COURSE 6

Block 1

UNIT-1

AN INTRODUCTION TO ANALYSIS OF FINANCIAL STATEMENT

Learning Objectives

After reading this chapter, students should be able to:

- 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

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 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 analyis:

(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 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.

1.12 Key terms

(i) Balance Sheet

(ii) Financial statement analysis

(iii) Stock Exchange

(iv) Financial ratios

1.13 Self-Assessment Questions

(i) Narrate the problems of financial statement analysis.

(ii) What are the sources of financial information?

1.14 Further Readings

(i) Gupta S.K and Sharma R.K, Management Accounting, Kalyani Publishers, 2nd Edition, New Delhi

(ii) Rao P.M., Financial Statement Analysis and Reporting, PHI, 1st Edition, New Delhi

(iii) Arora, M.N, Cost and Management Accounting, Himalaya Publishing House, 3rd Edition, Mumbai

1.15 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.

COURSE 6

BLOCK 1

UNIT-2

COMPARATIVE AND COMMON-SIZE STATEMENTS

Learning Objectives

After reading this chapter, students should be able to:

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

Structure

1.1 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.

1.2 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.

1.3 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.

1.4 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:

While interpreting Comparative Balance Sheet the interpreter is expected to study the following aspects:

(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 above-mentioned 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

Comparative Balance Sheets as on 31st March 2014 & 31st March 2015 (Amount in '000)

	31st March 2014	31st March 2015	**Increase / (Decrease)**	**% of increase / (decrease)**
Current Assets:				
Cash	Rs.500	Rs.600	Rs.100	20.00%
Accounts Receivables	Rs.2,000	Rs.3,000	Rs.1,000	50.00%
Inventory	Rs.1,500	Rs.2,500	Rs.1,000	66.67%
Total Current Assets	Rs.4,000	Rs.6,100	Rs.2,100	52.50%
Fixed Assets:				
Buildings	Rs.3,000	Rs.4,000	Rs.1,000	33.33%
Furniture & office equipments	Rs.1,000	Rs.1,500	Rs.500	50.00%
Total Fixed Assets	Rs.4,000	Rs.5,500	Rs.1,500	37.50%
Total Assets	**Rs.8,000**	**Rs.11,600**	**Rs.3,600**	**45.00%**
Liabilities:				
Current Liabilities:				
Accounts Payable	Rs.1,000	Rs.1,200	Rs.200	20.00%
Notes Payable	Rs.500	Rs.500	Rs.0	0.00%
Interest Payable	Rs.100	Rs.120	Rs.20	20.00%
Total Current Liabilities	Rs.1,600	Rs.1,820	Rs.220	13.75%
Shareholder's Equity:				
Common Stock	Rs.5,000	Rs.7,500	Rs.2,500	50.00%
Retained earnings	Rs.1,400	Rs.2,280	Rs.880	62.86%
Total Stockholder's equity	Rs.6,400	Rs.9,780	Rs.3,380	52.81%
Total Liabilities & Stockholder's equity	**Rs.8,000**	**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.

(3) 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

Comparative Income Statement as on 31st March 2014 & 31st March 2015 (Amount in '000)

	31st March 2014	**31st March 2015**	**Increase/ (Decrease)**	**% of increase / (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 expenses	Rs.200	Rs.300	Rs.100	50.00%
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 expenses	Rs.300	Rs.400	Rs.100	33.33%
Net income before taxes	Rs.1,000	Rs.1,250	Rs.250	25.00%
Less: Taxes at 30%	Rs.300	Rs.375	Rs.75	25.00%
Net Income after taxes	**Rs.700**	**Rs.875**	**Rs.175**	**25.00%**

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.

1.5 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.

1.6 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.

1.7 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.

(2) 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 (50,000×100/5,00,000)

1.8 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.

1.9 Types of Common-Size Statements:

(i) Common-Size Balance Sheet:

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 Rs.	Percentage
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

	31st March 2014	Percentage	31st March 2015	Percentage
Current Assets:				
Cash	Rs.500	6.25%	Rs.600	5.17%
Accounts Receivables	Rs.2,000	25%	Rs.3,000	25.86%
Inventory	Rs.1,500	18.75%	Rs.2,500	21.55%
Total Current Assets	Rs.4,000	50%	Rs.6,100	52.59%
Fixed Assets:				
Buildings	Rs.3,000	37.50%	Rs.4,000	34.48%
Furniture & office equipments	Rs.1,000	12.50%	Rs.1,500	12.93%
Total Fixed Assets	Rs.4,000	50%	Rs.5,500	47.41%
Total Assets	**Rs.8,000**	**100%**	**Rs.11,600**	**100%**
Liabilities:				
Current Liabilities:				
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 Liabilities	Rs.1,600	20%	Rs.1,820	15.69%
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 Stockholder's equity	Rs.6,400	80%	Rs.9,780	84.31%
Total Liabilities & Stockholder's equity	**Rs.8,000**	**100%**	**Rs.11,600**	**100%**

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.

Illustration: Common-size Income Statement as on 31st March 2014 & 31st March 2015 ***(Amount in '000)***

	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 expenses	Rs.400	5.71%	Rs.500	5.56%
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 30%	Rs.300	4.29%	Rs.375	4.17%
Net Income after taxes	**Rs.700**	**10.00%**	**Rs.875**	**9.72%**

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.

1.10 Advantages of Common-Size Statement

The advantages of Common-Size Statement are:

(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.

1.11 Limitations of Common-Size Statement

Common-Size Statement is not free from snags.

Some of them are:

(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.

1.12 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.

1.13 Key terms

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

1.14 Self-Assessment Questions

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

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(ii) Explain common-size income statement.

1.15 Further Readings

(i) Gupta S.K and Sharma R.K, Management Accounting, Kalyani Publishers, 2nd Edition, New Delhi

(ii) Rao P.M., Financial Statement Analysis and Reporting, PHI, 1st Edition, New Delhi

(iii) Arora, M.N, Cost and Management Accounting, Himalaya Publishing House, 3rd Edition, Mumbai

1.16 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 sold To Office Expenses To Selling Expenses To Interest Paid To Loss on sale of fixed assets	40,000 3,000 10,000 700 200 10,000	50,000 3,300 12,000 700 208 13,000	By Sales Less: Returns By other Incomes: Interest and Dividends	70,000 2,000 68,000 1,600 2,000	90,00 3,000 87,000 1,800 2,000

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

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

Liabilities	31.3. 2014	31.3. 2015	Assets	31.3. 2014	31.3. 2015
Equity Capital Preferential Capital Reserves Profit and Loss Account Bank Overdraft Creditors Provision for Taxation Proposed Dividends	3,00,000 1,50,000 30,000 22,500 75,000 60,000 30,000 22,500 6,90,000	4,95,000 2,25,000 45,000 30,000 75,000 75,000 37,500 37,500 10,20,000	Fixed Assets (net) Stock Debtors Bills Receivable Pre-paid expenses Cash at bank Cash in Hand	3,60,000 60,000 1,50,000 30,000 15,000 60,000 15,000 6,90,000	5,25,000 75,000 1,87,500 90,000 18,000 79,500 45,000 10,20,000

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

(iv) Elucidate the importance of Comparative Statement. Explain the advantages and disadvantages of Comparative Statement.