Analysis of Financial Statements

Meaning of Financial Analysis

Objective

After going through this lesson, you shall be able to understand the following concepts.

- Meaning of Financial Analysis
- Objectives of Financial Analysis
- Methods of Financial Analysis
- Tools of Financial Analysis
- Significance of Financial Analysis
- Limitations of Financial Analysis

Meaning of Financial Analysis

Financial statements of a company represent the financial health and strength in terms of liquidity, profitability, stability and solvency. A critical and thorough examination of the financial statements of a company in order to understand the data contained in it, is known as '*Financial Analysis*'. Financial statements include both, income statements and balance sheet. Analysis of these statements helps in studying the relationship between the different financial items. It helps in identifying and understanding the financial strengths and weaknesses of a business. Financial Analysis not only include '*analysis*' but also the '*interpretation*' of financial data. Analysis and interpretation of financial statements stands together. The one without other is of no relevance.

Financial Analyses not only establish cause and effect relationship among the various financial items but also present the financial data in a proper manner. The main purpose of Analysis and Interpretation is to present the financial data in such a manner that is easily understandable and self-explanatory. This helps the accounting users to assess the financial performance of the business over a period of time. Moreover, Financial Analyses also facilitate the different accounting users in decision making and policy designing process.

Purposes/Objectives of Financial Analysis

The following are the objectives of the Financial analysis.

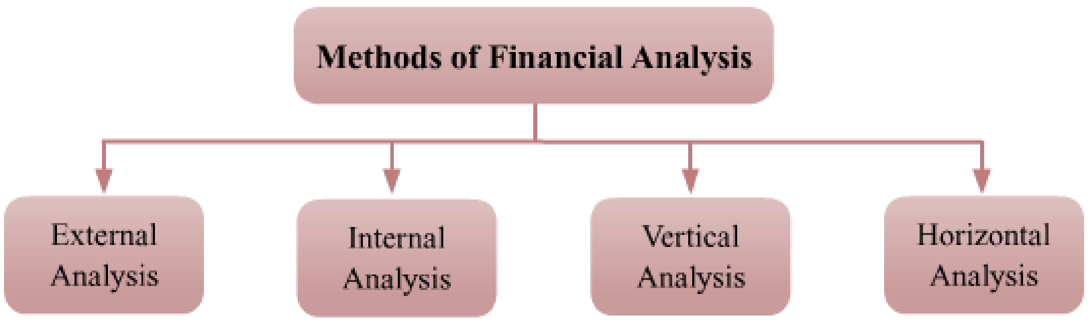
1. It enables the conduct of meaningful comparisons of financial data. It provides better and easy understanding of the changes in the financial data overtime.
2. It helps in designing effective plans and better execution of plans by enabling control and checks over the use of the financial resources.
3. Analysis of Financial Statements helps to know the earning capacity and profitability of a business firm. It also measures the efficiency of the business operations.
4. It also helps in assessing the solvency position of the firm. This implies that by studying the analysis of financial statements the ability of a firm to discharge its short-term as well as long-term obligations (debts).
5. It enables the intra-firm as well as inter-firm comparison.

6. It assists the management in decision making process, drafting various plans and to implement various cost effective measures.
7. It also helps in predicting the future trend and projected growth prospects of a business.

Methods of Financial Analysis

Analysis of financial statements can be done by any of the following methods.

a. External Analysis
b. Internal Analysis
c. Horizontal Analysis
d. Vertical Analysis



External Analysis

Analysis of financial statements by the external users is known as External Analysis. The external users include investors, creditors, suppliers, government agencies, etc. These users do not enjoy the direct access to the books and financial records of a company. Hence, they depend on the published reports, articles, magazines, government circulars, research papers, etc. to carry out their analysis.

Internal Analysis

Analysis of financial statements by the management and internal personnel is known as Internal Analysis. Unlike the external users, the internal users such as owners, management, employees, etc enjoy direct access to the financial records of a company. Generally, these users carry out financial analyses to judge the operational efficiency of the business and for effective decision making process.

Horizontal Analysis/Dynamic Analysis

It refers to the comparison of a financial item in the financial statements of one or more periods to its corresponding item in the ***base accounting period***. In other words, it is a comparison of financial items of different years (with the items of some selected base year). Its main purpose is to determine the change in an item during an accounting period. The change in the item is expressed either in absolute figures or in percentage or in both terms. It indicates growth or decline of the items of the financial statement. It is used for time series analysis and is also known as Dynamic Analysis. Statements containing such analysis are termed as *Comparative Financial Statements*.

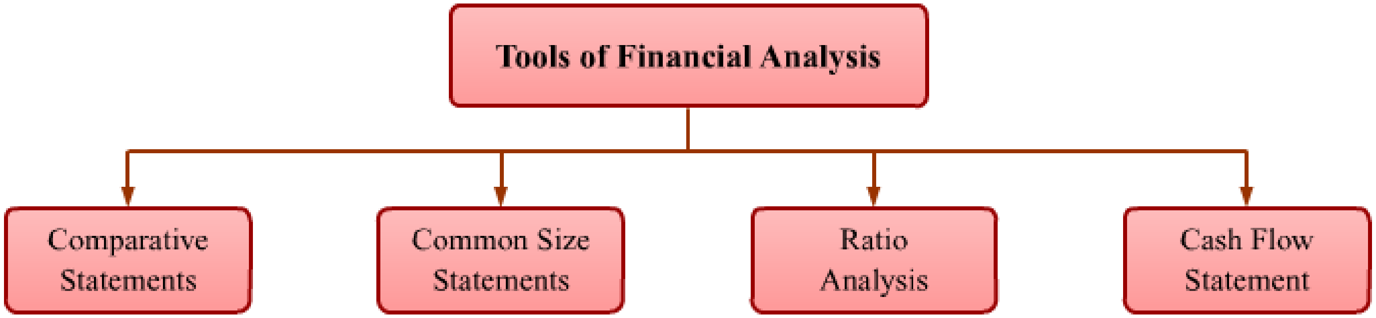
Vertical Analysis/Static Analysis

It refers to the comparison of items of the financial statement to a common item of the ***same accounting period***. Its purpose is to determine the proportion of the items to the common item of the same accounting period. The change in the item is expressed either in ratio or in percentage terms. It helps in predicting and determining the future relative proportion of an item to the common item. This analysis provides the inter-firm as well as intra-firm comparison. This analysis is used for cross-sectional analysis and is also known as Static Analysis. Statements containing such analysis are termed as *Common Size Statements*.

Difference between Horizontal Analysis and Vertical Analysis

Basis of Difference	Horizontal Analysis	Vertical Analysis
Meaning	It refers to the comparison of an item of the financial statement of one period or periods to its corresponding item of the base accounting period.	It refers to the comparison of item of the financial statement to the common item of the same accounting period.
Purpose	Its purpose is to determine the change in an item during an accounting period. The change in the item is expressed either in absolute figures or in percentage or in both terms.	Its purpose is to determine the proportion of item to the common item of the same accounting period. The change in the item is expressed either in ratio or in percentage terms.
Usefulness	It indicates growth or decline of the item.	It helps in predicting and determining the future relative proportion of an item to the common item.
Type of Data	It uses time series data (i.e. data of more than two years)	It uses cross-sectional data (i.e. data of one year)
Items	It compares the same item of different accounting periods.	It compares different items of the same accounting periods.
Reliability	It is more reliable, as the data of more than two accounting periods are used.	It is less reliable, as the data of a single accounting period is used.

Techniques/Tools of Financial Analysis



1. *Comparative Statements-* These statements depict the figures of two or more accounting years simultaneously that help to assess the profitability and financial position of a business. The Comparative Statements help us in analysing the trend of the financial position of the business. These financial statements enable comparisons of data of financial statements of two or more periods of a same enterprise or financial statements of two or more enterprises. These statements express the absolute change and percentage change in the financial items over a period of time. These statements uses horizontal analysis (dynamic analysis). The following are the commonly prepared Comparative Financial Statements.

- Comparative Balance Sheet
- Comparative Income Statement (or Statement of Profit and Loss)

2. *Common Size Statements*- These statements depict the relationship between various items of financial statements and some common items (such as Revenue from Operations and the Total of Balance Sheet) in percentage terms. In other words, various items of Statement of Profit and Loss such as Other Revenue, Cost of Materials Consumed, Purchases of Stock-in-Trade, Finance Costs, etc. are expressed in terms of percentage of Revenue from Operations. On the other hand, different items of Balance Sheet such as Shareholders' Funds, Non-Current Liabilities, Non-Current Assets, Current Assets, etc. are expressed in terms of percentage of Total of Balance Sheet. These percentage figures are easily comparable with that of the previous years' (i.e. inter-firm comparison) and with that of the figures of other firms in the same industry (i.e. inter-firm comparison) as well. The following are the commonly prepared Common Size Financial Statements.

- Common Size Balance Sheet
- Common Size Income Statement (or Statement of Profit and Loss)

3. *Ratio Analysis-* This technique depicts the relationship between various items of Balance Sheet and the Income Statements. It helps in ascertaining the profitability, operational efficiency, solvency, etc of a firm. The analysis expresses financial items in terms of percentage, fraction, proportion and as number of times. It enables budgetary controls by assessing the qualitative relationship among different financial variables. This analysis provides vital information to different accounting users regarding the financial position, viability and performance of a firm. It also facilitates decision making and policy designing process.

4. *Cash Flow Analysis-* This analysis is presented in the form of a statement showing inflows and outflows of cash and cash equivalents from operating, investing and financing activities of a company during a particular period of time. It helps in analysing the reasons of receipts and payments in cash and change in the cash balances during an accounting year in a company. It helps in depicting the cash position of a particular organisation on a particular date.

Significance of Analysis of Financial Statements

Financial analysis helps in determining the financial position of a company. The analysis of financial statements are done by different accounting users. While some of the accounting users are external such as creditors, government, tax authorities, investors, etc. (external users), whereas, some users are internal such as owners, management, employees, etc, (internal users). Thus, it can be said that the financial analysis caters the varying needs of different accounting users.

The following points explain the significance of the financial analysis to the various users.

1. *Management*- Analysis of financial statements helps the management in knowing different aspects of a business. It helps the management in drafting various business policies and facilitate them in planning and decision making process. It also helps the management in implementing various cost effective measures and control checks to eliminate the inefficiencies. Thus, financial analysis helps the management to have clear view of the business efficiency.

2. *Finance Manager*- Financial analysis enables the company to understand its financial position and financial vitality. It helps in knowing the earning capacity, profitability, solvency, stability and credit worthiness of the company. The finance manager is involved in making different financing policies and determining the actual performance of the company. With the help of the financial analysis, the finance manager take decisions whether to continue the existing policies, how to enhance efficiency of business operations, etc.

3. *Creditors*-With the help of the financial analysis, creditors can judge the ability of the business to discharge its all liabilities. Creditors are basically interested in knowing the credit worthiness and liquidity position of a business. Financial analysis helps the creditors to know the firm's capability to pay-off its debts over a period of time.

4. *Lenders*- Apart from judging the firm's ability to discharge its short-term debts on time, the financial analysis also helps in assessing the long-term solvency. Lenders use financial analysis to evaluate the risk involved in lending funds to the firm and to calculate the opportunity cost of the funds forwarded to the business.

5. *Investors and Potential Investors*- Investors and potential investors are those parties who either have invested or are planning to invest in the business of a firm. These parties are usually interested in knowing the profitability and efficiency of the business. Further, the financial analysis also helps the investors in evaluating the risk of investing by considering different investment opportunities.

6. *Employers*- The employers of the firm are basically interested in the timely payment of the wages and salaries. With the help of financial analysis they can judge the earnings and profitability of the business and can expect the reasonable hike or increment in their salaries and wages.

7. *Government*- Financial analysis enables the government to formulate various policy measures. It also helps the government in addressing the various macroeconomic problems such as unemployment, poverty, etc.

Limitations of Financial Analysis

The following points explain the various shortcomings of the financial analysis.

1. ***Ignores Changes in the Price level-*** The financial analysis fails to capture the change in price level. The figures of different years are taken on nominal values and not in real terms (i.e. not taking price change into considerations).

2. ***Misleading and Wrong Information-*** The financial analysis fails to reveal the change in the accounting procedures and practices. Consequently they may provide wrong and misleading information.

3. ***Interim and Final Picture-*** The financial analysis presents only the interim report and thereby provides incomplete information. They fail to provide the final and holistic picture.

4. ***Ignores Qualitative and Non-monetary Aspects-*** The financial analysis reveals only the monetary aspects. In other words, these analyses consider only that information that can be expressed only in monetary terms. These analyses fail to disclose managerial efficiency, growth prospects, and other non-operational efficiency of a business.

5. ***Accounting Concepts and Conventions-*** The financial analysis are based an accounting concepts and conventions. Therefore, the analysis and conclusions based on such analyses may not be reliable. For example, suppose an accountant lays an analyse by considering only the book-value of various items (i.e. according to the Going Concern Concept- valuing the items on the basis of their original costs). In this case, the conclusions drawn by him will not be realistic as the present market value of the items are ignored.

6. ***Involves Personal Biasness-*** The financial analysis reflects the personal biasness and personal value judgments of the accountants and experts involved. There are different techniques used by different personnel for charging depreciation (original cost or written-down value method) and also for inventory valuation. The use of different techniques by different people reduces the effectiveness of the financial analysis.

7. ***Unsuitable for Comparisons-*** Due to the involvement of personal value judgment, personal biasness and use of different techniques by different accountants, various types of comparisons such as inter-firm and intra-firm comparisons may not be possible and reliable.

Comparative Financial Statements

Objective

After going through this lesson, you shall be able to understand the following concepts.

- Meaning of Comparative Financial Statements
- Importance, Advantages and Disadvantages of Comparative Financial Statements
- Format of Comparative Balance Sheet
- Format of Comparative Income Statement

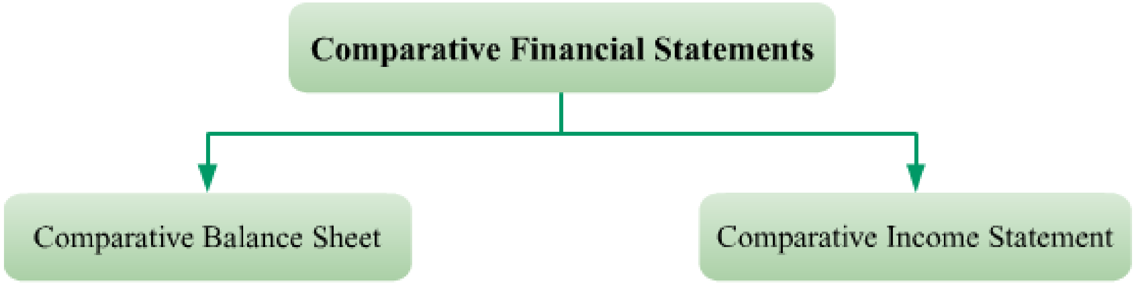
Introduction to Comparative Financial Statements

In the previous chapter, we learnt that the analysis of the financial statements is known as financial analysis. We also learnt about the importance of the financial analysis and various tools to conduct such financial analyses. Comparative Financial Statements is one of the many tools to analysis the financial statements of a company.

Definition

As the name suggests, Comparative Financial Statements involves a comparative analysis of various financial items recorded in the financial statements (Statement of Profit and Loss and Balance Sheet). It represents the financial items of two different accounting periods adjacent to each other and expresses any increase or decrease (in the monetary values of the financial items) both in the absolute as well as percentage terms. That is, these statements help the accounting users to evaluate and assess the financial progress in relative terms.In other words, these statements present the financial data in such a manner that it becomes very easy for the users to study and draw conclusions without any ambiguity. Moreover, Comparative Financial Statements help the users to conduct different kinds of comparisons such as intra-firm and inter-firm comparisons of financial statements over a period of time.

The following are the two Comparative Financial Statements that are commonly prepared.



1. Comparative Balance Sheet
2. Comparative Income Statements

Importance or Significance of Comparative Statements

1. ***Simple Presentation***- The Comparative Statements present the financial data in a simpler form. Moreover, the year-wise data of the same items are presented side-by-side, which not only makes the presentation clear but also enables easy comparisons (both intra-firm and inter-firm) conclusive.

2. ***Easy for Drawing Conclusion***- The presentation of comparative statement is so effective that it enables the analyst to draw conclusion quickly and easily and that too without any ambiguity.

3. ***Easy to Forecast***- The comparative analysis of profitability and operational efficiency of a business over a period of time helps in analysing the trend and also assists the management to forecast and draft various future plans and policy measures accordingly.

4. ***Easy Detection of Problems***- By comparing the financial data of two or more years, the financial management can easily detect the problems. While comparing the data, some items may have increased, while others have decreased or remained constant. The comparative analysis not only enables the management in locating the problems but also helps them to put various budgetary controls and corrective measures to check whether the current performance is aligned with that of the planned targets.

Advantages of Comparative Statements

a. The side-by-side presentation of financial items not only makes the presentation clear but also enables easy comparisons (both intra-firm and inter-firm) conclusive.
b. The presentation of comparative statement is so effective that it enables the analyst to draw conclusion quickly and easily and that too without any ambiguity
c. The comparative analysis of profitability and operational efficiency of a business over a period of time enables the management to forecast and draft various future plans.
d. The comparative analysis not only enables the management in locating the problems but also helps them to put various budgetary controls and corrective measures to check whether the current performance is aligned with that of the planned targets.

Disadvantages of Comparative Statements

a. The most important disadvantage of Comparative Statements is that they fail to capture the effects of price change.
b. Further, these statements lead to misleading conclusions in case of changes in the accounting policies and accounting practices over the period of study.
c. As these statements record the financial items at their original cost and not at their current market price, so they may lead to wrong and misleading conclusions regarding the profitability and efficiency of the business

I. Comparative Balance Sheet

A balance sheet that presents shareholders' funds, values of assets, etc. of two or more accounting periods adjacent to each other (side-by-side) is known as Comparative Balance Sheet. This statement facilitates comparisons of various financial items of two or more balance sheets of an organisation. Such balance sheets help the users to analyse different changes and to evaluate the current performance in relative to the past performances. The Comparative Balance Sheet also provides sufficient information to the accounting users to understand the financial data and also to predict the future trends.

Comparative Balance Sheet as explained by ***Prof. Foulka***, "*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*."

Format of Comparative Balance Sheet

The format of the Comparative Balance Sheet is explained diagrammatically below.

Comparative Balance Sheet

Particulars	Previous Year (Rs)	Current Year (Rs)	Absolute Change (Increase or Decrease) (Rs)	Percentage Change (Increase or Decrease) (%)
Various Assets and Liabilities are Recorded	Previous Year's figures	Current Year's figures	Net Increase or Decrease	Increase or Decrease in Percentage terms

Performa of Comparative Balance Sheet

Comparative Balance Sheet

as on…..

Particulars	Previous Year	Current Year	Absolute Change (Increase/Decrease) (Rs)	Percentage Change (Increase/Decrease) (%)
I. Equity and Liabilities				
1. Shareholders' Funds				
a. Equity Share Capital				
b. Preference Share Capital				
c. Reserves and Surplus				
2. Non-Current Liabilities				
a. Long-Term Borrowings				
i. Secured Loans				
ii. Unsecured Loans				
b. Other Long-Term Liabilities				
3. Current Liabilities				
a. Short-Term				

Borrowings b. Trade Payables c. Other Current Liabilities d. Short-Term Provisions				
Total	***	***	***	***
II. Assets 1. Non-Current Assets a. Fixed Assets i. Tangible Assets ii. Intangible Assets b. Non-Current Investments c. Long-Term Loans and Advances d. Other Non-Current Assets 2. Current Assets a. Inventories b. Trade Receivables c. Cash and Cash Equivalents d. Short-Term Loans and Advances e. Other Current Assets				
Total	♦♦♦	♦♦♦	♦♦♦	♦♦♦

The equality between (***) and (♦♦♦) ensures the arithmetical accuracy of the solution.

$$\text{Absolute Increase or Decrease} = \text{Current Years' Figure} - \text{Previous Years' Figure}$$

$$\text{Percentage Change} = \frac{\text{Absolute Change}}{\text{Previous Years' Figure}} \times 100$$

Example 1: From the following Balance Sheets of B2 Ltd., prepare a Comparative Balance Sheet as on March 31, 2012 and 2013.

Balance Sheet

as on March 31, 2012 and 2013

Particulars	Note No.	2012	2013
I. Equity and Liabilities			
1. Shareholders' Funds			
(a) Equity Share Capital		2,00,000	2,40,000
(b) 10% Preference Share Capital		1,00,000	1,00,000
(c) Reserves and Surplus		20,000	30,000
2. Non-Current Liabilities		1,50,000	2,00,000
3. Current Liabilities		80,000	70,000
Total		**5,50,000**	**6,40,000**
II. Assets			
1. Non-Current Assets			
(a) Fixed Assets		3,00,000	4,00,000
(b) Non-Current Investments		1,00,000	80,000
2. Current Assets		1,50,000	1,60,000
Total		**5,50,000**	**6,40,000**

Solution

Balance Sheet

as on March 31, 2012 and 2013

Particulars	2012	2013	Absolute Change (Rs)	Percentage Change (%)
I. Equity and Liabilities				
1. Shareholders' Funds				
(a) Equity Share Capital	2,00,000	2,40,000	40,000	20
(b) 10% Preference Share Capital	1,00,000	1,00,000	-	-
(c) Reserves and Surplus	20,000	30,000	10,000	50
2. Non-Current Liabilities	1,50,000	2,00,000	50,000	33.33
3. Current Liabilities	80,000	70,000	(10,000)	(12.5)
Total	**5,50,000**	**6,40,000**	**90,000**	**16.36**

II. Assets				
1. Non-Current Assets				
(a) Fixed Assets	3,00,000	4,00,000	1,00,000	33.33
(b) Non-Current Investments	1,00,000	80,000	(20,000)	(20
)2. Current Assets	1,50,000	1,60,000	10,000	6.67
Total	**5,50,000**	**6,40,000**	**90,000**	**16.36**

Working Note:

Absolute Change = Current Years' Figure (2013) – Previous Years' Figure (2012)

For example, Absolute Change in Equity Share Capital = 2,40,000 – 2,00,000 = 40,000

$$\text{Percentage Change} = \frac{\text{Absolute Change}}{\text{Previous Years' Figure}} \times 100$$

$$\text{For example, Percentage Change in Equity Share Capital} = \frac{40{,}000}{2{,}00{,}000} \times 100 = 20\%$$

Example 2: From the given below Balance Sheets of AKS Ltd., prepare a Comparative Balance Sheet as on March 31,2012 and 2013.

Particulars	Note No.	2012	2013
I. Equity and Liabilities			
1. Shareholders' Funds			
(a) Equity Share Capital		22,50,000	30,00,000
(b) Reserves and Surplus		6,00,000	4,50,000
2. Non-Current Liabilities			
(a) Long-Term Borrowing		9,00,000	13,50,000
3. Current Liabilities			
(a) Trade Payables (Creditors)		1,80,000	2,70,000
(b) Short-term provisions		1,20,000	1,80,000
Total		**40,50,000**	**52,50,000**
II. Assets			
1. Non-Current Assets			

(a) Fixed Assets			
(i) Tangible Assets		9,00,000	13,50,000
(ii) Intangible Assts		22,50,000	30,00,000
2. Current Assets			
(a) Inventories		2,25,000	1,80,000
(b) Trade Receivables		3,00,000	4,50,000
(c) Cash and Cash Equivalents		3,75,000	2,70,000
Total		**40,50,000**	**52,50,000**

Solution

Comparative Balance Sheet

as on March 31, 2012 and 2013

Particulars	2012	2013	Absolute Change (Rs)	Percentage Change (%)
I. Equity and Liabilities				
1. Shareholders' Funds				
(a) Equity Share Capital	22,50,000	30,00,000	7,50,000	33.33
(b) Reserves and Surplus	6,00,000	4,50,000	(1,50,000)	(25)
2. Non-Current Liabilities				
(a) Long-Term Borrowings	9,00,000	13,50,000	4,50,000	50
3. Current Liabilities				
(a) Trade Payables (Creditors)	1,80,000	2,70,000	90,000	50
(b) Short-Term Provisions	1,20,000	1,80,000	60,000	50
Total	**40,50,000**	**52,50,000**	**12,00,000**	**29.63**
II. Assets				
1. Non-Current Assets				
(a) Fixed Assets				
(i) Tangible Assets	9,00,000	13,50,000	4,50,000	50
(ii) Intangible Assets	22,50,000	30,00,000	7,50,000	33.33
2. Current Assets				
(a) Inventories	2,25,000	1,80,000	(45,000)	(20)
(b) Trade Receivables	3,00,000	4,50,000	1,50,000	50

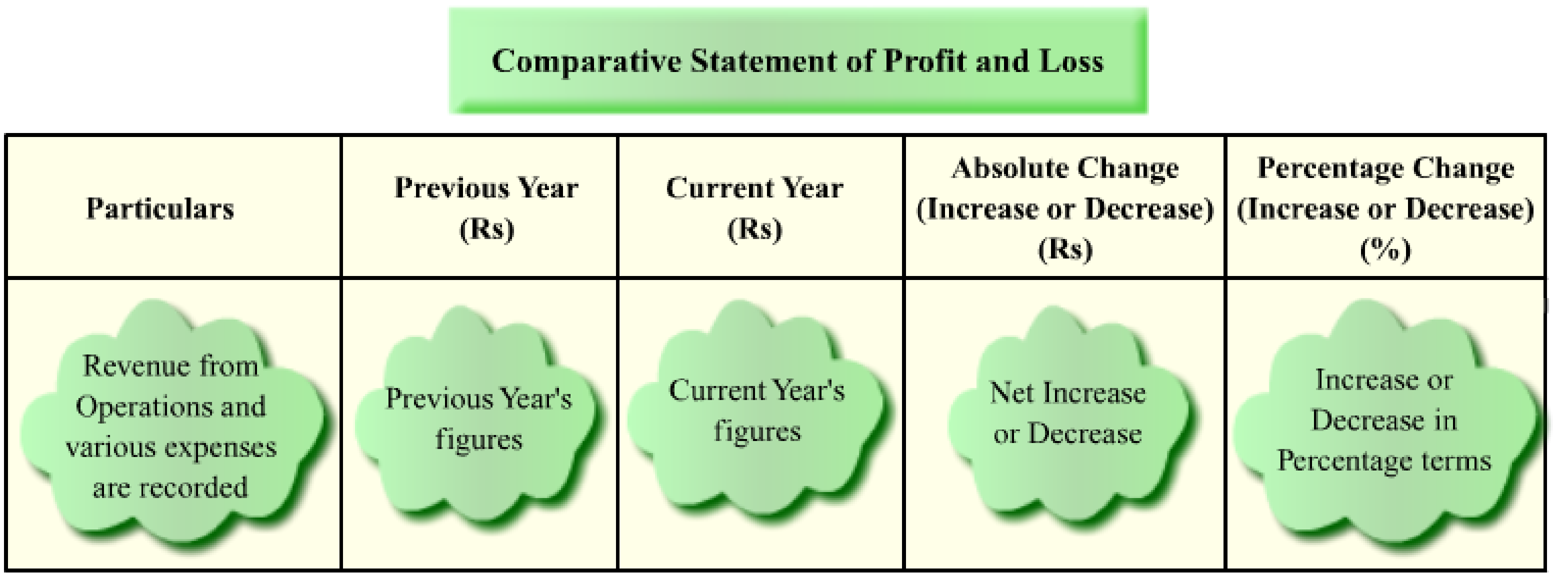
(c) Cash and Cash Equivalents	3,75,000	2,70,000	(1,05,000)	(28)
Total	**40,50,000**	**52,50,000**	**12,00,000**	**29.63**

II. Comparative Income Statements

A Comparative Income Statement presents total revenue earned and expenses incurred by a business during an accounting period in correspondence to the revenue and expenses incurred in the previous accounting period.That means, the revenues and expenses of two different accounting periods are presented in a comparable form (side-by-side).

Format of Comparative Income Statement

A comparative income statement like comparative balance sheet also has five columns. The format of the Comparative Income Statement is explained diagrammatically below.



Performa of Comparative Statement of Profit and Loss

Comparative Statement of Profit and Loss

Particulars	Previous Year	Current Year	Absolute Change (Rs)	Percentage Change (%)
I. Revenue from operations				

II. Other Incomes				
Total Revenue (I + II) *Less*: Expenses Cost of Material Consumed Purchase of Stock-in-Trade Changes in Inventories of Finished Goods Work-in-Progress and Stock-in-Trade Employees Benefit Expenses Finance Costs Depreciation and Amortisation Expenses Other Expenses				
Profit before Tax *Less*: Tax				
Profit after Tax				

Example 1: From the following Statements of Profit and Loss of Fish Ltd., prepare a Comparative Statement of Profit and Loss for the year ended March 31, 2012 and 2013.

Particulars	Note No.	2012	2013
Revenue from Operation		32,00,000	40,00,000
Cost of Material Consumed		16,00,000	20,00,000
Other Expenses		4,00,000	2,00,000
Tax Rate 35%			

Solution

Comparative Statement of Profit and Loss

for the year ended March 31, 2012 and 2013

Particulars	2012	2013	Absolute Change (Rs)	Percentage Change (%)
Revenue from Operations	32,00,000	40,00,000	8,00,000	25
Less: Expenses				

Cost of Material Consumed	16,00,000	20,00,000	4,00,000	25
Other Expenses	4,00,000	2,00,000	(2,00,000)	(50)
Profit before Tax	12,00,000	18,00,000	6,00,000	50
Less: Tax @ 35%	4,20,000	6,30,000	2,10,000	50
Profit after Tax	7,80,000	11,70,000	3,90,000	50

Working Notes:

Absolute Change = Current Years' Figure – Previous Years' Figure

$$\text{Percentage Change} = \frac{\text{Absolute Change}}{\text{Previous Years' Balance}} \times 100$$

Example 2: From the following Statements of Profit and Loss, prepare Comparative Statement of Profit and Loss for the year ended March 31, 2012 and 2013.

Statement of Profit and Loss

Particulars	**Note No.**	**2012**	**2013**
Revenue from Operations		5,00,000	7,50,000
Other Income		2,00,000	1,80,000
Employee Benefit Expenses		1,50,000	2,00,000
Stock-in-Trade		80,000	60,000
Depreciation		1,00,000	1,50,000
Tax Rate 50%			

Solution

Comparative Statement of Profit and Loss
for the year ended March 31, 2012 and 2013

Particulars	**2012**	**2013**	**Absolute Change (Rs)**	**Percentage Change (%)**
Revenue from Operations	5,00,000	7,50,000	2,50,000	50
Other Income	2,00,000	1,80,000	(20,000)	(10)

Total Revenue	7,00,000	9,30,000	2,30,000	32.86
Less: Expenses:				
Employee Benefit Expenses	1,50,000	2,00,000	50,000	33.33
Stock-in-Trade	80,000	60,000	(20,000)	(25)
Depreciation Expenses	1,00,000	1,50,000	50,000	50
Profit before Tax	3,70,000	5,20,000	1,50,000	40.54
Less: Tax @ 50%	1,85,000	2,60,000	75,000	40.54
Profit after Tax	1,85,000	2,60,000	75,000	40.54

Common Size Statements

Objective

After going through this lesson, you shall be able to understand the following concepts.

- Meaning of Common Size Statements
- Advantages and Disadvantages of Common Size Statements
- Format of Common Size Balance Sheet
- Format of Common Size Income Statement

Introduction to Common Size Statements

In the previous chapter, we learnt about the Comparative Financial Statements, where the data of the same financial items are placed adjacently (side-by-side) and are compared. Besides, Comparative Financial Statements, there are many other tools of financial analysis such as, Common Size Statements, Trend Analysis and Ratio Analysis. In this chapter, we are going to understand the meaning, importance and procedures of preparing Common Size Statements and Trend Analysis.

Common Size Statements are the statements that depicts the relationship between various items of financial statements with some common base in percentage terms. The Common Size Statements consist of two types of statements namely, Common Size Income Statements (or Statement of Profit and Loss) and Common Size Balance Sheet. In case of Common Size Income Statements, the financial items of Statement of Profit and Loss are expressed in terms of percentage of Revenue from Operations. On the other hand, in case of Common Size Balance Sheet, the financial items of Balance Sheet are expressed in terms of percentage of Total of Balance Sheet. That is, in other words, the common base is Revenue from Operations (in case of Common Size Income Statements) and Total of Balance Sheet (in case of Common Size Balance Sheet). These percentage figures are easily comparable with that of the past years' (i.e. inter-firm comparison) and with that of the figures of other firms in the same industry (i.e. inter-firm comparison) as well. The analyses based on these statements are commonly known as *Vertical Analysis*.

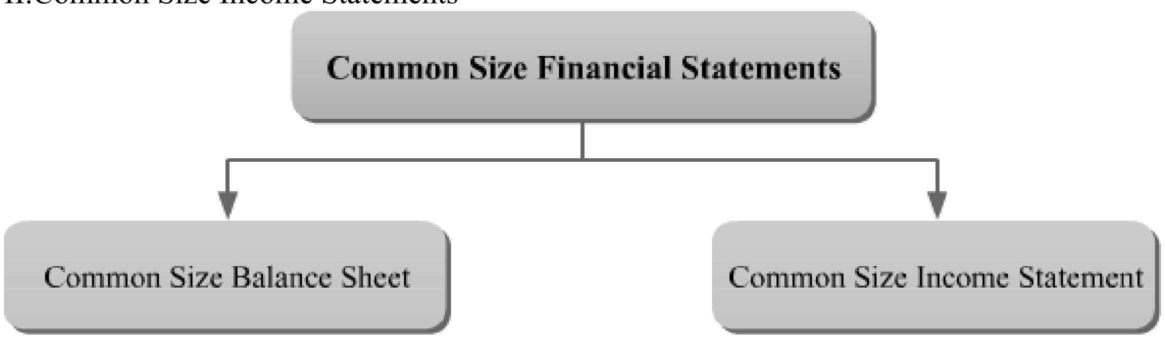
Advantages of Common Size Statements

a. It helps in ascertaining the ratio of each item to a common item (Revenue from Operations and Total of Balance Sheet) of the financial statements in terms of percentage.
b. It also helps in analysing the impact of each item on the operation and efficiency of the business.
c. It enables comparisons such as, inter-firm and intra-firm comparisons of liquidity, solvency and efficiency.

Disadvantages of Common Size Statements

a. These statements determine the proportion of each item to a common item rather than comparing the figures of the same item over a period of time.
b. These statements enable only cross-sectional analysis of financial data.

Types of Common Size Statements
The following are commonly prepared Common Size Statements.
I. Common Size Balance Sheet
II.Common Size Income Statements



I. Common Size Balance Sheet

A Balance Sheet in which assets and liabilities are represented individually as a percentage of a common base is known as *Common Size Balance Sheet*. In this statement, the common base is taken as the Total of Balance Sheet (i.e. total of equity and liabilities or total of assets). The sum total of the Balance Sheet in percentage terms is assumed to be 100% and all equity and liabilities and assets are expressed as a percentage of this total. For example, if Machinery is Rs 20,000 and the Total of Balance Sheet is Rs 4,00,000, then Machinery is expressed as 5% of the Total of Balance Sheet

$$\left(\text{i.e., } \frac{\text{Machinery}}{\text{Total of Balance Sheet}} = \frac{20,000}{4,00,000} = 5\%\right).$$

Format of Common Size Balance Sheet

A Common Size Balance Sheet consists of the following five columns.

Common Size Balance Sheet

Particulars	Absolute Amount		Percentage of Balance Sheet Total	
	Previous Year (Rs)	Current Year (Rs)	Previous Year (%)	Current Year (%)
Various Assets and Liabilities are recorded	Previous Year's Absolute Amount	Current Year's Absolute Amount	Percentage Share of Previous Year's Items	Percentage Share of Current Year's Items

Common Size Balance Sheet

as on…..

Particulars	Note No.	Absolute Amount		Percentage of Balance Sheet Total	
		Previous Year (Rs)	Current Year (Rs)	Previous Year (%)	Current Year (%)
I. Equity and Liabilities					
1. Shareholders' Funds					
a. Equity Share Capital					
b. Preference Share Capital					
c. Reserves and Surplus					
2. Non-Current Liabilities					
a. Long-Term Borrowings					
i. Secured Loans					
ii. Unsecured Loans					
b. Other Long-Term Liabilities					
3. Current Liabilities					
a. Short-Term Borrowings					
b. Trade Payables					
c. Other Current Liabilities					

d. Short-Term provisions					
Total					
II. Assets 1. Non-Current Assets a. Fixed Assets i. Tangible Assets ii. Intangible Assets b. Non-Current Investments c. Long-Term Loans and Advances d. Other Non-Current Assets 2. Current Assets a. Inventories b. Trade Receivables c. Cash and Cash Equivalents d. Short-Term Loans and Advances e. Other Current Assets					
Total					

$$\text{Previous Year (Percentage)} = \frac{\text{Previous Year's Absolute Figure}}{\text{Total of Balance Sheet of Previous Year}} \times 100$$

$$\text{Current Year (Percentage)} = \frac{\text{Current Year's Absolute Figure}}{\text{Total of Balance Sheet of Current Year}} \times 100$$

Preparation of Common Size Balance Sheet

Step 1: Title of the Common Size Statement, i.e. ‘Common Size Balance Sheet’ is written at the top of the statement.
Step 2: In the ‘Particulars’ column, the various items of the Balance Sheet are shown under the headings of ‘Equity and Liabilities’ and ‘Assets’.
Step 3: In the ‘Absolute Amount’ column, amount of the items are shown in their respective ‘Year’ column to which they belong.
Step 4: The Equity and Liabilities and Assets are totalled and are shown separately for each year.
Step 5: In the ‘Percentage’ column, the percentage of each item in comparison to the Total of Balance Sheet are shown. The percentage share of each item is calculated by the help of the following formula.

$$\text{Previous Year (Percentage)} = \frac{\text{Previous Year's Absolute Figure}}{\text{Total of Balance Sheet of Previous Year}} \times 100$$

$$\text{Current Year (Percentage)} = \frac{\text{Current Year's Absolute Figure}}{\text{Total of Balance Sheet of Current Year}} \times 100$$

***Example 1*: Prepare Common Size Balance Sheet from the following data.

Particulars	Note No.	2012	2013
I. Equity and Liabilities			
1. Shareholders' Funds			
(a) Equity Share Capital		4,00,000	6,00,000
(b) Reserves and Surplus		1,00,000	1,50,000
2. Non-Current Liabilities			
(a) Long-Term Borrowings		3,00,000	3,20,000
3. Current Liabilities			
(a) Trade Payables		2,00,000	2,50,000
Total		**10,00,000**	**13,20,000**
II. Assets			
1. Non-Current Assets			
(a) Fixed Assets			
(i) Tangible Assets		5,00,000	6,75,000
(ii) Intangible Assets		1,00,000	1,20,000
(b) Non-Current Investments		1,50,000	2,00,000
2. Current Assets		2,50,000	3,25,000
Total		**10,00,000**	**13,20,000**

Solution

Common Size Balance Sheet

as on….

Particulars	Note No.	Absolute Amount		Percentage of Balance Sheet Total	
		2012 (Rs)	2013 (Rs)	2012 (%)	2013 (%)
I. Equity and Liabilities					

1. Shareholders' Funds					
(a) Equity Share Capital		4,00,000	6,00,000	40	45.45
(b) Reserves and Surplus		1,00,000	1,50,000	10	11.36
2. Non-Current Liabilities					
(a) Long-Term Borrowings		3,00,000	3,20,000	30	24.24
3. Current Liabilities					
(a) Trade Payables		2,00,000	2,50,000	20	18.94
Total		**10,00,000**	**13,20,000**	**100**	**100**
II. Assets					
1. Non-Current Assets					
(a) Fixed Assets					
(i) Tangible Assets		5,00,000	6,75,000	50	51.14
(ii) Intangible Assets		1,00,000	1,20,000	10	9.09
(b) Non-Current Investments		1,50,000	2,00,000	15	15.15
2. Current Assets		2,50,000	3,25,000	25	24.62
Total		**10,00,000**	**13,20,000**	**100**	**100**

Working Note:

$$\text{Percentage (Previous Year)} = \frac{\text{Previous Year Absolute Figure}}{\text{Balance Sheet Total of Previous Year}} \times 100$$

$$\text{Percentage (Current Year)} = \frac{\text{Current Year Absolute Figure}}{\text{Balance Sheet Total of Current Year}} \times 100$$

For example,

$$\text{Percentage of Equity Share Capital (Previous Year)} = \frac{4,00,000}{10,00,000} \times 100 = 40\%$$

$$\text{Percentage of Equity Share Capital (Current Year)} = \frac{6,00,000}{13,20,000} \times 100 = 45.45\%$$

***Example 2*:** Prepare Common Size Balance Sheet of Rambo Ltd. as on March 31, 2012 and 2013, as per Revised Schedule VI.

Rambo Ltd.

Balance Sheet
as at 31 March 2012 and 2013

Particulars	Note No.	2012	2013
I. Equity and Liabilities			
1. Shareholders' Funds			
(a) Equity Share Capital		2,00,000	3,00,000
(b) Reserves and Surplus		3,00,000	4,00,000
2. Non-Current Liabilities			
(a) Long-Term Borrowings		5,00,000	3,00,000
3. Current Liabilities			
(a) Trade Payables		1,50,000	2,00,000
(b) Short-Term Provision		50,000	3,00,000
Total		**12,00,000**	**15,00,000**
II. Assets			
1. Non-Current Assets			
(a) Fixed Assets			
(i) Tangible Assets		4,00,000	6,00,000
(b) Non-Current Investments		2,00,000	3,00,000
2. Current Assets			
Trade Receivables		5,00,000	4,00,000
Cash and Cash Equivalent		1,00,000	2,00,000
Total		**12,00,000**	**15,00,000**

Solution

Rambo Ltd.
Balance Sheet
as on 31 March 2012 and 2013

Particulars	Note No.	Absolute Amount		Percentage of Balance Sheet Total	
		2012 (Rs)	2013 (Rs)	2012 (%)	2013 (%)
I. Equity and Liabilities					
1. Shareholders' Funds					

(a) Equity Share Capital		2,00,000	3,00,000	16.67	20
(b) Reserve and Surplus		3,00,000	4,00,000	25	26.67
2. Non-Current Liabilities					
(a) Long term borrowings		5,00,000	3,00,000	41.67	20
3. Current Liabilities					
(a) Trade Payable		1,50,000	2,00,000	12.50	13.33
(b)Short Term Provision		50,000	3,00,000	4.17	20
Total		**12,00,000**	**15,00,000**	**100**	**100**
II. Assets					
1. Non-Current Assets					
(a) Fixed Assets					
(i) Tangible Assets		4,00,000	6,00,000	33.33	40
(b) Non-Current Investments		2,00,000	3,00,000	16.67	20
2. Current Assets					
Trade and Receivable		5,00,000	4,00,000	41.67	26.67
Cash and Cash Equivalent		1,00,000	2,00,000	8.33	13.33
Total		**12,00,000**	**15,00,000**	**100**	**100**

II. Common Size Income Statement

Common Size Income Statement is defined as an income statement in which all the items of revenues and expenses are expressed as a percentage of Revenue from Operations as the common base. The figure of Revenue from Operations is assumed to be 100 and all revenues and expenses items are expressed in percentage terms as a proportion of Revenue from Operations.

Format of Common Size Income Statement

A Common Size Income Statement consists of the following five columns.

Common Size Statement of Profit and Loss

Particulars	Absolute Amount		Percentage of Revenue from Operations	
	Previous Year (Rs)	Current Year (Rs)	Previous Year (%)	Current Year (%)
Revenue from Operations and various expenses are recorded	Previous Year's Absolute Amount	Current Year's Absolute Amount	Percentage Share of Previous Year's Items	Percentage Share of Current Year's Items

Common Size Statement of Profit and Loss

for the year ended...

Particulars	Absolute Amount		Percentage of Revenue from Operations	
	Previous Year (Rs)	Current Year (Rs)	Previous Year (%)	Current Year (%)
I. Revenue from Operations				
II. Other Income				
Total Revenue (I + II)				
Less: Expenses				
Cost of Material Consumed				
Purchase of Stock-in-Trade				
Changes in Inventories of Finished Goods,				
Work-in-Progress and Stock-in-Trade				
Employees Benefit Expenses				
Finance Costs				
Depreciation and Amortization Expenses				
Other Expenses				

Profit before Tax				
Less: Tax				
Profit after Tax				

Preparation of Common Size Statement of Profit and Loss

Step 1: Title of the Common Size Statement, i.e. 'Common Size Statement of Profit and Loss' is written at the top of the statement.
Step 2: In the 'Particulars' column, the various items of Statement of Profit and Loss are shown under their respective heads.
Step 3: In the 'Absolute Amount' column, amount of the items are shown in their respective 'Year' column to which they belong.
Step 4: In the 'Percentage' column, the percentage of each item in comparison to the Revenue from Operations are shown. The percentage share of each item is calculated by the help of the following formula.

$$\text{Percentage (Previous Year)} = \frac{\text{Previous Year Absolute Figure}}{\text{Revenue from Operations of Previous Year}} \times 100$$

$$\text{Percentage (Current Year)} = \frac{\text{Current Year Absolute Figure}}{\text{Revenue from Operations of Current Year}} \times 100$$

***Example 1*:** Prepare a Common Size Statement of Profit and Loss from the given below data.

Particulars	2011 (Rs)	2012 (Rs)
Revenue from Operations	1,00,000	1,25,000
Cost of Material Consumed	65,000	80,000
Employee Benefit Expenses	6,000	10,000
Other Expenses	7,000	9,000
Other Income	12,000	15,000
Tax Rate 35%	40%	40%

Solution

Common Size Statement of Profit and Loss
for the year ended March 31, 2011 and 2012

Particulars	Absolute Amount		Percentage of Revenue from Operations	
	2011 (Rs)	**2012 (Rs)**	**2011 (%)**	**2012 (%)**

I. Revenue from Operations	1,00,000	1,25,000	100	100
II. Other Income	12,000	15,000	12	12
Total Revenue (I + II)	1,12,000	1,40,000	112	112
Less: Expenses:				
Cost of Material Consumed	65,000	80,000	65	64
Employees Benefit cost	6,000	10,000	6	8
Other Expenses	7,000	9,000	7	7.2
Profit before Tax	34,000	41,000	34	32.8
Less: Tax @ 40%	13,600	16,400	13.6	13.12
Profit after Tax	20,400	24,600	20.4	19.68

Working Note:

$$\text{Percentage (Previous Year)} = \frac{\text{Previous Year Absolute Figure}}{\text{Revenue from Operations of Previous Year}} \times 100$$

$$\text{Percentage (Current Year)} = \frac{\text{Current Year Absolute Figure}}{\text{Revenue from Operations of Current Year}} \times 100$$

For example,

$$\text{Percentage of Other Income (Previous Year)} = \frac{12{,}000}{1{,}00{,}000} \times 100 = 12\%$$

$$\text{Percentage of Other Income (Current Year)} = \frac{15{,}000}{1{,}25{,}000} \times 100 = 12\%$$

Example 2: Prepare a Common Size Statement of Profit and Loss for Rocky Ltd. from the data given below.

Particulars	**2011 (Rs)**	**2012 (Rs)**
Revenue from Operations	4,00,000	5,00,000
Purchases	2,00,000	3,00,000
Depreciation and Amortisation Expenses	20,000	30,000
Changes in Inventories of Finished Goods and Work-in-Progress	50,000	80,000

Finance Costs	20,000	40,000
Tax Rate	50%	60%

Solution

Rocky Ltd.

Common Size Statement of Profit and Loss

Particulars	**Absolute Amount**		**Percentage of Revenue from Operations**	
	2011 (Rs)	**2012 (Rs)**	**2011 (%)**	**2012 (%)**
I. Revenue from Operations	4,00,000	5,00,000	100	100
Less: Expenses				
Purchase of Stock-in-Trade	2,00,000	3,00,000	50	60
Changes in Inventories to Finished Goods and Work-in-Progress	50,000	80,000	12.5	16
Finance Costs	20,000	40,000	5	8
Depreciation and Amortisation Expenses	20,000	30,000	5	6
Profit before Tax	1,10,000	50,000	27.50	10
Less: Tax	55,000	30,000	13.75	6
Profit after Tax	55,000	20,000	13.75	4

Topics

- Meaning of Financial Analysis
- Comparative Financial Statements
- Common Size Statements