



12128CH04

4

Analysis of Financial Statements

You have learnt about the financial statements (Income Statement and Balance Sheet) of companies. Basically, these are summarised financial reports which provide the operating results and financial position of companies, and the detailed information contained therein is useful for assessing the operational efficiency and financial soundness of a company. This requires proper analysis and interpretation of such information for which a number of techniques (tools) have been developed by financial experts. In this chapter we will have an overview of these techniques.

4.1 Meaning of Analysis of Financial Statements

The process of critical evaluation of the financial information contained in the financial statements in order to understand and make decisions regarding the operations of the firm is called 'Financial Statement Analysis'. It is basically a study of relationship among various financial facts and figures as given in a set of financial statements, and the interpretation thereof to gain an insight into the profitability and operational efficiency of the firm to assess its financial health and future prospects.

The term 'financial analysis' includes both 'analysis and interpretation'. The term analysis means simplification of financial data by methodical classification given in the financial statements. Interpretation means explaining the meaning and significance of the data. These two are complimentary to each other. Analysis is useless

LEARNING OBJECTIVES

After studying this chapter, you will be able to :

- explain the nature and significance of financial analysis;
- identify the objectives of financial analysis;
- describe the various tools of financial analysis;
- state the limitations of financial analysis;
- prepare comparative and common size statements and interpret the data given therein; and
- calculate the trend percentages and interpret them.

used most efficiently and that the firm's financial condition is sound. Financial analysis helps the management in measuring the success of the company's operations, appraising the individual's performance and evaluating the system of internal control.

- (c) *Trade payables:* Trade payables, through an analysis of financial statements, appraises not only the ability of the company to meet its short-term obligations, but also judges the probability of its continued ability to meet all its financial obligations in future. Trade payables are particularly interested in the firm's ability to meet their claims over a very short period of time. Their analysis will, therefore, evaluate the firm's liquidity position.
- (d) *Lenders:* Suppliers of long-term debt are concerned with the firm's long-term solvency and survival. They analyse the firm's profitability over a period of time, its ability to generate cash, to be able to pay interest and repay the principal and the relationship between various sources of funds (capital structure relationships). Long-term lenders analyse the historical financial statements to assess its future solvency and profitability.
- (e) *Investors:* Investors, who have invested their money in the firm's shares, are interested about the firm's earnings. As such, they concentrate on the analysis of the firm's present and future profitability. They are also interested in the firm's capital structure to ascertain its influences on firm's earning and risk. They also evaluate the efficiency of the management and determine whether a change is needed or not. However, in some large companies, the shareholders' interest is limited to decide whether to buy, sell or hold the shares.
- (f) *Labour unions:* Labour unions analyse the financial statements to assess whether it can presently afford a wage increase and whether it can absorb a wage increase through increased productivity or by raising the prices.
- (g) *Others:* The economists, researchers, etc., analyse the financial statements to study the present business and economic conditions. The government agencies need it for price regulations, taxation and other similar purposes.

4.3 Objectives of Analysis of Financial Statements

Analysis of financial statements reveals important facts concerning managerial performance and the efficiency of the firm. Broadly speaking, the objectives of the analysis are to apprehend the information contained in financial statements with a view to know the weaknesses and strengths of the firm and to make a forecast about the future prospects of the firm thereby, enabling the analysts to take decisions regarding the operation of,

3. *Trend Analysis:* It is a technique of studying the operational results and financial position over a series of years. Using the previous years' data of a business enterprise, trend analysis can be done to observe the percentage changes over time in the selected data. The trend percentage is the percentage relationship, in which each item of different years bear to the same item in the base year. Trend analysis is important because, with its long run view, it may point to basic changes in the nature of the business. By looking at a trend in a particular ratio, one may find whether the ratio is falling, rising or remaining relatively constant. From this observation, a problem is detected or the sign of good or poor management is detected.
4. *Ratio Analysis:* It describes the significant relationship which exists between various items of a balance sheet and a statement of profit and loss of a firm. As a technique of financial analysis, accounting ratios measure the comparative significance of the individual items of the income and position statements. It is possible to assess the profitability, solvency and efficiency of an enterprise through the technique of ratio analysis.
5. *Cash Flow Analysis:* It refers to the analysis of actual movement of cash into and out of an organisation. The flow of cash into the business is called as cash inflow or positive cash flow and the flow of cash out of the firm is called as cash outflow or a negative cash flow. The difference between the inflow and outflow of cash is the net cash flow. Cash flow statement is prepared to project the manner in which the cash has been received and has been utilised during an accounting year as it shows the sources of cash receipts and also the purposes for which payments are made. Thus, it summarises the causes for the changes in cash position of a business enterprise between dates of two balance sheets.

In this chapter, we shall have a brief idea about the first three techniques, viz., comparative statements, common size statements and trend analysis. The ratio analysis and cash flow analysis is covered in detail in Chapters 5 and 6 respectively.

Test your Understanding – I

Fill in the blanks with appropriate word(s):

1. Analysis simply means _____ data.
2. Interpretation means _____ data.
3. Comparative analysis is also known as _____ analysis.
4. Common size analysis is also known as _____ analysis.
5. The analysis of actual movement of money inflow and outflow in an organisation is called _____ analysis.

Particulars	Note No.	2015-16 (Rs.)	2016-17 (Rs.)
(i) Revenue from operations		60,00,000	75,00,000
(ii) Other incomes		1,50,000	1,20,000
(iii) Expenses		44,00,000	50,60,000
(iv) Income tax		35%	40%

Solution:

Comparative statement of profit and loss of BCR Co. Ltd. for the year ended March 31, 2016 and 2017:

Particulars	2015-16	2016-17	Absolute Increase (+) or Decrease (-)	Percentage Increase (+) or Decrease (-)
	(Rs.)	(Rs.)	(Rs.)	%
I. Revenue from operations	60,00,000	75,00,000	15,00,000	25.00
II. Add: Other incomes	1,50,000	1,20,000	30,000	20.00
III. Total Revenue I+II	61,50,000	76,20,000	14,70,000	23.90
IV. Less: Expenses	44,00,000	50,60,000	6,60,000	15.00
Profit before tax	17,50,000	25,60,000	8,10,000	46.29
V. Less: Tax	6,12,500	10,24,000	4,11,500	67.18
Profit after tax	11,37,500	15,36,000	3,98,500	35.03

Illustration 2

From the following statement of profit and loss of Madhu Co. Ltd., prepare comparative statement of profit and loss for the year ended March 31, 2016 and 2017:

Particulars	Note No.	2015-16 (Rs.)	2016-17 (Rs.)
Revenue from operations		16,00,000	20,00,000
Employee benefit expenses		8,00,000	10,00,000
Other expenses		2,00,000	1,00,000
Tax rate 40 %			

Illustration 3

The following are the Balance Sheets of J. Ltd. as at March 31, 2016 and 2017. Prepare a Comparative balance sheet.

Particulars	Note No.	March 31, 2017 (Rs.)	March 31, 2016 (Rs.)
I. Equity and Liabilities			
1. Shareholders' Funds			
a) Share capital		20,00,000	15,00,000
b) Reserve and surplus		3,00,000	4,00,000
2. Non-current Liabilities			
Long-term borrowings		9,00,000	6,00,000
3. Current liabilities			
Trade payables		3,00,000	2,00,000
Total		35,00,000	27,00,000
II. Assets			
1. Non-current assets			
a) Fixed assets			
- Tangible assets		20,00,000	15,00,000
- Intangible assets		9,00,000	6,00,000
2. Current assets			
- Inventories		3,00,000	4,00,000
- Cash and cash equivalents		3,00,000	2,00,000
Total		35,00,000	27,00,000

Solution:

Comparative Balance Sheet of J. Limited as at March 31, 2016 and March 2017:

(Rs. in Lakhs)

Particulars	March 31, 2016	March 31, 2017	Absolute Change	Percentage Change
I. Equity and Liabilities				
1. Shareholders' Funds				
a) Share capital	15	20	05	33.33
b) Reserve and surplus	04	03	(01)	(25)
2. Non-current Liabilities				
a) Long-term borrowings	06	09	03	50
3. Current liabilities				
a) Trade payables	02	03	01	50
Total	27	35	08	29.63

Solution:

**Comparative Balance Sheet of Amrit Limited
as at March 31, 2016 and March 31, 2017**

Particulars	March 31,	March 31,	Absolute	Percentage
	2016	2017	Increase (+) or Decrease (-)	Increase (+) or Decrease (-) %
Rs.	Rs.	Rs.	%	
I. Equity and Liabilities				
1) Shareholders' funds				
a) Share capital	15	20	5	33.33
b) Reserves and surplus	14	13	(1)	(7.14)
2) Non-current liabilities				
Long-term borrowings	16	19	3	18.75
3) Current liabilities				
Trade payables	2	3	1	50
Total	47	55	8	17.02
II. Assets				
1) Non-current assets				
Fixed assets				
a) Tangible assets	15	20	5	33.33
b) Intangible assets	16	19	3	18.75
2) Current assets				
a) Inventories	14	13	(1)	(7.14)
b) Cash and Cash Equivalents	2	3	1	50
Total	47	55	8	17.02

Do it yourself

From the Balance Sheets for the year ended March 31, 2016 and 2017, prepare the comparative Balance Sheet of Omega Chemicals Ltd.:

Particulars	Note No.	Rs. in Lakhs	
		2017 (Rs.)	2016 (Rs.)
I. Equity and Liabilities			
1) Shareholders' Fund			
a) Share capital		5	10
b) Reserve and surplus		3	2
2) Non-current liabilities			
Long-term borrowings		5	8
3) Current liabilities			
Trade Payable		2	4
Total		15	24

Illustration 5

From the following information, prepare a Common size Income Statement for the year ended March 31, 2016 and March 31, 2017:

Particulars	2016-17 (Rs.)	2015-16 (Rs.)
Revenue from operations	18,00,000	25,00,000
Cost of good sold	10,00,000	12,00,000
Operating expenses	80,000	1,20,000
Non-operating expenses	12,000	15,000
Depreciation	20,000	40,000
Wages	10,000	20,000

Solution:

Common Size Income Statement for the year ended March 31, 2016 and March 31, 2017

Particulars	Absolute Amounts		Percentage of Net Sales	
	2015-16 Rs.	2016-17 Rs.	2015-16 (%)	2016-17 (%)
Revenue from operations	25,00,000	18,00,000	100	100
(Less) Cost of goods Sold*	12,00,000	10,00,000	48	55.56
Gross Profit	13,00,000	8,00,000	52	44.44
(Less) Operating Expenses**	1,20,000	80,000	4.80	4.44
Operating Income	11,80,000	7,20,000	47.20	40
(Less) Non-Operating expenses	15,000	12,000	0.60	0.67
Profit	11,65,000	7,08,000	46.60	39.33

* Wages is the part of cost of goods sold;

** Depreciation is the part of operating expenses.

Illustration 6

From the following information, prepare Common size statement of profit and loss for the year ended March 31, 2016 and March 31, 2017:

Particulars	2015-16 (Rs.)	2016-17 (Rs.)
Revenue from operations	25,00,000	20,00,000
Other income	3,25,000	2,50,000
Employee benefit expenses	8,25,000	4,50,000

Solution:

**Common size Balance Sheet of XRI Co. Ltd.
as at March 31, 2016 and March 31, 2017:**

Particulars	Absolute Amounts		Percentage of Total Assets	
	31.03.2016	31.03.2017	31.03.2016	31.03.2017
	(Rs.)	(Rs.)	(%)	(%)
I. Equity and Liabilities				
1. Shareholders fund				
a) Share capital	15,00,000	12,00,000	36.14	36.93
b) Reserve and surplus	5,00,000	5,00,000	12.05	15.38
2. Non-current liabilities				
Long-term borrowings	6,00,000	5,00,000	14.46	15.38
3. Current liabilities				
Trade payables	15,50,000	10,50,000	37.35	32.31
Total	41,50,000	32,50,000	100	100
II. Assets				
1. Non-current assets				
a) Fixed assets				
- Tangible asset				
Plant & machinery	14,00,000	8,00,000	33.73	24.62
- Intangible assets				
Goodwill	16,00,000	12,00,000	38.55	36.92
Non-current investments	10,00,000	10,00,000	24.10	30.77
2. Current assets				
Inventories	1,50,000	2,50,000	3.62	7.69
Total	41,50,000	32,50,000	100	100

Do it yourself

Prepare common size balance sheet of Raj Co. Ltd. as at March 31, 2016 and March 31, 2017 from the given information:

Particulars	2017	2016
I. Equity and Liabilities		
1. Shareholders fund		
a) Share capital	20,00,000	15,00,000
b) Reserve and surplus	3,00,000	4,00,000
2. Non-current liabilities		
Long-term borrowings	9,00,000	6,00,000
3. Current liabilities		
Trade payables	3,00,000	2,00,000
Total	35,00,000	27,00,000

Test your Understanding – III

State whether each of the following is True or False :

- (a) The financial statements of a business enterprise include cash flow statement.
- (b) Comparative statements are the form of horizontal analysis.
- (c) Common size statements and financial ratios are the two tools employed in vertical analysis.
- (d) Ratio analysis establishes relationship between two financial statements.
- (e) Ratio analysis is a tool for analysing the financial statements of any enterprise.
- (f) Financial analysis is used only by the creditors.
- (g) Statement of profit and loss account shows the operating performance of an enterprise for a period of time.
- (h) Financial analysis helps an analyst to arrive at a decision.
- (i) Cash Flow Statement is a tool of financial statement analysis.
- (j) In a Common size statement each item is expressed as a percentage of some common base.

4.7 Limitations of Financial Analysis

Though financial analysis is quite helpful in determining financial strengths and weaknesses of a firm, it is based on the information available in financial statements. As such, the financial analysis also suffers from various limitations of financial statements. Hence, the analyst must be conscious of the impact of price level changes, window dressing of financial statements, changes in accounting policies of a firm, accounting concepts and conventions, personal judgement, etc. Some other limitations of financial analysis are:

1. Financial analysis does not consider price level changes.
2. Financial analysis may be misleading without the knowledge of the changes in accounting procedure followed by a firm.
3. Financial analysis is just a study of reports of the company.
4. Monetary information alone is considered in financial analysis while non-monetary aspects are ignored.
5. The financial statements are prepared on the basis of accounting concept, as such, it does not reflect the current position.

Long Answer Questions

1. Describe the different techniques of financial analysis and explain the limitations of financial analysis.
2. Explain the usefulness of trend percentages in interpretation of financial performance of a company.
3. What is the importance of comparative statements? Illustrate your answer with particular reference to comparative income statement.
4. What do you understand by analysis and interpretation of financial statements? Discuss its importance.
5. Explain how common size statements are prepared giving an example.

Numerical Questions

Following are the balance sheets of Alpha Ltd., as at March 31, 2016 and 2017. You are required to prepare Comparative Balance Sheet.

<i>Particulars</i>	<i>March 31, 2016 (Rs.)</i>	<i>March 31, 2017 (Rs.)</i>
I. Equity and Liabilities		
1. Shareholders' Funds		
(a) Share Capital	2,00,000	4,00,000
(b) Reserve & Surplus	1,00,000	1,50,000
2. Noncurrent Liabilities		
(a) Long Term Borrowings	2,00,000	3,00,000
3. Current Liabilities		
(a) Short term borrowings	50,000	70,000
(b) Trade Payables	30,000	60,000
(c) Other Current Liabilities	20,000	10,000
(d) Short Terms Provisions	20,000	20,000
Total	6,20,000	10,20,000
II. Assets		
1. Non-Current Assets		
(a) Fixed Assets	2,00,000	5,00,000
(b) Non-Current Investments	1,00,000	1,25,000
2. Current Assets		
(a) Current Investments	60,000	80,000
(b) Inventories	1,35,000	1,55,000
(c) Trade Receivables	60,000	90,000

3. Prepare Comparative Statement of profit and loss from the following information.

Particulars	2015-16 (Rs.)	2016-17 (Rs.)
Freight Outward	20,000	10,000
Wages (office)	10,000	5,000
Manufacturing Expenses	50,000	20,000
Stock adjustment	(60,000)	30,000
Cash purchases	80,000	60,000
Credit purchases	60,000	20,000
Return inward	8,000	4,000
Gross profit	(30,000)	90,000
Carriage outward	20,000	10,000
Machinery	3,00,000	2,00,000
10% depreciation on machinery	10,000	5,000
Interest on short-term loans	20,000	20,000
10% debentures	20,000	10,000
Profit on sale of furniture	20,000	10,000
Loss on sale of office car	90,000	60,000
Tax rate	40%	50%

4. Prepare Comparative Statement of Profit and Loss from the following information:

Particulars	2015-16 (Rs.)	2016-17 (Rs.)
Manufacturing expenses	35,000	80,000
Opening stock	30,000	60% of closing stock
Sales	9,60,000	4,50,000
Returns outward	4,000 (out of credit purchase)	6,000 (out of cash purchase)
Closing stock	150% of opening stock	1,00,000
Credit purchases	1,50,000	150% of cash purchase

Answers to Test your Understanding

Test your Understanding – I

- | | | |
|----------------|-----------------------------|---------------|
| 1. Simplifying | 2. explaining the impact of | 3. horizontal |
| 4. vertical | 5. cash flow. | |

Test your Understanding – II

- | | | | | |
|-------|-------|-------|-------|-------|
| 1 (d) | 2 (d) | 3 (c) | 4 (a) | 5 (b) |
|-------|-------|-------|-------|-------|

Test your Understanding – III

- | | | | | | |
|----------|----------|----------|----------|----------|-----------|
| (a) True | (b) True | (c) True | (d) True | (e) True | (f) False |
| (g) True | (h) True | (i) True | (j) True | | |