Financial statement analysis

What is a financial statement?

The term financial statement refers to statement of Changes in financial position, Statement of Retained Earnings, Balance Sheet, Profit and Loss Account, etc. But, generally, the financial statements include only two statements; they are profit and Loss Account and Balance Sheet. It is observed that the mere presentation of these statements does not serve the purpose of anybody in anyway. The importance of these statements lies in their analysis and interpretation. In the beginning, analysis was done only for extending credit, but now it is being used as most important function of Management Accountant for providing various useful information to many persons.

Some of the schedules are prepared and submitted along with the financial statements for meaningful presentation. Such schedules are schedule of fixed assets, schedule of debtors, schedule of creditors, schedule of investments and the like.

Nature of Financial Statements

Generally, financial statements are prepared in order to disclose the financial position of business concerns at a point of time and also operating results during the period under review. The interested parties of the financial statements are thinking that the values shown in the financial statements to be real and absolute. But, this is not correct understanding. The values shown in the financial statements never convey the current or economic values. The data shown in the financial statements are greatly affected by the following facts.

1. **Recorded Facts**: All the business transactions which are having financial character alone recorded in the books of accounts (Journals, Ledger and other Subsidiary Books). Such recorded information are used for preparing financial statements. After some gradual passage of time, these recorded information become historical in nature. Besides, the financial statements are showing results of the various transactions which are taken place at various dates.

There is no place for their current value in the financial statements which is neither justified nor logical. For example: If a plant and machinery is purchased in 2005 and another plant and machinery is purchased in 2010, then the total amount paid at both dates shall be shown under "*Plant and Machinery Account*" in the books. The purchasing power of money in 2005 is not the same in 2010. Hence, the recording the value of plant and machinery in the books of account is not valid and correct. Besides, the assets are shown in the Balance Sheet either on Straight Line Method or Written Down Value Method. Market value or replacement cost is not shown in the financial statement.

2. **Accounting Conventions**: There are four types of accounting conventions. They are convention of conservatism, convention of full disclosure, convention of consistency and convention of materiality. These are used for valuation of raw materials, stock of finished goods,

debtors and the like. Many companies does not follow same pattern of conventions throughout its life. Hence, the financial statements fail to satisfy the essential elements of comparison.

3. **Postulates**: There are some postulates and assumptions just like accounting concepts and conventions. Such postulates and assumptions are used for preparing. financial statements. In other words, the conventions used in financial statements are based on certain postulates. It is assumed that the purchasing power of money is constant for all the period. Hence, the management accountants are recording all the business transactions in rupee value on different dates without making any distinction between the rupee value of two dates.

4. **Personal Judgement**: Personal judgement plays a vital role in the preparation of financial records and financial statements. The management accountants may use their judgement in choosing the method of valuation of closing inventory, in calculating the provision for bad debts and in choosing the method of charging the depreciation of fixed assets. Likewise, the application of various accounting concepts and conventions depends upon the personal judgement of the management accountant. Therefore, different meaning and results can be obtained from the financial statements of the same company. Based on the different results, different recommendations may be provided for the growth and development of a business concern.

Features of Financial Statements

The important features of financial statements are as follows.

1. Financial Statements are prepared at the end of the accounting period.

2. Financial Statements disclose both facts and opinions.

3. Financial statements are prepared on the going concern value..

4. Financial statements are recorded facts of financial transactions based on historical cost.

5. Financial statements are greatly affected by personal judgement of the accountants.

Objectives of Financial Statements

The different types of people are using the financial statements. They need different types of information. Hence, the main objective of financial statements is fulfilling the needs of such people. Even though, some other objectives are briefly explained below.

1. To provide an accurate and reliable financial information about the resources and usage in a business unit within the stipulated time.

2. To provide overall changes made in the financial information relating to resources and usage for a particular period.

3. To provide accurate and reliable financial information relating to net changes made between resources and usage for a particular period arising out of business activities.

4. To provide financial information which are helping the top management for estimating earning potential of business.

Meaning of Analysis

Analysis means the process of splitting or broken up of the contents of financial statements into many parts for getting meaningful information at the maximum.

Meaning of Interpretation

Interpretation means explaining the meaning and significance of the rearranged and/or modified data of the financial statements.

Procedure for Analysis and Interpretation

To make an effective analysis and interpretation of financial statements, the following groundwork are required to be completed.

1. The objectives of financial statement analysis is the basis for the selection of techniques of analysis. Hence, the organization should decide the purpose of financial statement analysis.
2. The extent of interpretation is also decided to select right type of techniques of financial statement analysis.

3. The financial statements are prepared on certain assumptions, principles and practices which are ascertained to understand their significance.

4. Additional information required for the work of interpretation should be collected properly.

5. The collected data should be presented in a logical sequence by rearrangement of data.

6. Data should be analyzed for preparing comparative statement, common size statement, trend percentage, calculation of ratios and the like.

7. General market conditions and economic conditions are taken into consideration for analyzing and interpreting the collected facts.

8. Interpreted data and information should be presented in a suitable report form.

Objectives of Analysis and Interpretation

Many interested parties of financial statements are analyzed and interpreted according to their varied objectives. In spite of the variations in the objectives of analysis and interpretation by various classes of people, there are some common objectives of interpretation which are presented below.

1. To **examine the earning capacity and efficiency** of various business activities with the help of income statements.

2. To **measure the managerial efficiency** under various business situations.
3. To **estimate the performance evaluation** of different departments over a period of time.
4. To **measure short term and long term solvency position** of the business organization with the help of Balance Sheet.
5. To **examine the source of finance** and way of utilizing the available finance.
6. To **determine earning capacity** and future prospects of the business concern.
7. To **identify the way of utilizing fixed assets** and the role of fixed assets on maintaining the earning capacity of the business concern.
8. To **investigate the future potential** of the business concern.
9. To **compare operational efficiency** of similar concerns engaged in the same industry.
10. To **identify the growth trend** of the business organization.

Importance of Analysis and Interpretation

All the quantitative information i.e. financial accounting information are intelligibly analyzed and interpreted so that significant facts and relationship concerning various aspects of financial life of a business concern is known to everybody. In this way, various factors have increased the importance of the analysis and interpretation of financial statements.

1. Wrong and defective decisions are taken by the top management in the absence of analysis and interpretation.

2. Sometimes, hasty and intuitive decisions are also taken by the various responsible executives.

3. Everybody has limited experience in business activities. Hence, one can easily understand the complexities of business activities through analysis and interpretation.
4. If any decision is taken on the basis of intuition or conclusion derived, there is no meaning in decision and nobody understands the decision. In other words, if the decisions are based on scientific analysis and interpretation, everybody understands the decision very easily.
5. Analysis and interpretation are necessary to verify and examine the correctness and accuracy of the decisions already taken on the basis of intuition

Financial statement analysis (or financial analysis) is the process of reviewing and analyzing a company's financial statements to make better economic decisions. These statements include the income statement, balance sheet, statement of cash flows, and a statement of changes in equity. Financial statement analysis is a method or process involving specific techniques for evaluating risks, performance, financial health, and future prospects of an organization.

“Analyzing financial statements,” according to Metcalf and Titard, “is a process of evaluating the relationship between component parts of a financial statement to obtain a better understanding of a firm’s position and performance.”

In the words of Myers, “Financial statement analysis is largely a study of relationship among the various financial factors in a business as disclosed by a single set-of statements and a study of the trend of these factors as shown in a series of statements.”

Users of Financial Statement Analysis

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

- ***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.
- ***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
- ***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).
- ***Regulatory authorities***: If a company is publicly held, its financial statements are examined by the Securities and Exchange board to see if its statements conform to the various accounting standards.
- ***Others***:
- Bankers and financial institutions
- Employees.
- Government.
- Trade associations.
- Economists and researchers.
- Taxation authorities

Methods 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 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. 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:

- ***Liquidity ratios***. This is the most fundamentally important set of ratios, because they measure the ability of a company to remain in business.
- **Cash coverage ratio.** Shows the amount of cash available to pay interest.
- **Current ratio**. Measures the amount of liquidity available to pay for current liabilities.
- **Quick ratio**. The same as the current ratio, but does not include inventory.
- **Liquidity index**. Measures the amount of time required to convert assets into cash.
- ***Activity ratios***. These ratios are a strong indicator of the quality of management, since they reveal how well management is utilizing company resources.
- **Accounts payable turnover ratio.** Measures the speed with which a company pays its suppliers.
- **Accounts receivable turnover ratio.** Measures a company's ability to collect accounts receivable.
- **Fixed asset turnover ratio.** Measures a company's ability to generate sales from a certain base of fixed assets.
- **Inventory turnover ratio**. Measures the amount of inventory needed to support a given level of sales.
- **Sales to working capital ratio**. Shows the amount of working capital required to support a given amount of sales.
- **Working capital turnover ratio**. Measures a company's ability to generate sales from a certain base of working capital.
- ***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.
- **Debt to equity ratio.** Shows the extent to which management is willing to fund operations with debt, rather than equity.
- **Debt service coverage ratio**. Reveals the ability of a company to pay its debt obligations.
- **Fixed charge coverage**. Shows the ability of a company to pay for its fixed costs.

2. ***Profitability ratios*.** These ratios measure how well a company performs in generating a profit..

- **Breakeven point**. Reveals the sales level at which a company breaks even.
- **Contribution margin ratio**. Shows the profits left after variable costs are subtracted from sales.
- **Gross profit ratio.** Shows revenues minus the cost of goods sold, as a proportion of sales.

- **Margin of safety.** Calculates the amount by which sales must drop before a company reaches its breakeven point.
- **Net profit ratio**. Calculates the amount of profit after taxes and all expenses have been deducted from net sales.
- **Return on equity**. Shows company profit as a percentage of equity.
- **Return on net assets.** Shows company profits as a percentage of fixed assets and working capital.
- **Return on operating assets**. Shows company profit as percentage of assets utilized.

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:

- ***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.
- ***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.
- ***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.

Some of the others important limitations of financial analysis are, however, summed up as below:

- (i) It is only a study of interim reports

- (ii) Financial analysis is based upon only monetary information and non-monetary factors are ignored.

- (iii) It does not consider changes in price levels.

- (iv) As the financial statements are prepared on the basis of a going concern, it does not give exact position. Thus accounting concepts and conventions cause a serious limitation to financial analysis.

- (v) Changes in accounting procedure by a firm may often make financial analysis misleading.

- (vi) Analysis is only a means and not an end in itself. The analyst has to make interpretation and draw his own conclusions. Different people may interpret the same analysis in different ways.

Techniques to use to analyze your financial statements:

Trend analysis:

Trend analysis is also called time-series analysis. Trend analysis helps a firm's financial manager determine how the firm is likely to perform over time. Trend analysis is based on historical data from the firm's financial statements and forecasted data from the firm's pro forma, or forward-looking, financial statements.

One popular way of doing trend analysis is by using financial ratio analysis. If you calculate financial ratios for a business firm, you have to calculate at least two years of ratios in order for them to mean anything. Ratios are meaningless unless you have something to compare them to, in this case other years of data. Trend analysis is even more powerful if you have and use several years of financial ratios.

Common size financial statement analysis: Common size financial statement analysis is analyzing the balance sheet and income statement using percentages. All income statement line items are stated as a percentage of sales. All balance sheet line items are stated as a percentage of total assets. For example, on the income statement, every line item is divided by sales and on the balance sheet, every line item is divided by total assets. This type of analysis enables the financial manager to view the income statement and balance sheet in a percentage format which is easy to interpret.

Percentage Change Financial Statement Analysis: Percentage change financial statement analysis gets a little more complicated. When you use this form of analysis, you calculate growth rates for all income statement items and balance sheet accounts relative to a base year. This is a very powerful form of financial statement analysis. You can actually see how different income statement items and balance sheet accounts grew or declined relative to grows or declines in sales and total assets.

Benchmarking: Benchmarking is also called industry analysis. It involves comparing a company to other companies in the same industry in order to see how one company is doing financially compared to the industry. This type of analysis is very helpful to the financial manager as it helps to see if any financial adjustments need to be made.

Financial ratio analysis: are usually used for benchmarking analysis. Financial ratios for other companies can be obtained from a number of sources. Here is an excellent source of industry average ratios. In order to do benchmarking, you compare the ratios for one company to the ratios for other companies in the same industry. You have to be sure that the industry average ratios are calculated in the same way the ratios for your company are calculated when you do benchmarking.

Using these four financial statement analysis techniques help a financial manager know where a business firm is financially both internally and as compared to other firms in the industry. Together, they are powerful analysis tools that will help every business firm stay solvent and profitable.

Objectives of Financial Statement Analysis:

The major objectives of financial statement analysis are to provide decision makers information about a business enterprise for use in decision-making. Users of financial statement information are the decision-makers concerned with evaluating the economic situation of the firm and predicting its future course.

Financial statement analysis can be used by the different users and decision makers to achieve the following objectives:

1. Assessment of Past Performance and Current Position:

Past performance is often a good indicator of future performance. Therefore, an investor or creditor is interested in the trend of past sales, expenses, net income, cash flow and return on investment. These trends offer a means for judging management's past performance and are possible indicators of future performance.

Similarly, the analysis of current position indicates where the business stands today. For instance, the current position analysis will show the types of assets owned by a business enterprise and the different liabilities due against the enterprise. It will tell what the cash position is, how much debt the company has in relation to equity and how reasonable the inventories and receivables are.

2. Prediction of Net Income and Growth Prospects:

The financial statement analysis helps in predicting the earning prospects and growth rates in the earnings which are used by investors while comparing investment alternatives and other users interested in judging the earning potential of business enterprises. Investors also consider the risk or uncertainty associated with the expected return.

The decision makers are futuristic and are always concerned with the future. Financial statements which contain information on past performances are analyzed and interpreted as a basis for forecasting future rates of return and for assessing risk.

3. Prediction of Bankruptcy and Failure:

Financial statement analysis is a significant tool in predicting the bankruptcy and failure probability of business enterprises. After being aware about probable failure, both managers and investors can take preventive measures to avoid/minimise losses.

Corporate managements can effect changes in operating policy, reorganize financial structure or even go for voluntary liquidation to shorten the length of time losses.

In accounting and finance area, empirical studies conducted have suggested a set of financial ratios which can give early signal of corporate failure. Such a prediction model based on financial statement analysis is useful to managers, investors and creditors. Managers may use the ratios prediction model to assess the solvency position of their firms and thus can take appropriate corrective actions.

Investors and shareholders can use the model to make the optimum portfolio selection and to bring changes in the investment strategy in accordance with their investment goals. Similarly, creditors can apply the prediction model while evaluating the creditworthiness of business enterprises.

4. Loan Decision by Financial Institutions and Banks:

Financial statement analysis is used by financial institutions, loaning agencies, banks and others to make sound loan or credit decision. In this way, they can make proper allocation of credit among the different borrowers. Financial statement analysis helps in determining credit risk, deciding terms and conditions of loan if sanctioned, interest rate, maturity date etc.

However, objectives of financial statements analysis may be stated to bring out the significance of such analysis:

(i) To assess the earning capacity or profitability of the firm.

(ii) To assess the operational efficiency and managerial effectiveness.

(iii) To assess the short term as well as long term solvency position of the firm.

(iv) To identify the reasons for change in profitability and financial position of the firm.

(v) To make inter-firm comparison.

(vi) To make forecasts about future prospects of the firm.

(vii) To assess the progress of the firm over a period of time.

(viii) To help in decision making and control.

(ix) To guide or determine the dividend action.

(x) To provide important information for granting credit.

IMPORTANCE OF ANALYSIS OF FINANCIAL STATEMENT

Financial statement is prepared at a certain point of time according to established convention. These statements are prepared to suit the requirement of the proprietor. For measuring the financial soundness, efficiency, profitability and future prospects of the concern, it is necessary to analyze the financial statement. Following purposes are served by the Financial analysis: -

Help in Evaluating the operational efficiency of the Concern:- It is necessary to analyze the financial statement for matching the total expenses incurred in manufacturing, Advertising, selling and distribution of the finished goods and total financial expanses of the current year comparing with the total expanses of the previous year and evaluate the managerial efficiency of concern.

Help in Evaluating the short and long term financial position:- It is necessary to analyze the financial statement for comparing the current assets and current liabilities to evaluate the short term and long term financial soundness.

Help in calculating the profitability:- It is necessary to analyze the financial statement to know the gross profit and net profit.

Help in indicating the trend of achievements:- Analysis of financial statement helps in comparing the Financial position of previous year and also compare various expenses, purchases and sales growth, gross and net profit. Cost of goods sold, total value of assets and liabilities can be compare easily with the help of Analysis of financial statement.

Forecasting, budgeting and deciding future line of action:-The potential growth of the business can be predicts by the analysis of financial statement which helps in deciding future line of action. Comparisons of actual performance with target show all the shortcomings.

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)

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:

	₹	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 1:

The Balance Sheets of S & Co. and K& Co. are given as follows:

Balance Sheets

as on Dec.31, 2011

Liabilities	S & Co. ₹	K & Co. ₹
Preference Share Capital	1,20.000	1,60,000
Equity Share Capital	1,50,000	4,00,000
Reserve & Surpluses	14,000	18,000
Long-term Loans	1,15,000	1,30,000
Bills Payable	2,000	—
Sundry Creditors	12,000	4,000
Outstanding Expenses	15,000	6,000
Proposed Dividend	10,000	90,000
	4,38,000	8,08,000

Land and Building	80,000	1,23,000
Plant and Machinery	3,34,000	6,00,000
Temporary Investment	1,000	40,000
Inventories	10,000	25,000
Book–Debts	4,000	8,000
Prepaid Expenses	1,000	2,000
Cash and Blank Balances	8,000	10,000
	4,38,000	8,08,000

Compare the financial position of two companies with the help of common size balance sheet.

Solution :

Common-Size Balance Sheet
as on Dec. 31, 2011

	S & Co.		*K & Co.*	
	Amount ₹	%	*Amount* ₹	%
Fixed Assets				
Land and Building	80,000	18.26	1,23,000	15.22
Plant and Machinery	3,34,000	76.26	6,00,000	74.62
Total Fixed Assets	4,14,000	94.52	7,23,000	89.48
Current Assets				
Temporary Investments	1,000	0.23	40,000	4.95
Inventories	10.000	2.28	25.000	3.08
Book Debts	4,000	0.91	8,000	0.99
Prepaid Expenses	1,000	0.23	2,000	0.25
Cash and Bank Balance	8,000	1.83	10,000	1.25
Total Current Assets	24,000	5.48	85,000	10.52
Total Assets	4,38,000	100,00	8,08,000	100.00
Share Capital and Reserves				
Preference Share Capital	1,20,000	27.39	1,60,000	19.80
Equity Share Capital	1,50,000	34.25	4,00,000	49.50
Reserves and Surpluses	14,000	3.19	18,000	2.23
Total Capital & Reserves	2,84,000	64.83	5,78,000	71.53
Long–term Loans	1,15,000	26,25	1,30,000	16.09
Current Liabilities				
Bills Payable	2,000	0.46	—	—
Sundry Creditors	12,000	2.74	4.000	0.49
Outstanding Expenses	15,000	3.44	6,000	0.74
Proposed Dividend	10,000	2.28	90,000	11.15
	39,000	8.92	1,00,000	12.38
Total of Liability Side	4,38,000	100.00	8,08,000	100.00

Comments:

(1) An analysis of pattern of financing of both the companies shows that K &Co. is more traditionally financed as compared to S&Co. The former company has depended more on its own funds as is shown by balance sheet. Out of total investments, 71.53% of the funds are proprietor's funds and outsiders' funds account only for 28.47%.

In S & Co. proprietors' funds are 64.83% while outsiders' share is 35.17% which shows that this company has depended more upon outsiders funds. In the present day economic world,

generally, companies depend more on outsiders' funds. In this context both the companies have good financial planning but K& Co. is more financed on traditional lines.

(2) Both the companies are suffering from inadequacy of working capital. The percentage of current liabilities is more than the percentage of current assets in both the companies. The first company is suffering more from working capital position than the second company because current liabilities are more than current assets by 3.44% and this percentage is 1.86% in the case of second company.

(3) A close look at the balance sheets shows that investments in fixed assets have been financed from working capital in both the companies. In S & Co. fixed assets account for 94.52% of total assets while long- term funds account for 91.08% of total funds. In K& Co. fixed assets account for 89.48% whereas long term funds account for 87.62% of total funds Instead of using long-term funds for working capital purposes the companies have used working capital for purchasing fixed assets.

(4) Both the companies face working capital problem and immediate steps should be taken to issue more capital or raise long-term loans to raise working capital position.

(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 2:

Following are the Income Statements of a company for the years ending Dec., 31, 2010 and 2011:

	2010 (₹s '000)	2011 (₹n '000)
Sales	500	700
Miscellaneous Income	20	15
	520	715
Expenses:		
Cost of sales	325	510
Office expenses	20	25
Selling expenses	30	45
Interest	25	30
	400	610
Net Profit	120	105
	520	715

Solution :

Common-Size Income Statement
for the years ending Dec. 2010 and 2011

	2010		2011	
	(000) ₹	%	('000)	% ₹
Sales	500	100.00	700	100.00
Less: Cost of sales	325	65.00	510	72.86
Gross Profit	175	35.00	190	27.14
Operating Expenses:				
Office expenses	20	4.00	25	3.58
Selling expenses	30	6.00	45	6.42
Total Operating Expenses	50	10.00	70	10.00
Operating Profit	125	25.00	120	17.14
Miscellaneous Income	20	4.00	15	2.14
Total Income	145	29.00	135	19.28
Less: Non-operating expenses :				
Interest	25	5.00	30	4.28
Net Profit	120	24.00	105	15.00

Interpretation:

(1) The sales and gross profit has increased in absolute figures in 2011 as compared to 2010 but the percentage of gross profit to sales has gone down in 2011.

(2) The increase in cost of sales as a percentage of sales has brought the profitability from 35 to 27.14%.

(3) Operating expenses have remained the same in both the years but non-operating expenses have decreased as a percentage in 2011. A slight decrease in non-operating expenses in the latter year could not help to improve profits.

(4) Net profits have decreased both in absolute figures and as a percentage in 2011 as compared to 2010.

(5) The overall profitability has decreased in 2011 and the reason is a rise in cost of sales. The company should take immediate steps to control its cost of sales, otherwise the company will be in trouble.

Trend analysis : involves the collection of information from multiple time periods and plotting the information on a horizontal line for further review. The intent of this analysis is to spot actionable patterns in the presented information.

In business, trend analysis is typically used in two ways, which are as follows:

- *Revenue and cost analysis*. Revenue and cost information from a company's income statements can be arranged on a trend line for multiple reporting periods and examined for trends and inconsistencies. For example, a sudden spike in expense in one period followed by a sharp decline in the next period can indicate that an expense was booked twice in the first month. Thus, trend analysis is quite useful for examining preliminary financial statements for inaccuracies, to see if adjustments should be made before the statements are released for general use.
- *Investment analysis*. An investor can create a trend line of historical share prices, and use this information to predict future changes in the price of a stock. The trend line can be associated with other information for which a cause-and-effect relationship may exist, to see if the causal relationship can be used as a predictor of future stock prices. Trend analysis can also be used for the entire stock market, to detect signs of a impending change from a bull to a bear market, or the reverse.

When used internally (the revenue and cost analysis function), trend analysis is one of the most useful management tools available. The following are examples of this type of usage:

- Examine revenue patterns to see if sales are declining for certain products, customers, or sales regions.
- Examine expense report claims for evidence of fraudulent claims.
- Examine expense line items to see if there are any unusual expenditures in a reporting period that require additional investigation.
- Extend revenue and expense line items into the future for budgeting purposes, to estimate future results.

When trend analysis is being used to predict the future, keep in mind that the factors formerly impacting a data point may no longer be doing so to the same extent. This means that an extrapolation of a historical time series will not necessarily yield a valid prediction of the future.

Thus, a considerable amount of additional research should accompany trend analysis when using it to make predictions.

Comparative Statements:

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.

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) Current financial position and liquidity position.

(2) Long -term financial position.

(3) Profitability of the concern.

(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.

Illustration 1:

From the following information, prepare a comparative Balance Sheet of Deepti Ltd.:

Particulars	*31.3.2011 (₹)*	*31.3.2010 (₹)*
Equity share capital	50,00,000	50,00,000
Fixed assets	72,00,000	60,00,000
Reserves and surplus	12,00,000	10,00,000
Investments	10,00,000	10,00,000
Long-term loans	30,00,000	30,00,000
Current assets	21,00,000	30,00,000
Current liabilities	11,00,000	10,00,000

Solution :

Comparative Balance Sheet
as on 31.3.2010 and 31.3.2011

	2010 ₹	*2011* ₹	*Absolute Change* ₹	*Percentage Change (%)*
Assets				
Fixed assets	60,00,000	72,00,000	12,00,000	20
Investments	10,00,000	10,00,000	—	—
Current assets	30,00,000	21,00,000	(9,00,000)	(—) 30
Total assets	1,00,00,000	1,03,00,000	3,00,000	3
Liabilities and Capital				
Equity share capital	50,00,000	50,00,000	—	—
Reserves and surplus	10,00,000	12,00,000	2,00,000	20
Long-term loans	30,00,000	30,00,000	—	—
Current liabilities	10,00,000	11,00,000	1,00,000	10
	1,00,00,000	1,03,00,000	3,00,000	3

Illustration 2. Following are the Balance sheets of Rachana Ltd. as on 30th June 2010 and 2011 :

Liabilities	*2010* ₹	*2011* ₹	*Assets*	*2010* ₹	*2011* ₹
Share Capital	1,00,000	1,50,000	Fixed Assets	2,00,000	3,00,000
Reserves	1,00,000	1,00,000	Current Assets	50,000	80,000

(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.

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