitability aspect of the firms.

#### 4. Limitations of Inter-Firm Comparison:

# Inter-firm comparison is not even free from snags. Some of them are discussed hereunder:

(i) It is very difficult to maintain the secrecy of the firm since the data are presented to its members.

(ii) It is not always possible to make a proper comparison between the two firms as identical position is hardly possible in the real world situation. Thus, it is not always effective.

(iii) In the absence of any. proper cost accounting system, the data so collected and presented cannot produce any reliable information for the purpose of making proper comparison. Thus, it will become fruitful only when both the firms maintain good costing system.



(iv) Sometimes the member firms do not prefer to disclose their data about the financial and operational performances.

However, some of the snags can be avoided by careful study, analysis and interpretation.

For example, secrecy can be maintained if ratios are use instead of absolute figures

# 1.12 Let's Sum-Up

Financial analysis is a process of selecting, evaluating, and interpreting financial data, along with other pertinent information, in order to formulate an assessment of a company's present and future financial condition and performance. To meet their financial reporting obligations and to assist in strategic decision-making, firms prepare financial statements. However, the information provided in the financial statements is not an end in itself as no meaningful conclusions can be drawn from these statements alone. Firms employ financial analysts to read, compare and interpret the data as necessary for quantitative analysis and decision-making.

# 1.13 Key Terms

- (i) Balance Sheet
- (ii) Financial statement analysis
- (iii) Stock Exchange
- (iv) Financial ratios

#### **1.14 Self-Assessment Questions**

(i) Narrate the problems of financial statement analysis.

Ans.

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(i) What are the sources of financial information?

Ans. \_\_\_\_\_



# **1.15 Further Readings**

- (i) Gupta S.K and Sharma R.K, Management Accounting, Kalyani Publishers, 2<sup>nd</sup> Edition, New Delhi
- (ii) Rao P.M., Financial Statement Analysis and Reporting, PHI, 1<sup>st</sup> Edition, New Delhi
- (iii) Arora, M.N, Cost and Management Accounting, Himalaya Publishing House, 3<sup>rd</sup> Edition, Mumbai

#### **1.16 Model Questions**

- (i) What is financial statement analysis? Compare horizontal and vertical analysis.
- (ii) What are the limitations of financial statement analysis?
- (iii) Who are the users of financial statement analysis?
- (iv) Who is a financial analyst? Elaborate the role of financial analyst.
- (v) Enumerate the procedure of financial statement analysis.
- (vi) Narrate the objectives of financial statement analysis.

# Unit –II Analysis of Financial Statement-II



Learning Objectives : After studying this lesson, you will be able to know :

Assumptions of financial statement analysis, qualitative character of financial statement, constraints of financial statement analysis, different types of financial statement analysis, methods of financial statement analysis, tools of financial statement analysis, characteristics of ideal financial statement, nature of financial statement and etc.

#### Structure :

- 2.1 Assumptions of Financial Statement Analysis
- 2.2 Qualitative Character of Financial Statements
- 2.3 Constraints of Financial Statements
- 2.4 Types of Financial Statement
- 2.5 Types of Financial Statement Analysis
- 2.6 Methods of Financial Statement Analysis
- 2.7 Tools of Financial Statement Analysis
- 2.8 Characteristics of Ideal Financial Statement
- 2.9 Nature of Financial Statement
- 2.10 Sum Up
- 2.11 Self-Assessment Questions
- 2.12 Further Readings
- 2.13 Model Questions

# 2.1 Assumptions of Financial Statement Analysis

Different authors have defined fundamental accounting assumptions differently. According to some there are only three basic assumptions under every accounting information i.e.:

- 1. Going concern concept
- 2. Accrual concept
- 3. Consistency

And some have stated that there are five basic assumptions:

- 1. Business entity concept
- 2. Going concern concept

- 3. Accruals concept
- 4. Money Measurement concept
- 5. Consistency



However, if we are preparing financial statements according to IAS 1 then fundament accounting assumptions for preparing financial statements are as follows:

- 1. Going concern Entity is a going concern
- 2. Accrual basis of accounting all financial statements except cash flow information must be prepared following accrual basis of accounting
- 3. **Consistency** Consistency in presentation and classification of financial statements items
- 4. **Materiality and aggregation** Material class of similar items are presented separately
- 5. **Offsetting** Assets against liabilities and incomes against expenses cannot be offset unless permitted or required by IAS.

Among these five, first three are given more importance as they least affected by situations and other requirements of IASs. The five items listed above are basically what a normal user of information have in his mind for every financial statement and that is why they are called basic accounting assumptions underlying financial statements. However, according to IASB Framework for Preparation and Presentation of Financial Statements underlying assumptions

- 1. Accrual Basis
- 2. Going Concern

Definitely these are not the MUST follow rules for preparation and entity can deviate from them where entity will have to follow the instructions regarding what should be done in case of deviation from such basic accounting assumptions for preparing financial statements.Remember, IAS 1 is part of a *regulatory framework* and is meant to be detailed and more demanding. Whereas IASB Framework is part of a *conceptual framework* which provides conceptual guidelines to be followed and is more generalized in nature .According to the Framework of IAS/IFRS, the underlying assumptions for the preparation of financial statements are :

Accrual basis: The financial statements are prepared under the accrual basis. According to accrual basis of accounting, the effects of transactions and other events are recognized when they occur and not when the cash is received or paid. In other words, the transactions are recorded in the books of accounts when they occur and not when the cash is received or paid. It is opposite to *cash basis of accounting*.

Going concern basis: The financial statements are prepared under the going concern basis. Under going concern basis, it is assumed that the enterprise will continue in operation for the foreseeable future, and the enterprise has neither the intention nor the need to liquidate or curtail materially the scale of its operations.



# 2.2 Qualitative Characteristics of Financial Statements

*Understandability* : The information must be readily understandable to users of the financial statements. This means that information must be clearly presented, with additional information supplied in the supporting footnotes as needed to assist in clarification.

**Relevance**: The information must be relevant to the needs of the users, which is the case when the information influences the economic decisions of users. This may involve reporting particularly relevant information, or information whose omission or misstatement could influence the economic decisions of users.

**Reliability**: The information must be free of material error and bias, and not misleading. Thus, the information should faithfully represent transactions and other events, reflect the underlying substance of events, and prudently represent estimates and uncertainties through proper disclosure.

**Comparability** : The information must be comparable to the financial information presented for other accounting periods, so that users can identify trends in the performance and financial position of the reporting entity.

**Unbiased** : Information that is biased can be misleading biased information is not useful unless the users understand the bias, any bias is consistently applied across years/firms/industries, and the users can adjust the reported results to reflect their own desired bias. When faced with uncertainty, there is a need to either require reporting of unbiased values accompanied with sufficient disclosure, or require the reporting of biased (prudent or conservative) values with the bias determined in a predictable, consistent fashion.

**Cost benefit effective** : General understanding that the development of accounting information consumes resources. As such, the cost of producing such information should be reasonable in relation to the expected benefit. Use the materiality accounting rule – may not have to be fully followed for immaterial items if full compliance would result in unwarranted higher costs.

# **2.3 Constraints of Financial Statement**

Constraints of financial statement are actually the limit or boundaries that are necessary for providing information with the qualitative in characteristics. To make the information useful, the basic assumptions and principles discussed earlier', The constraints of financial statement are;

- 1. Cost-Benefit Principle,
- 2. Materiality Principle,
- 3. Consistency Principle,
- 4. Conservatism Principle,
- 5. Timeliness Principle, and
- 6. Industry Practice.

**Cost-Benefit Principle**: According to this principle, the cost of applying an accounting principle should not be more than its benefits. If the cost is more, this principle should be modified. Too often, users assume that information is free. However, providers of accounting information know that it is not. Therefore, companies must consider the costbenefit relationship. They must consider the costs of providing the information against the benefits that can be derived from using it. Rule-making bodies and governmental agencies use cost-benefit analysis before making final their informational requirements. In order to justify requiring a particular measurement or disclosure, the benefits perceived to be derived from it must exceed the costs perceived to be associated with it. The difficulty in cost-benefit analysis is that the costs and especially the benefits are not always evident or measurable. The costs are of several kinds: costs of collecting and processing, of disseminating, of auditing, of potential litigation, of disclosure to competitors, and of analysis and interpretation. Benefits to preparers may include greater management control and access to capital at a lower cost. Users may receive better information for allocation of resources, tax assessment, and rate regulation. As noted earlier, benefits are generally more difficult to quantify than are costs. Despite its difficulty in its implications, the FASB attempts to regulate that each proposed pronouncement will fill a major need and that the costs imposed to meet the rule are justified in relation to overall benefits of the resulting information. In addition, the Board seeks input on costs and benefits as part of its due process.

Materiality Principle: This principle is basically an exception to the full disclosure principle. The full disclosure principle requires that all facts necessary to ensure that the financial statements are not misleading, must be disclosed, whereas the materiality principle requires that the items or events having an insignificant economic effect or not being relevant to the user's need not be disclosed. According to the materiality principle, all relatively relevant items, the knowledge of which might influence the decision of the users of the financial statements, should be disclosed in the financial statements. Which information is more relevant than others is largely a matter of judgment. For instance, recording and accounting of a small Calculator as an asset in the balance sheet may not be justified due to the excess of cost of recording over the benefits in terms of usefulness of recording and the accounting of calculators as an asset. The materiality depends not only upon the amount of item but also upon the size of business, level and nature of information, level of the person/department who makes the judgment about materiality, e.g. a worker reporting to his foreman about the production in grams (e.g. part of kilogram), a foreman to his supervisor in kilograms, a



supervisor to his production manager in quintals and the production manager to the top management in tones, may be justified with regard to the circumstances. It hardly makes any difference if the production manager reports to the top management that the production is 1,99,000.90 kilograms or simply 200 tones (nearly).



#### **Consistency Principle :**

According to this principle, whatever accounting practices (whether logical or not) are selected for a given category of transactions, they should be followed on a horizontal, basis from one accounting period to another to achieve compatibility, e.g., if the inventory is valued on (LIFO) basis, this basis should be followed year after year and if a particular asset is depreciated according to (WDV) method, this method should be followed year after year. The consistency should not be confused with mere uniformity or inflexibility and should not be allowed to become an impediment to the introduction of improved accounting standards. It is not appropriate for an enterprise, to leave its accounting policies unchanged when more relevant and reliable alternatives exist. The users should be informed of the accounting policies employed in the preparation of the financial statements, any change in these policies and the effects of such changes.

#### **Conservatism Principle :**

According to this principle, the principle of 'anticipate no profit but provide for all probable losses' should be applied. The valuation of stock-in-trade at a lower cost or net realizable value and making the provisions for bad and doubtful debts are the applications of this principle. In other words, the principle of conservatism requires that in the situation of uncertainty and doubt, the business transactions should be recorded in such a manner that the profits and assets are not overstated. When the stock is valued at cost in one accounting period and at a lower cost or net realizable value in another accounting period; this principle conflicts with the principle of consistency.

When excessive provisions for bad and doubtful debts and depreciation are charged, it leads to the creation of secret reserves, and thus, this principle conflicts with the principle of full disclosure. The estimation of probable losses is a subjective judgment and thus, this principle conflicts with the principle of objectivity. The practice of making provisions for bad and doubtful debts, etc. implies lesser charges in the following accounting periods. In other words, it reduces the current income and raises the future income and thus it conflicts with the matching principle. Nowadays, the conservatism principle is being replaced by the prudence principle which requires that the conservation principle should be applied only in circumstances in which great uncertainty and doubt exist.

#### **Timeliness Principle :**

According to this principle, timely information (though less reliable) should be made available to the decision makers. If the quarterly reports are made available on halfyearly basis, the information contained in the quarterly report would not be very useful to the decision makers since the information has lost its capacity to influence the decision during the period of half year, after the expiry of which the quarterly report had been submitted.

#### **Industry Practice :**



The peculiar characteristics of an industry may require departure from the accounting guidelines discussed above. For example, in case of an agricultural industry, it is a common practice to disclose the crops at market value rather than at a cost price since it is costly to obtain accurate cost figures of individual crops. Such differences from basic theory are rare, but they do exist.

Whenever we find what appears to be a violation of basic accounting theory, we must fix whether some peculiarity of the industry explains the reasons of violation before we try to censure the procedures followed.

# 2.4 Types of Financial Statements

The four main types of financial statements are:

#### 1. Statement of Financial Position

Statement of Financial Position, also known as the Balance Sheet, presents the financial position of an entity at a given date. It is comprised of the following three elements:

- <u>Assets:</u> Something a business owns or controls (e.g. cash, inventory, plant and machinery, etc)
- <u>Liabilities:</u> Something a business owes to someone (e.g. creditors, bank loans, etc)
- <u>Equity:</u> What the business owes to its owners. This represents the amount of capital that remains in the business after its assets are used to pay off its outstanding liabilities. Equity therefore represents the difference between the assets and liabilities.

#### 2. Income Statement

Income Statement, also known as the *Profit and Loss Statement*, reports the company's financial performance in terms of net profit or loss over a specified period. Income Statement is composed of the following two elements:

- <u>Income:</u> What the business has earned over a period (e.g. sales revenue, dividend income, etc)
- <u>Expense</u>: The cost incurred by the business over a period (e.g. salaries and wages, <u>depreciation</u>, rental charges, etc)

Net profit or loss is arrived by deducting expenses from income.

#### 3. Cash Flow Statement

Cash Flow Statement, presents the movement in cash and bank balances over a period. The movement in cash flows is classified into the following segments:

- Operating Activities: Represents the cash flow from primary activities of a business.
- Investing Activities: Represents cash flow from the purchase and sale of assets other than inventories (e.g. purchase of a factory plant)
- Financing Activities: Represents cash flow generated or spent on raising and repaying share capital and debt together with the payments of interest and dividends.

View detailed explanation and Example of Cash Flow Statement

#### 4. Statement of Changes in Equity

Statement of Changes in Equity, also known as the *Statement of Retained Earnings*, details the movement in owners' equity over a period. The movement in owners' equity is derived from the following components:

- Net Profit or loss during the period as reported in the income statement
- Share capital issued or repaid during the period
- Dividend payments
- Gains or losses recognized directly in equity (e.g. revaluation surpluses

# 2.5 Types of Financial Statement Analysis

Financial statements analysis are classified according to their objectives, Materials used and Modus operandi. Financial statement analysis, according to objectives are further subdivided into Short term and long term.

#### Short term analysis include

- i. Working capital position analysis,
- ii. Liquidity analysis,
- iii. Return analysis,
- iv. Profitability analysis,
- v. Activity analysis.

#### Long term analysis include

- i. Profitability analysis,
- ii. Capital structure analysis,
- iii. Financial position,
- iv. Future prospects.

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Financial statement analysis according to materials used include Internal and External analysis. Financial statement analysis according to modus operandi include Horizontal and vertical analysis. They are briefly explained below.



1. **Internal Analysis**: Internal analysis is made by the top management executives with the help of Management Accountant. The finance and accounting department of the business concern have direct approach to all the relevant financial records. Such analysis emphasis on the overall performance of the business concern and assessing the profitability of various activities and operations.

2. External Analysis: Shareholders as investors, banks, financial institutions, material suppliers, government department and tax authorities and the like are doing the external analysis. They are fully depending upon the published financial statements. The objective of analysis is varying from one party to another.

3. Short Term Analysis: The short term analysis of financial statement is primarily concerned with the <u>working capital analysis</u> so that a forecast may be made of the prospects for future earnings, ability to pay interest, debt maturities – both current and long term and probability of a sound dividend policy.

A business concern has enough funds in hand to meet its current needs and sufficient borrowing capacity to meet its contingencies. In this aspect, the liquidity position of the business concern is determined through analyzing current assets and current liabilities. Hence, ratio analysis is highly useful for short term analysis.

4. Long Term Analysis: There must be a minimum rate of <u>return on investment</u>. It is necessary for the growth and development of the company and to meet the cost of capital. Financial planning is also necessary for the continued success of a company. The fixed assets structure, leverage analysis, ownership pattern of securities and the like are made in the long term analysis.

5. Horizontal Analysis: It is otherwise called as dynamic analysis. When financial statements for a number of years are viewed and analyzed, the analysis is called horizontal analysis. The preparation of comparative statements is an example of this type of analysis.

6. Vertical Analysis: It is otherwise called as static analysis. Under this type of analysis, the ratios are calculated from the balance sheet of one year and/or from the profit and loss account of one year. It is used for short term analysis only

# 2.6 Methods or Techniques of Financial Statement Analysis

Financial statement analysis can be performed by employing a number of methods or techniques. The following are the important methods or techniques of financial statement analysis.

*1. Ratio Analysis* : Ratio analysis is the analysis of the interrelationship between two financial figures.

2. Cash Flow Analysis : Cash flow analysis is the analysis of the change in the cash position during a period.



**3.** Comparative Financial Statements : Comparative financial statement is a analysis of financial statements of the company for two years or of the two companies of similar types.

*4. Trend Analysis* :Trend analysis is the analysis of the trend of the financial ratios of the company over the years.

The methods to be selected for the analysis depend upon the circumstances and the users' need. The user or the analyst should use appropriate methods to derive required information to fulfill their needs.

# 2.7 Tools or Techniques of Financial Statement Analysis

Important tools or techniques of financial statement analysis are as follows.

- 1. Comparative Statement or Comparative Financial and Operating Statements.
- 2. Common Size Statements.
- 3. Trend Ratios or Trend Analysis.
- 4. Average Analysis.
- 5. Statement of Changes in Working Capital.
- 6. Fund Flow Analysis.
- 7. Cash Flow Analysis.
- 8. Ratio Analysis.
- 9. Cost Volume Profit Analysis

A brief explanation of the tools or techniques of financial statement analysis presented below.

#### 1. Comparative Statements

Comparative statements deal with the comparison of different items of the Profit and Loss Account and Balance Sheets of two or more periods. Separate comparative statements are prepared for Profit and Loss Account as Comparative Income Statement and for Balance Sheets.

As a rule, any financial statement can be presented in the form of comparative statement such as comparative balance sheet, comparative profit and loss account, comparative cost of production statement, comparative statement of working capital and the like.

# 2. Comparative Income Statement

Three important information are obtained from the Comparative Income Statement. They are Gross Profit, Operating Profit and Net Profit. The changes or the improvement in the profitability of the business concern is find out over a period of time. If the changes or improvement is not satisfactory, the management can find out the reasons for it and some corrective action can be taken.



#### **3.** Comparative Balance Sheet

The financial condition of the business concern can be find out by preparing comparative balance sheet. The various items of Balance sheet for two different periods are used. The assets are classified as current assets and fixed assets for comparison. Likewise, the liabilities are classified as current liabilities, long term liabilities and shareholders' net worth. The term shareholders' net worth includes Equity Share Capital, Preference Share Capital, Reserves and Surplus and the like.

#### 4. Common Size Statements

A vertical presentation of financial information is followed for preparing common-size statements. Besides, the rupee value of financial statement contents are not taken into consideration. But, only percentage is considered for preparing common size statement.

The total assets or total liabilities or sales is taken as 100 and the balance items are compared to the total assets, total liabilities or sales in terms of percentage. Thus, a common size statement shows the relation of each component to the whole. Separate common size statement is prepared for profit and loss account as Common Size Income Statement and for balance sheet as Common Size Balance Sheet.

#### 5. Trend Analysis

The ratios of different items for various periods are find out and then compared under this analysis. The analysis of the ratios over a period of years gives an idea of whether the business concern is trending upward or downward. This analysis is otherwise called as *Pyramid Method*.

#### 6. Average Analysis

Whenever, the trend ratios are calculated for a business concern, such ratios are compared with industry average. These both trends can be presented on the graph paper also in the shape of curves. This presentation of facts in the shape of pictures makes the analysis and comparison more comprehensive and impressive.

#### 7. Statement of Changes in Working Capital

The extent of increase or decrease of working capital is identified by preparing the statement of changes in working capital. The amount of net working capital is calculated by subtracting the sum of current liabilities from the sum of current assets. It does not detail the reasons for changes in working capital.

# 8. Fund Flow Analysis

Fund flow analysis deals with detailed sources and application of funds of the business concern for a specific period. It indicates where funds come from and how they are used during the period under review. It highlights the changes in the financial structure of the company.

# 9. Cash Flow Analysis

Cash flow analysis is based on the movement of cash and bank balances. In other words, the movement of cash instead of movement of working capital would be considered in the cash flow analysis. There are two types of cash flows. They are actual cash flows and notional cash flows.

#### 10. Ratio Analysis

Ratio analysis is an attempt of developing meaningful relationship between individual items (or group of items) in the balance sheet or profit and loss account. Ratio analysis is not only useful to internal parties of business concern but also useful to external parties. Ratio analysis highlights the liquidity, solvency, profitability and capital gearing.

#### 11. Cost Volume Profit Analysis

This analysis discloses the prevailing relationship among sales, cost and profit. The cost is divided into two. They are fixed cost and variable cost. There is a constant relationship between sales and variable cost. Cost analysis enables the management for better profit planning.

# **2.8 Characteristics of Ideal Financial Statements**

The following points highlight the nine characteristics of financial statements, i.e,

- 1. Depict True Financial Position
- 2. Effective Presentation
- 3. Relevance
- 4. Attractive
- 5. Easiness
- 6. Comparability
- 7. Analytical Representation
- 8. Brief
- 9. Promptness



#### **1. Depict True Financial Position:**

The information contained in the financial statements should be such that a true and correct idea is taken about the financial position of the concern. No material information should be withheld while preparing these statements.



The financial statements should be presented in a simple and lucid way so as to make them easily understandable. A person who is not well versed with accounting terminology should also be able to understand the statements without much difficulty. This characteristic will enhance the utility of these statements.

#### 3. Relevance:

inancial statements should be relevant to the objectives of the enterprise. This will possible when the person preparing these statements is able to properly utilize the accounting information. The information which is not relevant to the statements should be avoided, otherwise it will be difficult to make a distinction between relevant and irrelevant data.

#### 4. Attractive:

The financial statements should be prepared in such a way that important information is underlined so that it attracts the eye of the reader.

#### 5. Easiness:

Financial statements should be easily prepared. The balances of different ledger accounts should be easily taken to these statements. The calculation work should be minimum possible while preparing these statements. The size of the statements should not be very large. The columns to be used for giving the information should also be less. This will enable the saving of time in preparing the statements.

#### 6. Comparability:

The results of financial analysis should be in a way that can be compared to the previous years statements. The statement can also be compared with the figures of other concerns of the same nature. Sometimes budgeted figures are given along with the present figures. The comparable figures will make the statements more useful. The Indian Companies Act, 1956 has made it obligatory to give previous years figures in the balance sheet. The comparison of figures will enable a proper assessment for the working of the concern.

#### 7. Analytical Representation:

The information should be analyzed in such a way that similar data is presented at the same place. A relationship can be established in similar type of information. This will be helpful in analysis and interpretation of data.



## 8. Brief:

If possible, the financial statements should be presented in brief. The reader will be able to form an idea about the figures. On the other hand, if figures are given in details then it will become difficult to judge the working of the business.

#### 9. Promptness:

The financial statements should be prepared and presented at the earliest possible. Immediately at the close of the financial year, statements should be ready.

# 2.9 Nature of Financial Statements

The financial statements are prepared on the basis of recorded facts. The recorded facts are those which can be expressed in monetary terms. The statements are prepared for the particular period generally one year. The following of the nature of the financial statements are discussed below:-

- **Recorded Facts :-** The data which is taken out from the accounting records is known as recorded facts. Actual cost data are the source of maintaining the accounting records.
- Accounting Conventions :- Various accounting conventions such as historical cost convention , Monetary measurement, Separate Entity, Materiality, Realization, etc are adopted to prepare external and internal Financial accounts. The accounting conventions help to make financial statements realistic, comparable and simple.
- **Personal judgments :-** For preparing financial statements, standard accounting conventions is very important instead of this One important things plays a very important role in making financial statements i.e. Personal Judgments. For example, in applying the cost or market value whichever is less to inventory valuation the accountant will have to use his judgment in computing the cost in particular case? There are a number of methods of valuing stock, i.e. First in First out, last in first out, average cost method, etc. The accountant will use one of these methods for valuing materials.
- **Postulates :-** It is very important for an accountant to makes certain assumptions at the time of preparing accounting records. These postulates are derived from accounting environment so it does not require any proof. It is assumed that everyone can understand an accounting postulate so that it is recorded in financial statements.



# 2.10 Sum Up



The information must be readily understandable to users of the financial statements. This means that information must be clearly presented, with additional information supplied in the supporting footnotes as needed to assist in clarification. The information must be relevant to the needs of the users, which is the case when the information influences the economic decisions of users. This may involve reporting particularly relevant information, or information whose omission or misstatement could influence the economic decisions of users. The information must be free of material error and bias, and not misleading. Thus, the information should faithfully represent transactions and other events, reflect the underlying substance of events, and prudently represent estimates and uncertainties through proper disclosure. The information must be comparable to the financial information presented for other accounting periods, so that users can identify trends in the performance and financial position of the reporting entity. Information that is biased can be misleading biased information is not useful unless the users understand the bias, any bias is consistently applied across years/firms/industries, and the users can adjust the reported results to reflect their own desired bias. When faced with uncertainty, there is a need to either require reporting of unbiased values accompanied with sufficient disclosure, or require the reporting of biased (prudent or conservative) values with the bias determined in a predictable, consistent fashion general understanding that the development of accounting information consumes resources. As such, the cost of producing such information should be reasonable in relation to the expected benefit. Use the materiality accounting rule – may not have to be fully followed for immaterial items if full compliance would result in unwarranted higher costs.

# 2.11 Key Words

#### **1.** Comparative Statements

Comparative statements deal with the comparison of different items of the Profit and Loss Account and Balance Sheets of two or more periods.

#### **2.**Common Size Statements

A vertical presentation of financial information is followed for preparing common-size statements.

#### 3. Trend Analysis

The ratios of different items for various periods are find out and then compared under this analysis. The analysis of the ratios over a period of years gives an idea of whether the business concern is trending upward or downward.

#### 4. Statement of Changes in Working Capital

The extent of increase or decrease of working capital is identified by preparing the statement of changes in working capital.



#### 5. Fund Flow Analysis

Fund flow analysis deals with detailed sources and application of funds of the business concern for a specific period. It indicates where funds come from and how they are used during the period under review. It highlights the changes in the financial structure of the company.

#### 6. Cash Flow Analysis

Cash flow analysis is based on the movement of cash and bank balances. In other words, the movement of cash instead of movement of working capital would be considered in the cash flow analysis. There are two types of cash flows. They are actual cash flows and notional cash flows.

#### 7. Ratio Analysis

Ratio analysis is an attempt of developing meaningful relationship between individual items (or group of items) in the balance sheet or profit and loss account. Ratio analysis is not only useful to internal parties of business concern but also useful to external parties.

#### 8. Cost Volume Profit Analysis

This analysis discloses the prevailing relationship among sales, cost and profit. The cost is divided into two. They are fixed cost and variable cost. There is a constant relationship between sales and variable cost. Cost analysis enables the management for better profit planning.

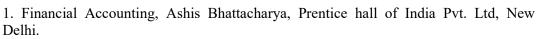
# 2.12 Self Assessment Questions

- 1. Express the underlying assumptions of financial statement analysis.
- 2. Discuss the qualitative characters of financial statement.
- 3. Describe the constraints of financial statement.
- 4. Narrate the different Types of financial statement.

# 2.13 Model Questions

- 1. Mention the different types of financial statement analysis.
- 2. Highlight the different methods of financial statement analysis
- 3. Discuss the different tools of financial statement analysis
- 4. State the characteristics of ideal financial statement
- 5. Nature of financial statement

# 2.14 Further Readings



2. Financial Accounting, S. N. Maheshwari, Vikash Publishing House Pvt. Ltd., New Delhi.

3. Theory and Practice of Financial Accounting, B. B Dam and H C Gautam, Capital Publishing Company, Guwahati

4. Advance Accountancy, R. L. Gupta and M. Radhaswamy, Sultan Chand & Sons, New Delhi.

5. Jain & Narang, Accounting Theory and Management Accounting, Kalayani Publishers.

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# Unit – III Comparative And Common-Size Statements

#### Learning Objectives :

After reading this chapter, students should be able to know :

- explain the meaning and classification of comparative financial statements
- Narrate the merits of comparative statements
- Elucidate the meaning of common size statement

#### **Structure :**

- 3.1 Introduction
- 3.2 Meaning of Comparative Statements
- 3.3 Features of Comparative Statements
- 3.4 Types of Comparative Statements
- 3.5 Advantages of Comparative Statements
- 3.6 Disadvantages of Comparative Statements
- 3.7 Meaning of Common-Size Statement
- 3.8 Features of Common-Size Statement
- 3.9 Types of Common-Size Statement
- 3.10 Advantages of Common-Size Statement
- 3.11 Limitations of Common-Size Statement
- 3.12 Let's sum-up
- 3.13 Key terms
- 3.14 Self-Assessment Questions
- 3.15 Further Readings
- 3.16 Model Questions

# **3.1 Introduction**

Comparative Financial Statement analysis provides information to assess the direction of change in the business. Financial statements are presented as on a particular date for a particular period. The financial statement Balance Sheet indicates the financial position as at the end of an accounting period and the financial statement Income Statement shows the operating and non-operating results for a period. But financial



managers and top management are also interested in knowing whether the business is moving in a favorable or an unfavorable direction. For this purpose, figures of current year have to be compared with those of the previous years. In analyzing this way, comparative financial statements are prepared.



Common Size Statement involves representing the income statement figures as a percentage of sales and representing the balance sheet figures as a percentage of total assets. Financial statements represent absolute figures and a comparison of absolute figures can be misleading. For example, the cost of goods sold might have increased but as a percentage of sales it might have decreased. So, to have a perfect understanding about these increases and decreases, the figures reported are converted into percentages to some common base. In Income Statement, Sales figure is assumed to be 100% and all other figures are expressed as a percentage of sales. In Balance Sheet, the total of assets is taken as 100% and all other figures are expressed as a percentage of total assets. This type of Statement so prepared is called as the Common Size Statement and the analysis performed on the Common Size Statement is called as the Common Size Financial Statement Analysis or otherwise called as Vertical Analysis.

# 3.2 Meaning of Comparative Statements

The comparative financial statements are statements of the financial position at different periods; of time. The elements of financial position are shown in a comparative form so as to give an idea of financial position at two or more periods. Any statement prepared in a comparative form will be covered in comparative statements.

From practical point of view, generally, two financial statements (balance sheet and income statement) are prepared in comparative form for financial analysis purposes. Not only the comparison of the figures of two periods but also be relationship between balance sheet and income statement enables an in depth study of financial position and operative results.

#### The comparative statement may show:

- (i) Absolute figures (rupee amounts).
- (ii) Changes in absolute figures i.e., increase or decrease in absolute figures.
- (iii) Absolute data in terms of percentages.
- (iv) Increase or decrease in terms of percentages.

The analyst is able to draw useful conclusions when figures are given in a comparative position. The figures of sales for a quarter, half -year or one year may tell only the present position of sales efforts. When sales figures of previous periods are given along with the figures of current periods then the analyst will be able to study the trends of sales over different periods of time. Similarly, comparative figures will indicate the trend and direction of financial position and operating results.

The financial data will be comparative only when same accounting principles are used in preparing these statements. In case of any deviation in the use of accounting principles this fact must be mentioned at the foot of financial statements and the analyst should be careful in using these statements.



#### **3.3 Features of Comparative Statements**

(i) A comparative statement adds meaning to the financial data.

(ii) It is used to effectively measure the conduct of the business activities.

(iii) Comparative statement analysis is used for intra firm analysis and inter-firm analysis.

(iv) A comparative statement analysis indicates change in amount as well as change in percentage.

(v) A positive change in amount and percentage indicates an increase and a negative change in amount and percentage indicates a decrease.

(vi) If the value in the first year is zero then change in percentage cannot be indicated. This is the limitation of comparative statement analysis. While interpreting the results qualitative inferences need to be drawn.

(vii) It is a popular tool useful for analysis by the financial analysts.

(viii) A comparative statement analysis cannot be used to compare more than two years financial data.

# **3.4 Types of Comparative Statements**

#### The two comparative statements are

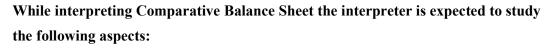
- (i) Balance sheet, and
- (ii) Income statement.

#### (i) Comparative Balance Sheet:

The comparative balance sheet analysis is the study of the trend of the same items, group of items and computed items in two or more balance sheets of the same business enterprise on different dates.' The changes in periodic balance sheet items reflect the conduct of a business.

The changes can be observed by comparison of the balance sheet at the beginning and at the end of a period and these changes can help in forming an opinion about the progress of an enterprise. The comparative balance sheet has two columns for the data of original balance sheets. A third column is used to show increases in figures. The fourth column may be added for giving percentages of increases or decreases.

#### **Guidelines for Interpretation of Comparative Balance Sheet:**



(1) For studying current financial position or short -term financial position of a concern, one should see the working capital in both the years. The excess of current assets over current liabilities will give the figures of working capital. The increase in working capital will mean improvement in the current financial position of the business.

An increase in current assets is accompanied by the increase in current liabilities of the same amount will not show any improvement in the short-term financial position. A student should study the increase or decrease in current assets and current liabilities and this will enable him to analyze the current financial position. The second aspect which should be studied in current financial position is the liquidity position of the concern. If liquid assets like cash in hand, cash at bank, bills receivables, debtors, etc. show an increase in the second year over the first year, this will improve the liquidity position of the concern.

The increase in inventory can be on account of accumulation of stocks for want of customers, decrease in demand or inadequate sales promotion efforts. An increase in inventory may increase working capital of the business but it will not be good for the business.

(2) The long -term financial position of the concern can be analyzed by studying the changes in fixed assets, long-term liabilities and capital .The proper financial policy of concern will be to finance fixed assets by the issue of either long-term securities such as debentures, bonds, loans from financial institutions or issue of fresh share capital.

An increase in fixed assets should be compared to the increase in long-term loans and capital. If the increase in fixed assets is more than the increase in long term securities then part of fixed assets has been financed from the working capital. On the other hand, if the increase in long-term securities is more than the increase in fixed assets then fixed assets have not only been financed from long-term sources but part of working capital has also been financed from long-term sources. A wise policy will be to finance fixed assets by raising long-term funds.

The nature of assets which have increased or decreased should also be studied to form an opinion about the future production possibilities. The increase in plant and machinery will increase production capacity of the concern. On the liabilities side, the increase in loaned funds will mean an increase in interest liability whereas an increase in share capital will not increase any liability for paying interest. An opinion about the long-term financial position should be formed after taking into consideration abovementioned aspects. (3) The next aspect to be studied in a comparative balance sheet question is the profitability of the concern. The study of increase or decrease in retained earnings, various resources and surpluses, etc. will enable the interpreter to see whether the profitability has improved or not. An increase in the balance of Profit and Loss Account and other resources created from profits will mean an increase in profitability to the concern. The decrease in such accounts may mean issue of dividend, issue of bonus shares or deterioration in profitability of the concern.



(4) After studying various assets and liabilities an opinion should be formed about the financial position of the concern. One cannot say if short-term financial position is good then long-term financial position will also be good or vice-versa. A concluding word about the overall financial position must be given at the end.

#### Illustrations on Comparative Balance Sheet

	31 <sup>st</sup> March 2014
Current Assets:	
Cash	Rs.500
Accounts	
Receivables	Rs.2,000
Inventory	Rs.1,500
Total	K5.1,500
Current	Rs.4,000
Assets	10.1,000
Fixed Assets:	
Buildings	Rs.3,000
Furniture &	
office	Rs.1,000
equipments	
Total	
Fixed	Rs.4,000
Assets	5.000
Total Assets	Rs.8,000
Liabilities:	
Current	
Liabilities:	
Accounts	
<b>D</b> 11	Rs.1,000
Payable	
Notes Payable	Rs.500
Interest	Rs.100

<u>Comparative Balance Sheets as on 31<sup>st</sup> March 2014 & 31<sup>st</sup> March 2015</u> (Amount in '000)



Payable	
Total Current Liabiliti es	Rs.1,600
Shareholder's	
Equity:	
Common Stock	Rs.5,000
Retained earnings	Rs.1,400
Total Stockh older's equity	Rs.6,400
Total Liabilities &	
Stockholder's equity	Rs.8,000

31 <sup>st</sup> March 2015	Increase / (Decrease)	% of increase / (decrease)
Rs.600	Rs.100	20.00%
Rs.3,000	Rs.1,000	50.00%
Rs.2,500	Rs.1,000	66.67%
Rs.6,100	Rs.2,100	52.50%
Rs.4,000	Rs.1,000	33.33%
Rs.1,500	Rs.500	50.00%



Rs.5,500	Rs.1,500	37.50%
Rs.11,600	Rs.3,600	45.00%
Rs.1,200	Rs.200	20.00%
Rs.500	Rs.0	0.00%
Rs.120	Rs.20	20.00%
Rs.1,820	Rs.220	13.75%
Rs.7,500	Rs.2,500	50.00%
Rs.2,280	Rs.880	62.86%
Rs.9,780	Rs.3,380	52.81%
Rs.11,600	Rs.3,600	45.00%

In this example, the financial position of 2014 and 2015 has been compared. Compared to 2014, the total assets have increased 45% in 2015. There is increase in all the components of current assets and fixed assets. There is significant increase in shareholders' equity.

#### (ii) Comparative Income Statement:

The Income statement gives the results of the operations of a business. The comparative income statement gives an idea of the progress of a business over a period of time. The changes in absolute data in money values and percentages can be determined to analyze the profitability of the business. Like comparative balance sheet, income statement also has four columns. First two columns give figures of various items for two years. Third and fourth columns are used to show increase or decrease in figures in absolute amounts and percentages respectively.

#### **Guidelines for Interpretation of Income Statements:**

# The analysis and interpretation of income statement will involve the following steps:

(1) The increase or decrease in sales should be compared with the increase or decrease in cost of goods sold. An increase in sales will not always mean an increase in profit. The profitability will improve if increase in sales is more than the increase in cost of goods sold. The amount of gross profit should be studied in the first step.

(2) The second step of analysis should be the study of operational profits. The operating expenses such as office and administrative expenses, selling and distribution expenses should be deducted from gross profit to find out operating profits.

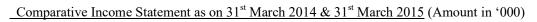
An increase in operating profit will result from the increase in sales position and control of operating expenses. A decrease in operating profit may be due to an increase in operating expenses or decrease in sales. The change in individual expenses should also be studied. Some expenses may increase due to the expansion of business activities while others may go up due to managerial inefficiency.

The increase or decrease in net profit will give an idea about the overall profitability of the concern. Non-operating expenses such as interest paid, losses from sale of assets, writing off of deferred expenses, payment of tax, etc. decrease the figure of operating profit. When all non-operating expenses are deducted from operational profit, we get a figure of net profit. Some non-operating incomes may also be there which will increase net profit. An increase in net profit will gave us an idea about the progress of the concern.

(4) An opinion should be formed about profitability of the concern and it should be given at the end. It should be mentioned whether the overall profitability is good or not.



#### Illustrations on Comparative Income Statement



	31 <sup>st</sup> March	31st March	Increase/	% of increase
	2014	2015	(Decrease)	(decrease)
Sales	Rs.7,000	Rs.9,000	Rs.2,000	28.57%
Less: Cost of goods sold	Rs.5,000	Rs.6,400	Rs.1,400	28.00%
Gross				
profit	Rs.2,000	Rs.2,600	Rs.600	30.00%
Less: Operating				
expenses				
General &				
administrative	Rs.200	Rs.300	Rs.100	50.00%
expenses				
Selling & distribution expenses	Rs.400	Rs.500	Rs.100	25.00%
Other operating				
expenses	Rs.100	Rs.150	Rs.50	50.00%
Operating				
profit	Rs.1,300	Rs.1,650	Rs.350	26.92%
Less: Interest	Rs.300	Rs.400	Rs.100	33.33%



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expenses					
Net	Rs.1,000	Rs.1,250	Rs.250	25.00%	
before taxes	13.1,000	10.1,200	16.200	25.0070	
Less: Taxes at 30%	Rs.300	Rs.375	Rs.75	25.00%	
Net Income after taxes	<b>Rs.700</b>	<b>Rs.875</b>	<b>Rs.175</b>	25.00%	

(3) The sales have increased in 2015 as compared to 2014, and also the cost of goods has increased. There is a 25% increase in net profit after tax.

# 3.5 Advantages of Comparative Financial Statement

#### The following advantages may be advocated:

#### (a) Comparison:

The comparative statements show the figures of various firms or number of years side by side i.e. both for inter-firm comparison and intra-firm comparison.

#### (b) Horizontal Analysis:

The variables are arranged horizontally for the purpose of analysis and interpretations of data taken from financial statements for assessing profitability, overall efficiency and financial position of a firm.

#### (c) Trend Analysis:

The comparative financial statement helps to ascertain the 'trend' relating to sales, cost of goods sold, operating expenses etc. so that a proper comparison can easily be made which helps the analyst to understand the overall performance of a firm.

#### (d) Trend and Directions:

The comparative financial statement provides necessary information for comparison of trends in related items e.g. the analyst can compare the trend of sales with the trend of accounts receivable which gives very useful information. A 20% increase in accounts

receivable and an increase of sales by only 10% warrants investigation into the reasons for this difference in the rate of increase.

#### (e) Evaluation of:

The comparative financial statement helps the analyst to compare Performance the performance of one firm with that of other similar firm in the industry and also compare the performance of the competitors in the line. This comparison helps to find out the weakness or strength of a firm and to take adequate steps.

#### (f) Measuring Financial:

Comparative financial statements help to measure important Distress financial ratios which are used for predicting financial distress and predicting corporate failure with the help of Multivariate Model.

# 3.6 Disadvantages of Comparative Financial Statement

Comparative financial statements are not even free from snags.

#### Some of them are:

#### (a) Inter-firm Comparison:

Inter firm comparison will only be effective if both the firms follow the same accounting principles, method of valuations of stocks, assets etc. i.e. all the accounting concepts and conventions, which in real world situation, are not identically followed by both the firms e.g. Firm A follows the FIFO method of valuing stock whereas Firm B follows LIFO method for the same.

#### (b) Inflationary Effect:

Comparative financial statements do not recognise the change in prices level and, as such, it will be of no use.

#### (c) Ascertaining Correct Trend:

It is very difficult to ascertain the correct trend if there is a structural changes in a firm which are frequently happened.

#### (d) Supply Misleading Information:

Sometimes a comparative financial statement provides meaningless information, e.g. if a negative amount comes in base year, and a positive amount in the next year, it is not possible to find out the change in percentage.

#### (e) Uniformity in Principle:

There must be a consistency while following accounting principles, concepts and convention. But in practice, this is not done and as such, multi-year analysis becomes useless.



# 3.7 Meaning of Common-Size Statement

The common-size statements, balance sheet and income statement are shown in analytical percentages. The figures are shown as percentages of total assets, total liabilities and total sales. The total assets are taken as 100 and different assets are expressed as a percentage of the total. Similarly, various liabilities are taken as a part of total liabilities.

These statements are also known as component percentage or 100 per cent statements because every individual item is stated as a percentage of the total 100. The short-comings in comparative statements and trend percentages where changes in items could not be compared with the totals have been covered up. The analyst is able to assess the figures in relation to total values.

#### The common-size statements may be prepared in the following way:

(1) The totals of assets or liabilities are taken as 100.

The individual assets are expressed as a percentage of total assets, i.e., 100 and different liabilities are calculated in relation to total liabilities. For example, if total assets are Rs 5 lakhs and inventory value is Rs 50,000, then it will be 10% of total assets ( $50,000 \times 100/5,00,000$ )

#### 3.8 Features of Common Size Statement

(i) A common size statement analysis indicates the relation of each component to the whole.

(ii) In case of a Common Size Income statement analysis Net Sales is taken as 100% and in case of Common Size Balance Sheet analysis total funds available/total capital employed is considered as 100%.

(iii) It is used for vertical financial analysis and comparison of two business enterprises or two years financial data.

(iv) Absolute figures from the financial statement are difficult to compare but when converted and expressed as percentage of net sales in case of income statement and in case of Balance Sheet as percentage of total net assets or total funds employed it becomes more meaningful to relate.

(v) A common size analysis is a type of ratio analysis where in case of income statement sales is the denominator (base) and in case of Balance Sheet funds employed or total net assets is the denominator (base) and all items are expressed as a relation to it.

(vi) In case of common size statement analysis the absolute figures are converted to proportions for the purpose of inter-firm as well as intra-firm analysis.



# 3.9 Types of Common-Size Statements

# (i) Common-Size Balance Sheet:



	31 <sup>st</sup> March 2014	Percentage	31 <sup>st</sup> March	Percentage
			2015	
Current Assets:				
		6.25%		
Cash	Rs.500	0.2370	Rs.600	5.17%
Accounts				
	Rs.2,000	25%	Rs.3,000	25.86%
Receivables				
Inventory	Rs.1,500	18.75%	Rs.2,500	21.55%
Total Current				
	Rs.4,000	50%	Rs.6,100	52.59%
Assets	13.4,000	5070	13.0,100	52.5970
Fixed Assets:				
Buildings	Rs.3,000	37.50%	Rs.4,000	34.48%
Furniture & office				
	Rs.1,000	12.50%	Rs.1,500	12.93%
equipments				
Total Fixed				
	Rs.4,000	50%	Rs.5,500	47.41%
Assets				
Total Assets	Rs.8,000	100%	Rs.11,600	100%
Liabilities:				
Current Liabilities:				

			1	U
Accounts Payable	Rs.1,000	12.50%	Rs.1,200	10.34%
Notes Payable	Rs.500	6.25%	Rs.500	4.31%
Interest Payable	Rs.100	1.25%	Rs.120	1.03%
Total Current	Rs.1,600	20%	Rs.1,820	15.69%
Liabilities	K3.1,000	2070	K3.1,020	15.0970
Shareholder's Equity:				
Common Stock	Rs.5,000	62.50%	Rs.7,500	64.66%
Retained earnings	Rs.1,400	17.50%	Rs.2,280	19.66%
Total Stockholde r's equity	Rs.6,400	80%	Rs.9,780	84.31%
Total Liabilities &				
Stockholder's equity	<b>Rs.8,000</b>	100%	Rs.11,600	100%

Diploma in Accounting

A statement in which balance sheet items are expressed as the ratio of each asset to total assets and the ratio of each liability is expressed as a ratio of total liabilities is called common-size balance sheet.

For example, following assets are shown in a common-size balance sheet:

Assets	Amount in	Percentage
	Rs.	
Cash in Hand and at Bank	5,000	2.50
Sundry Debtors	20,000	10.00
Stock	25,000	12.50
Land and Buildings	50,000	25.00
Plant and Machinery	1,00,000	50.00
Total Assets	2,00,000	100.00

The total figure of assets Rs 2,00,000, is taken as 100 and all other assets are expressed as a percentage of total assets. The relation of each asset to total assets is expressed in the statement. The relation of each liability to total liabilities is similarly expressed.



The common-size balance sheet can be used to compare companies of differing size. The comparison of figures in different periods is not useful because total figures may be affected by a number of factors. It is not possible to establish standard norms for various assets. The trends of figures from year to year may not be studied and even they may not give proper results.

#### **Illustration on Common-Size Balance Sheet**

From the above common size balance sheet, it can be pointed out that the percentage of fixed asset has decreased in 2015 as compared to fixed assets. There has been significant increase in stakeholder's equity in 2015 as compared to 2014.

#### (ii) Common Size Income Statement:

The items in income statement can be shown as percentages of sales to show the relation of each item to sales. A significant relationship can be established between items of income statement and volume of sales. The increase in sales will certainly increase selling expenses and not administrative or financial expenses. In case the volume of sales increases to a considerable extent, administrative and financial expenses may go up. In case the sales are declining, the selling expenses should be reduced at once. So, a relationship is established between sales and other items in income statement and this relationship is helpful in evaluating operational activities of the enterprise.

	31st March 2014	Percentage	31st March 2015	Percentage
Sales	Rs.7,000	100%	Rs.9,000	100%
Less: Cost of goods sold	Rs.5,000	71.53%	Rs.6,400	71.11%
Gross profit	Rs.2,000	28.47%	Rs.2,600	28.89%
Less: Operating expenses				
General & administrative expenses	Rs.200	2.86%	Rs.300	3.33%
Selling & distribution	Rs.400	5.71%	Rs.500	5.56%

# <u>Illustration: Common-size Income Statement as on 31<sup>st</sup> March 2014 & 31<sup>st</sup> March 2015</u> (Amount in '000)

expenses				
Other operating				
expenses	Rs.100	1.43%	Rs.150	1.67%
Operating				
profit	Rs.1,300	18.57%	Rs.1,650	18.33%
Less: Interest				
expenses	Rs.300	4.29%	Rs.400	4.44%
Net				
income	Rs.1,000	14.29%	Rs.1,250	13.89%



before taxes

Less: Taxes at

Rs.300 4.29% Rs.375 4.17% 30%

Net

Income

Rs.700 10.00% Rs.875 9.72% after

taxes

It can be analysed that percentage of net income after tax has minimally decreased, even though percentage of gross profit has increased from 2014 to 2015. This is mainly due to increase in operating expenses and interest expenses.

# 3.10 Advantages of Common-Size Statement

# (a) Easy to Understand

Common-size Statement helps the users of financial statement to make clear about the ratio or percentage of each individual item to total assets/liabilities of a firm. For example, if an analyst wants to know the working capital position he may ascertain the percentage of each individual component of current assets against total assets of a firm and also the percentage share of each individual component of current liabilities.

# (b) Helpful for Time Series Analysis:

A Common-Size Statement helps an analyst to find out a trend relating to percentage share of each asset in total assets and percentage share of each liability in total liabilities.

#### (c) Comparison at a Glance:

An analyst can compare the financial performances at a glance since percentage of increase or decrease of each individual component of cost,

assets, liabilities etc. are available and he can easily ascertain his required ratio.

# (d) Helpful in analysing Structural Composition:

A Common-Size Statement helps the analyst to ascertain the structural relations of various components of cost/expenses/assets/liabilities etc. to the required total of assets/liabilities and capital.

# 3.11 Limitations of Common-Size Statement

#### (a) Standard Ratio:

Common-Size Statement does not help to take decisions since there is no standard ratio/percentage regarding the change of percentage in the various component of assets, liabilities, sales etc.

#### (b) Change in Price-level:

Common-Size statement does riot recognise the change in price level i.e. inflationary effect. So, it supplies misleading information's since it is based on historical cost.

#### (c) Following Consistency:

If consistency in the accounting principle, concepts, conventions is not maintained then Common Size Statement becomes useless.

#### (d) Seasonal Fluctuation:

Common-Size Statement fails to convey proper records during seasonal fluctuations in various components of sales, assets liabilities etc. e.g. sales and closing stock significantly vary. Thus, the statement fails to supply the real information to the users of financial statements.

#### (e) Window Dressing:

Effect of window dressing in financial statements cannot be ignored and Common-Size Statements fail to supply the real positions of sales, assets, liabilities etc. due to the evil effects of window dressing appearing in the financial statements.

# (f) Qualitative Element:

Common-Size Statement fails to recognise the qualitative elements, e.g. quality of works, customer relations etc. while measuring the performance of a firm although the same should not be ignored.

# (g) Liquidity and Solvency Position:

Liquidity and solvency position cannot be measured by Common-Size Statement. It considers the percentage of increase or decrease in various components of sales, assets, liabilities etc. In other words it does not help to ascertain the Current Ratio, Liquid Ratio, Debt Equity Capital Ratio, Capital Gearing Ratio etc. which are applied in testing liquidity and solvency position of a firm.



# 3.12 Let's Sum-Up

Comparative Financial Statement Analysis is also called as Horizontal analysis. The Comparative Financial Statement provides information about two or more years' figures as well as any increase or decrease from the previous year's figure and it's percentage of increase or decrease. This kind of analysis helps in identifying the major improvements and weaknesses. For example, if net income of a particular year has decreased from its previous year, despite an increase in sales during the year, is a matter of serious concern. Comparative financial statement analysis in such situations helps to find out where costs have increased which has resulted in lower net income than the previous year.

# 3.13 Key Terms

- Comparative Balance Sheet
- Comparative Income Statement
- Common-Size Balance Sheet
- Common-Size Income Statement

#### 3.14 Self-Assessment Questions

(i) Write a brief note on comparative income statement.

Ans.

(ii) Explain common-size income statement.

Ans.





# **3.15 Further Readings**

- (i) Gupta S.K and Sharma R.K, Management Accounting, Kalyani Publishers, 2<sup>nd</sup> Edition, New Delhi
- (ii) Rao P.M., Financial Statement Analysis and Reporting, PHI, 1<sup>st</sup> Edition, New Delhi
- (iii) Arora, M.N, Cost and Management Accounting, Himalaya Publishing House, 3<sup>rd</sup> Edition, Mumbai

# **3.16 Model Questions**

(i) The following is the profit and loss account of Samir Auto Ltd. For the years 2014 and 2015. Make out a comparative Income Statement. Five your valuable analytical views and comments on profitability of the enterprise.

Particulars	31.3.2014	31.3.2015	Particulars	31.3.2014	31.3.2015
To cost of goods	40,000	50,000	By Sales	70,000	90,00
				2,00	
sold	3,000	3,300	Less: Returns	0	3,000
To Office Expenses	10,000	12,000		68,000	87,000
To Selling Expenses	700	700	By other		
				1,60	
To Interest Paid			Incomes:	0	1,800
				2,00	
To Loss on sale of	200	208	Interestand	0	2,000
fixed assets	10,000	13,000	Dividends		

To Income Tax	9,500	12,092	By discount	1,800		
To Net Profit	73,400	91,300	on Purchases	73,400	91,302	
			By Profit on			
			sale of land			
	I					



 (ii) From the following Balance Sheet of Samir Auto Ltd, for the years ended 31<sup>st</sup> Maarch, 2014 and 2015, prepare common-size balance sheet.

Liabilities	31.3.	31.3.	Assets	31.3.	31.3.
	2014	2015		2014	2015
Equity	3,00,000	4,95,000	Fixed Assets	3,60,000	5,25,000
Capital	1,50,000	2,25,000	(net)	60,000	75,000
Preferential	30,000	45,000	Stock	1,50,000	1,87,500
Capital Reserv	22,500	30,000	Debtors	30,000	90,000
es	75,000	75,000	Bills	15,000	18,000
Profit and	60,000	75,000	Receivable	60,000	79,500
Loss Accoun	30,000	37,500	Pre-paid	15,000	45,000
t	22,500	<u>37,50</u> 0	expenses		
Bank	6,90,000	10,20,000	Cash at bank	6,90,000	10,20,000
Overdra ft Credito rs Provision for Taxatio n Propos ed			Cash in Hand		
Dividends					

(iii) What do you mean by Common-Size statement? Briefly narrate the advantages and disadvantages of Common-size statement.

Elucidate the importance of Comparative Statement. Explain the advantages and disadvantages of the comparative statement
