Analysis of Financial Statements

4

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.

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 commonsize statements and interpret the data given therein; and*
- *calculate the trend percentages and interpret them.*

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 without interpretation, and interpretation without analysis is difficult or even impossible.

Box

Financial statement analysis is very aptly defined by Bernstein as, "a judgemental process which aims to estimate current and past financial positions and the results of the operation of an enterprise, with primary objective of determining the best possible estimates and predictions about the future conditions." It essentially involves regrouping and analysis of information provided by financial statements to establish relationships and throw light on the points of strengths and weaknesses of a business enterprise, which can be useful in decision-making involving comparison with other firms (cross sectional analysis) and with firms' own performance, over a time period (time series analysis).

4.2 Significance of Financial Analysis

Financial analysis is the process of identifying the financial strengths and weaknesses of the firm by properly establishing relationships between the various items of the balance sheet and the profit and loss account. Financial analysis can be undertaken by management of the firm, or by parties outside the firm, viz. owners, trade creditors, lenders, investors, labour unions, analysts and others. The nature of analysis will differ depending on the purpose of the analyst. A technique frequently used by an analyst need not necessarily serve the purpose of other analysts because of the difference in the interests of the analysts. Financial analysis is useful and significant to different users in the following ways:

(a) *Finance manager:* Financial analysis focusses on the facts and relationships related to managerial performance, corporate efficiency, financial strengths and weaknesses and creditworthiness of the company. A finance manager must be well-equipped with the different tools of analysis to make rational decisions for the firm. The tools for analysis help in studying accounting data so as to determine the continuity of the operating policies, investment value of the business, credit ratings and testing the efficiency of operations. The techniques are equally important in the area of financial control, enabling the finance manager to make constant reviews of the actual financial operations of the firm to analyse the causes of major deviations, which may help in corrective action wherever indicated.

(b) *Top management:* The importance of financial analysis is not limited to the finance manager alone. Its scope of importance is quite broad which includes top management in general and the other functional managers.

Management of the firm would be interested in every aspect of the financial analysis. It is their overall responsibility to see that the resources of the firm are used most efficiently, and that the firm's financial condition is sound. Financial analysis helps the management in measuring the success or otherwise of the company's operations, appraising the individual's performance and evaluating the system of internal control.

(c) *Trade creditors:* A trade creditor, through an analysis of financial statements, appraises not only the urgent ability of the company to meet its obligations, but also judges the probability of its continued ability to meet all its financial obligations in future. Trade creditors are particularly interested in the firm's ability to meet their claims over a very short period of time. Their analysis will, therefore, confine to the evaluation of 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 overtime, 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 tenders do analyse the historical financial statements. But they place more emphasis on the firm's projected financial statements to make analysis about 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 Financial Analysis

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, and further investment in, the firm. To be more specific, the analysis is undertaken to serve the following purposes (objectives):

- to assess the current profitability and operational efficiency of the firm as a whole as well as its different departments so as to judge the financial health of the firm.
- to ascertain the relative importance of different components of the financial position of the firm.
- to identify the reasons for change in the profitability/financial position of the firm.
- to judge the ability of the firm to repay its debt and assessing the short-term as well as the long-term liquidity position of the firm.

Through the analysis of financial statements of various firms, an economist can judge the extent of concentration of economic power and pitfalls in the financial policies pursued. The analysis also provides the basis for many governmental actions relating to licensing, controls, fixing of prices, ceiling on profits, dividend freeze, tax subsidy and other concessions to the corporate sector.

It also helps the management in self-appraisal and the shareholders (owners) and others to judge the performance of the management.

4.4 Tools of Financial Analysis

The most commonly used techniques of financial analysis are as follows:

1. *Comparative Statements:* These are the statements showing the profitability and financial position of a firm for different periods of time in a comparative form to give an idea about the position of two or more periods. It usually applies to the two important financial statements, namely, Balance Sheet and Income Statement prepared in a comparative form. The financial data will be comparative only when same accounting principles are used in preparing these statements. If this is not the case, the deviation in the use of accounting principles should be mentioned as a footnote. Comparative figures indicate the trend and direction of financial position and operating results. This analysis is also known as 'horizontal analysis'.

2. *Common Size Statements:* These are the statements which indicate the relationship of different items of a financial statement with some common item by expressing each item as a percentage of the common item. The percentage thus calculated can be easily compared with the results corresponding percentages of the previous year or of some other firms, as

the numbers are brought to common base. Such statements also allow an analyst to compare the operating and financing characteristics of two companies of different sizes in the same industry. Thus, common-size statements are useful, both, in intra-firm comparisons over different years and also in making inter-firm comparisons for the same year or for several years. This analysis is also known as 'Vertical analysis'.

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, 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 management is found.

4. *Ratio Analysis:* It describes the significant relationship which exists between various items of a balance sheet and a profit and loss account 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.

4.5 Comparative Statements

As stated earlier, these statements refer to the Profit and Loss Account and Balance Sheet prepared by providing columns for the figures for both the current year as well as for the previous year and for the changes during the year, both in absolute and relative terms. As a result, it is possible to find out not only the balances of account as on different dates and summaries of different operational activities of different periods, but also the extent of their increase or decrease between these dates. The figures in the comparative statements can be used for identifying the direction of changes and also the trends in different indicators of performance of an organisation.

The following steps may be followed to prepare the comparative statements:

Step 1 : List out absolute figures in rupees relating to two points of time (as shown in columns 2 and 3 of Figure 4.1.).

Step 2 : Find out change in absolute figures by subtracting the first year (Col.2) from the second year (Col.3) and indicate the change as increase (+) or decrease (–) and put it in column 4.

Step 3 : Preferably, also calculate the percentage change as follows and put it in Column 5.

$$\frac{\text{Second year absolute figure (Col.3)}}{\text{First year absolute figure (Col.2)}} \times 100 - 100,$$

Particulars	First Year	Second Year	Absolute Increase (+) or Decrease (–)	Percentage Increase (+) or Decrease (–)
Column 1	2	3	4	5
	Rs.	**Rs.**	**Rs.**	**%.**

Fig. 4.1

Illustration 1

Convert the following Income Statement into a comparative income statement of BCR Co. Ltd and interpret the changes in 2005 in the light of the conditions in 2004.

Particulars	*2004* (Rs.)	*2005* (Rs.)
Gross Sales	30,600	36,720
Less: Sales Return	600	700
	----	----
Net Sales	30,000	36,020
Less: Cost of Goods Sold	18,200	20,250
	----	----
Gross Profit	**11,800**	**15,770**
	----	----
Less: Operating Expenses –		
Administration Expenses	3,000	3,400
Selling Expenses	6,000	6,600
	----	----
Total Operating Expenses	**9,000**	**10,000**
	----	----
Profit form Operations	2,800	5,770
Add: Non-Operating Income	300	400
	----	----
	3,100	6,170
Less: Non-Operating Expenses	400	600
	----	----
Net Profit before Tax	2,700	5,570
Less: Tax @ 50%	1,350	2,785
	----	----
Net Profit after Tax	**1,350**	**2,785**
	----	----

Solution

Comparative Income Statement for the year ended March 31, 2004 and 2005.

Particulars	*2004*	*2005*	*Absolute Increase (+) or Decrease (-)*	*Percentage Increase (+) or Decrease (-)*
Column 1	2	3	4	5
	Rs.	Rs.	Rs.	%.
Gross Sales	30,600	36,720	**+6,120**	**+20.00**
Less: Sales Return	600	700	+100	+16.67
Net Sales	**30,000**	**36,020**	**+6,020**	+20.07
Less: Cost of Goods Sold	18,200	20,250	+2,050	+11.26
Gross Profit (A)	**11,800**	**15,770**	**+3,970**	**+33.64**
Less: Operating Expenses (B)				
Administration Expenses	3,000	3,400	+400	+13.33
Selling Expenses	6,000	6,600	+600	+10.00
	9,000	**10,000**	**+1,000**	**+11.11**
Operating Profit (A-B)	**2,800**	**5,770**	**+2,970**	**+106.07**
Add: Non-operating Income	300	400	+100	+33.33
	3,100	**6,170**		
Less: Non-operating Expenses	400	600	+200	+50.00
Net Profit before Tax	**2,700**	**5,570**	**+2,870**	**+106.30**
Less: Tax @ 50%	1,350	2,785	+1,435	+106.30
Net Profit after Tax	**1,350**	**2,785**	**+1,435**	**+106.30**

Interpretation

1. The company has made efforts to reduce the cost which is evident from the fact that the cost of goods sold has not increased in the same ratio as the amount sales.
2. The gross profit has increased in 2005 as compared to 2004 considerably, 33.64% with an increase 20% in sales;
3. The company has also concentrated on reducing the operating cost; hence, the percentage of operating profit has also considerably increased, i.e. 106.07%.

Thus, the overall performance of the company has immensely improved in the year 2005.

Illustration 2

From the following Income Statement of Madhu Co.Ltd., prepare Comparative Income Statement for the year ended March 31, 2005 and 2006 and interpret the same.

Particulars	*2005 (Rs.)*	*2006 (Rs.)*
Sales	4,00,000	6,50,000
Purchases	2,00,000	2,50,000
Opening Stock	20,600	32,675
Closing Stock	32,675	20,000
Salaries	16,010	18,000
Rent	5,100	6,000
Postage and Stationery	3,200	4,100
Advertising	2,600	4,600
Commission on Sales	3,160	3,500
Depreciation	200	500
Loss on Sale of Asset	4,000	2,000
Profit on Sale of Investment	3,000	4,500

Solution

Comparative Income Statement of Madhu Co. Ltd for the year ended March 31, 2005 and 2006

Particulars	*2005*	*2006*	*Absolute Increase (+)/ Decrease (-)*	*Percentage Increase (+) /Decrease (-)*
	Rs.	Rs.	Rs.	
Sales	4,00,000	6,50,000	+2,50,000	+62.50
Less: Cost of Goods Sold:				
Opening Stock	20,600	32,675	+12,075	+58.62
Add: Purchases	2,00,000	2,50,000	+50,000	+25.00
Less: Closing Stock	32,675	20,000	(–)12,675	(–)38.79
	1,87,925	2,62,675	+74,750	+39.78
Gross Profit (A)	**2,12,075**	**3,87,325**	**+1,75,250**	**+82.64**
Less: Operating Expenses (B)	16,010	18,000	+1,990	+12.43
Salaries	5,100	6,000	+900	+17.65
Rent	3,200	4,100	+900	+28.13
Postage and Stationery	2,600	4,600	+2,000	+76.92
Advertising				
Commission on Sales	3,160	3,500	+340	+10.76

Depreciation	200	500	+300	+150.00
	30,270	**36,700**	**+6,430**	**+21.24**
Operating Profit				
(A-B)	**1,81,805**	**3,50,625**	**+1,68,820**	**+92.86**
Add: Non-operating Income				
Profit on Sale of Investment	3,000	4,500	+1,500	+50.00
	1,84,805	**3,55,125**		
Less: Non-operating Expenses				
Loss on Sale of Assets	4,000	2,000	(–)2,000	(–)50.00
Net Profit	**1,80,805**	**3,53,125**	**+ 1,72,320**	**+95.31**

Interpretation

1. The comparative balance sheet of the company reveals that there has been an increase in sales by Rs.2,50,000, i.e. 62.5% whereas cost of goods sold has increased only by Rs.74,750, i.e. 39.78%. This reveals that the company has made efforts to reduce the cost of goods sold thereby the gross profit of the company has increased by Rs.1,75,250, i.e. 82.64%.
2. The expenses of the company have increased by Rs.6,430, i.e. 21.24% only, and the operating profit has increased by Rs.1,68,820, i.e. 92.86%.
3. The net profit of the company has increased by 95.31%,
4. The overall performance of the company is good.

Illustration 3

The following are the Balance Sheets of J. Ltd. for the year ended March 31, 2005 and 2006.

Prepare a Comparative Balance Sheet and comment on the financial position of the business firm.

Rs.('000)

Liabilities	*2005 Rs.*	*2006 Rs.*	*Assets*	*2005 Rs.*	*2006 Rs.*
Equity Share Capital	600	800	Land and Building	370	270
Reserves and Surplus	330	222	Plant and Machinery	400	600
Debentures	200	300	Furniture and Fixtures	20	25
Long-term Loans	150	200	Other Fixed Assets	25	30
Bills Payable	50	45	Cash in Hand and at Bank	20	80
Sundry Creditors	100	120	Bills Receivable	150	90
Other Current Liabilities	5	10	Sundry Debtors	200	250
			Stock	250	350
			Pre-paid Expenses	-	2
	1,435	**1,697**		**1,435**	**1,697**

Solution

Comparative Balance Sheets of J Ltd.
as on March 31, 2005 and 2006.

(Rs.'000)

Particulars	*2005 (Rs.)*	*2006 (Rs.)*	*Absolute Increase (+)/ Decrease (–)*	*Change (%) Increase (+) /Decrease (–)*
Assets:				
Current Assets				
Cash and Bank	20	80	60	300
Bills Receivable	150	90	(-)60	(-)40
Sundry Debtors	200	250	+50	+25
Stock	250	350	+100	+40
Prepaid Expenses	-	2	+2	+200
Total Current Assets	**620**	**772**	**+152**	**+24.52**
Fixed Assets				
Land and Building	370	270	**(-)100**	(-)27.03
Plant and Machinery	400	600	**+200**	+50
Furniture and Fixtures	20	25	**+5**	+25
Other Fixed Assets	25	30	**+5**	+20
Total Fixed Assets	**815**	**925**	**+110**	**+13.5**
Total Assets	**1,435**	**1,697**	**+262**	**+18.26**
Liabilities:				
Current Liabilities				
Bills Payable	50	45	(-)5	**(-)10**
Sundry Creditors	100	120	+20	**+20**
Other Current Liabilities	5	10	+5	**+100**
Total Current Liabilities	**155**	**175**	**+20**	**+12.90**
Debentures	200	300	+100	**+50**
Long-term Loans	150	200	+50	**+33.33**
Total External Liabilities	**505**	**675**	**+170**	**+33.66**
Equity Share Capital	600	800	+200	**+33.33**
Reserves and Surplus	330	222	(-)108	**(-)32.73**
Shareholders Fund	930	1022	92	+ 0.98
Total Liabilities and Capital	**1,435**	**1,697**	**262**	**18.26**

Note : For the purpose of analysis, the balance sheet may be presented vertically with major heads of assets and liabilities.

Interpretation

1. The comparative balance sheet of the company reveals that during the year 2006, there has been an increase in fixed assets by Rs.1,10,000, i.e. 13.5% while long-term liabilities have relatively increased by Rs.1,50,000 and equity share capital has increased by Rs.2 lakhs. This fact depicts that the policy of the company is to purchase fixed assets from long-term source of finance, thereby not affecting the working capital.
2. The current assets have increased by Rs.1,52,000, i.e. 24.52%. The current liabilities have increased only by Rs.20,000, i.e. 12.9%. This shows an improvement in the liquid position of the Company.
3. Shareholder's funds (share capital plus reserves) have shown an increase of Rs. 92,000.
4. The overall financial position of the company is satisfactory.

Exhibit - 1

Sterlite Optical Technologies Ltd.
Financial Overview 2001-2005

US$ in million	2005-06	2004-05	2003-04	2002-03	2001-02
Revenues (Gross)	140.90	82.46	22.49	27.27	146.72
Revenues (Net)	123.61	72.72	20.02	25.05	130.28
Earning before Interest Tax and Depreciation	18.81	10.53	4.24	(6.93)	34.60
Interest	3.64	2.32	2.81	5.14	3.13
Profit before Depreciation and Tax	15.16	8.22	1.42	(12.07)	31.47
Depreciation	6.55	5.93	6.13	5.72	4.49
Profit before Tax	8.64	2.28	(4.12)	(17.79)	26.98
Tax	(0.59)	0.01	(0.58)	-	5.98
Profit after Tax	9.21	2.27	(4.12)	(17.79)	21.00
Earning per Share	0.16	0.04	(0.07)	(0.32)	0.38
Capital Employed	127.71	93.15	96.42	126.36	119.47
Rs. in million					
Turnover	6,239.33	2,706.74	1,032.95	1,319.84	6,997.78
% Growth	68.32	258.85	(21.74)	(81.14)	-
Turnover (Net)	5,473.72	3,268.76	919.23	1,212.46	6,213.49
% Growth	67.46	255.60	(24.18)	(80.49)	-
% to Net sales	15.22	14.48	21.16	(27.67)	26.55
Interest	161.36	104.12	129.16	248.78	149.21
Profit before Depreciation and Tax	671.49	369.28	65.38	(584.25)	1,500.78
% to Net Sales	12.27	11.30	7.11	(48.19)	24.15
Depreciation	289.92	266.76	281.66	276.90	214.05
Profit before Tax	381.57	102.52	(216.28)	(861.15)	1,286.73
% to Net sales	6.97	3.14	(23.53)	(71.03)	20.71
Tax	(26.10)	0.32	(26.58)	-	284.98
Profit after Tax	407.66	102.20	(189.43)	(861.15)	1,001.75
% to Net Sales	7.45	3.13	(20.61)	(71.03)	16.12
Capital Employed	5,696.95	4,075.28	4,183.71	6,002.03	5,830.11
Return on Capital Employed %	9.53	5.07	(2.08)	(10.20)	24.63
Interest Coverage ratio	5.16	4.55	1.51	(1.35)	11.06
Working Capital Ratio	2.91	1.64	2.06	2.86	2.24
Debt Equity Ratio	0.72	0.56	0.67	0.95	0.47
Earning per Share	7.27	1.83	-3.38	-15.38	17.86

Do it Yourself

From the following balance sheet and income statement of Day Dreaming Co.Ltd., for the year ending 2002 and 2003, prepare the comparative statements.

Income Statement

(Rs. in Lakhs)

Particulars	***2005***	***2006***
Net Sales	900	1,050
Cost of Goods Sold	650	850
Administrative Expenses	40	40
Selling Expenses	20	20
Net Profit	190	140

Balance Sheet

	2005	***2006***
Equity Share Capital	600	600
6% Preference Share Capital	500	500
Reserves	400	445
Debenture	300	350
Bills Payable	250	275
Creditors	150	200
Tax payable	150	200
Total Liabilities	**2,350**	**2,570**
Land	300	300
Buildings	500	470
Plant	400	470
Furniture	300	340
Stock	400	500
Cash	450	490
Total Assets	**2,350**	**2,570**

4.6 Common Size Statement

Common Size Statement, also known as component percentage statement, is a financial tool for studying the key changes and trends in the financial position and operational result of a company. Here, each item in the statement is stated as a percentage of the aggregate, of which that item is a part. For example, a common size balance sheet shows the percentage of each asset to the total assets, and that of each liability to the total liabilities. Similarly, in the common size income statement, the items of expenditure are shown as a percentage of the net sales. If such a statement is prepared for successive periods, it shows the changes of the respective percentages over time. [See the Five year Review of Asian paints (India) Ltd. Exhibit 2].

Common size analysis is of immense use for comparing enterprises which differ substantially in size as it provides an insight into the structure of financial statements. Inter-firm comparison or comparison of the company's position with the related industry as a whole is possible with the help of common size statement analysis.

The following procedure may be adopted for preparing the common size statements.

1. List out absolute figures in rupees at two points of time, say year 1, and year 2 (Column 2 & 4 of Exhibit 2)
2. Choose a common base (as 100). For example, Sales revenue total may be taken as base (100) in case of income statement, and total assets or total liabilities (100) in case of balance sheet.
3. For all items of Col. 2 and 4 work out the percentage of that total. Column 3 and 5 portray these percentages in Figures 4.2.

Common Size Statement

Particulars	**Year one**	**Percentage**	**Year two**	**Percentage**
Column 1	**2**	**3**	**4**	**5**

Figure 4.2

Illustration 4

Convert the following Balance Sheet into Common Size Balance Sheets and interpret the results there of.

Balance Sheet as on March 31, 2004 and 2005

(Rs. in lakhs)

Liabilities	*2004 (Rs.)*	*2005 (Rs.)*	*Assets*	*2004 (Rs.)*	*2005 (Rs.)*
Equity Share Capital	1,000	1,200	Debtors	450	390
Capital Reserve	90	185	Cash	200	15
General Reserve	500	450	Stock	320	250
Sinking Fund	90	100	Investment	300	250
Debentures	450	650	Building *Less* Depreciation	800	1,400
Sundry Creditors	200	150	Land	198	345
Others	15	20	Furniture & Fittings	77	105
	2,345	**2,755**		**2,345**	**2,755**

Solution

Common Size Balance Sheets
at the end of the year ended March 31, 2004 and 2005

(Rs. in lakhs)

Particulars	*2004*		*2005*	
	Rs.	*%*	*Rs.*	*%*
Share Capital				
Equity Share Capital	1,000	42.64	1,200	43.56
Capital Reserve	90	3.84	185	6.72
General Reserve	500	21.32	450	16.33
Sinking Fund	90	3.84	100	3.63
	1,680	**71.64**	**1,935**	**70.24**
Shareholder's Fund				
Long-term Debt (Net worth)				
Debentures	**450**	**19.19**	**650**	**23.59**
Current Liabilities				
Sundry Creditors	200	8.53	150	5.44
Other Creditors	15	0.64	20	0.73
	215	**9.17**	**170**	**6.17**
Total Liabilities	**2,345**	**100.00**	**2,755**	**100.00**
Fixed Assets				
Buildings	800	34.12	1,400	50.82
Land	198	8.44	345	12.52
Furniture and Fittings	77	3.28	105	3.81
Total Fixed Assets	**1,075**	**45.84**	**1,850**	**67.15**
Current Assets				
Debtors	450	19.19	390	14.16
Cash	200	8.53	15	0.05
Stock	320	13.64	250	9.07
Total Current Assets	**970**	**41.36**	**655**	**23.78**
Investments	**300**	**12.08**	**250**	**9.07**
Total Assets	**2,345**	**100.00**	**2,755**	**100.00**

Interpretation :

1. In 2005, both current assets and current liabilities decreased as compared to 2004, but the decrease in current assets is more than the decrease in the current liabilities. As a result, the firm may face liquidity problem.
2. In 2005 both fixed assets and the long-term liabilities increased, but the increase in the fixed assets is more than the increase in long-term liabilities. The firm sold some investments to acquire fixed assets and used short-term funds to purchase fixed assets.
3. The firm has undertaken expansion programme reflected in addition to land and buildings.

The overall financial position of the firm is satisfactory. It should improve its liquidity.

Illustration 5

From the following financial statements, prepare Common Size Statements for the year ended March 31, 2004 and 2005.

Income Statement

Particulars	*2004*	*2005*
Net Sales	5,00,000	49,500
Cost of Goods Sold	3,78,000	3,60,000
Operating Expenses	62,500	60,000
Depreciation	22,000	22,000
Income from Investments	70,000	89,000
Income Tax	32,500	40,000

Balance Sheets as on March 31, 2004 and 2005

Particulars	*March 31, 2004 (Rs.)*	*March 31, 2005 (Rs.)*
Liabilities		
Share Capital	2,00,000	2,90,000
Reserves	40,220	40,000
Profit and Loss	15,555	14,292
Long-term Loan	18,965	19,262
Creditors	5,125	5,125
Bills Payable	2,300	2,195
Creditors	13,000	15,000
Outstanding Expenses	2,220	1,011
Total Liabilities	**2,97,385**	**3,86,885**
Assets		
Land and Building	50,000	70,000
Plant and Machinery	1,00,000	1,00,000
Furniture	30,000	62,500
Stock	7,165	8,192
Debtors	40,000	52,000
Bills Receivable	50,000	49,020
Cash	-	20,000
Pre-paid Expenses	20,220	25,173
Total Assets	**2,97,385**	**3,86,885**

Solution

Common Size Income Statement for the year ended March 31, 2004 and 2005

Particulars	*2004*		*2005*	
	Rs.	*%*	*Rs.*	*%*
Net Sales	5,00,000	100	4,95,000	100
Less: Cost of Goods Sold	3,78,000	75.6	3,60,000	72.72
Gross Profit	1,22,000	24.4	1,35,000	27.28
Less: Operating Expenses	62,500	12.5	60,000	12.12
Less: Depreciation	22,000	4.4	22,000	4.44
Operating Profit	37,500	11.9	53,000	5.15
Add: Income from Investment	70,000	14	89,000	16.16
Profit before Tax	1,07,500	21.5	1,42,000	28.68
Less: Income Tax	32,500	6.5	40,000	8.08
Net Profit after Tax	75,000	15	1,40,000	28.28

Common Size Balance Sheet as on March 31, 2004 and 2005

Particulars	*2004*		*2005*	
	Rs.	*%*	*Rs.*	*%*
Liabilities				
Share Capital	2,00,000	67.25	2,90,000	74.96
Reserves	40,220	13.52	40,000	10.34
Profit and Loss Account	15,555	5.23	14,292	3.69
Long-term Loan	18,965	6.38	19,262	4.98
Creditors	5,125	1.72	5,125	1.32
Bills Payable	2,300	0.77	2,195	0.57
Creditors	13,000	4.37	15,000	3.88
Outstanding Expenses	2,220	0.76	1,011	0.26
Total Liabilities	**2,97,385**	**100.00**	**3,86,885**	**100.00**
Assets				
Land and Building	50,000	16.81	70,000	18.09
Plant and Machinery	1,00,000	33.63	1,00,000	25.85
Furnitures	30,000	10.09	62,500	16.15
Stock	7,165	2.41	8,192	2.12
Debtors	40,000	13.45	52,000	13.44
Bills Receivable	50,000	16.81	49,020	12.67
Cash	-		20,000	5.17
Pre-paid Expenses	20,220	6.80	25,173	6.51
Total Assets	**2,97,385**	**100.00**	**3,86,885**	**100.00**

Interpretation :

1. On comparison of the percentage of the cost of goods sold, it is observed that the company has tried to reduce its cost to improve its profit margin.
2. The profitability of the company has improved as compared to the previous year as the profit after tax percentage has gone up by 13.28%.
3. The company has issued share capital in order to finance the purchase of fixed assets like furniture and land and buildings.
4. The company has improved its liquidity position as reflected in the increase of its current assets.

Thus, there is an improvement in the working of the company.

Illustration 6

Prepare Common Size Statement from the following income statement of Karan Ltd. for the year ended March 31, 2006.

INCOME STALEMENT

Particulars	*(Rs.'000)*
Income	
Sales	2,538
Miscellaneous Income	26
Total Income	2,564
Expenses	
Cost of Goods Sold	1,422
Administrative Expenses	184
Selling Expenses	720
Other Non-Operating Expenses	40
Total Expenses	**2,366**
Tax	68

Solution

Common Size Income Statement of Karan Ltd.
for the year ended March 31, 2006

Particulars	**(Rs.'000)**	**%**
Sales	2,538	100
Less: Cost of Goods Sold	1,422	56.03
Gross Profit (A)	**1,116**	**43.97**
Operating Expenses		
Administrative Expenses	184	7.25
Selling Expenses	720	28.37
Total Expenses (B)	**904**	**35.62**
Operating Profit (A-B)	**212**	**8.35**
Add: Miscellaneous Income	26	1.02
	238	**9.38**
Less: Non-operating Expenses	40	1.58
Profit before Tax	**198**	**7.8**
Less: Tax	68	2.68
Profit after Tax	130	5.12

Interpretation :

The company's profitability as a percentage of sales is rather low. This is primarily on account of higher operating expenses. Hence, the company has to find ways and means to reduce cost of goods sold and operating expenses.

Exhibit - 2

Asian Paints (India) Ltd.

Results for the Accounting Year	**2004-2005**	**2003-2004**	**2002-2003**	**2001-2002**	**2000-2001**
Revenue Account –					
Gross Sales	22,388.04	20,259.05	18,066.06	15,984.05	14,695.01
Net Sales and Operating Income	19,415.01	16,966.05	15,302.05	13,613.05	12,333.05
Growth Rates (%)	14.43	10.87	12.41	10.38	13.18
Materials Consumed	11,154.00	9,441.05	8,023.05	7,173.6	6,611.06
% to Net Sales	57.45	55.65	52.43	52.70	53.61
Overheads	5,323.03	4,829.06	4,587.07	4,176.08	3,699.04
% to Net sales	27.42	28.47	29.98	30.68	29.99
Operating Profit	3,253.09	2,912.02	2,817.02	2,407.08	2,115.00
Interest Charges	27.05	52.07	83.05	145.08	221.02
Depreciation	476.01	480.01	485.02	447.09	334.09
Profit Before Tax and Extraordinary item	2,750.03	2,379.04	2,248.05	1,814.01	1,558.09

% to Net Sales	14.17	14.02	14.69	13.33	12.64
Extraordinary Items	42.3	68.1	-	-	-
Profit Before Tax and after Extraordinary item	2,708.00	2,311.03	2,248.50	1,814.10	1,558.90
% to Net Sales	13.95	13.62	14.69	13.33	12.64
Profit After Tax	1,738.02	1,475.08	1,433.07	1,153.03	1,063.09
Prior period items	(3.3)	2.1	(13.6)	(10.2)	(8.1)
Profit After Tax and prior period items	1,734.08	1,477.09	1,420.01	1,143.01	1,055.08
Return on overage net worth (RONW) (%)*	31.43	29.32	32.01	27.82	27.47
Capital Account					
Share Capital	959.02	959.02	641.09	641.09	641.09
Reserves and Surplus	4,763.00	4,356.02	4,124.03	3,463.07	3,470.01
Deferred Tax Liability (Net)	305.04	486.06	581.06	611.08	-
Loan Funds	838.08	704.07	1,036.02	1,107.07	2,268.02
Fixed Assets	3,195.01	3,444.03	3,662.04	3,895.00	3,804.06
Investments	2,584.03	2,424.09	1,476.09	633.04	440.07
Net Current Assets	1,087.02	637.05	1,244.58	1,296.07	2,134.09
Debt-Equity Ratio	0.15:1	0.13:1	0.22:1	0.27:1	0.55:1
Per Share Data					
Earnings Per Share (Rs.)	18.5	#16.1	#14.8	17.8	16.5
Dividend (%)	95.0	$85.0	110.0	90.0	70.0
Book Value (Rs.)	59.7	$55.4	74.3	64.0	64.1
Other Information					
Number of Employees	3,627	3,430	3,400	3,258	3,197

- RONW is calculated after provision for impairment on fixed assets in 2004-2005

\# EPS is calculated after adjusting for Bonus issue and the reduction of capital on account of merger of Pentasia Investments Ltd. in accordance with Accounting Standard (AS 20) - Earnings per share

$ On increased Capital

Do it Yourself

The following are the Balance Sheets of Harsha Ltd. as on March 31, 2006 and March 31, 2007

Liabilities	*2005 (Rs.)*	*2006 (Rs.)*	*Assets*	*2005 (Rs.)*	*2006 (Rs.)*
Equity Capital	1,00,000	1,65,000	Fixed Assets	1,20,000	1,75,000
Preference Capital	50,000	75,000	Stock	20,000	25,000
Reserves	10,000	15,000	Debtors	50,000	62,500
Profit and Loss Account	7,500	10,000	Bills Receivable	10,000	30,000
Bank Overdraft	25,000	25,000	Prepaid Expenses	5,000	6,000
Creditors	20,000	25,000	Cash at Bank	20,000	26,500
Provision for Taxation	10,000	12,500	Cash in hand	5,000	15,000
Proposed Dividend	7,500	12,500			
	2,30,000	3,40,000		2,30,000	3,40,000

Prepare Common Size Balance Sheet and interpret the same.

Test your Understanding – II

Choose the right answer :

1. The financial statements of a business enterprise include:
   (a) Balance sheet
   (b) Profit and loss account
   (c) Cash flow statement
   (d) All the above
2. The most commonly used tools for financial analysis are:
   (a) Horizontal analysis
   (b) Vertical analysis
   (c) Ratio analysis
   (d) All the above
3. An Annual Report is issued by a company to its:
   (a) Directors
   (b) Auditors
   (c) Shareholders
   (d) Management
4. Balance Sheet provides information about financial position of the enterprise:
   (a) At a point in time
   (b) Over a period of time
   (c) For a period of time
   (d) None of the above
5. Comparative statement are also known as:
   (a) Dynamic analysis
   (b) Horizontal analysis
   (c) Vertical analysis
   (d) External analysis

4.7 Trend Analysis

The financial statements may be analysed by computing trends of series of information. Trend analysis determines the direction upwards or downwards and involves the computation of the percentage relationship that each item bears to the same item in the base year. In case of comparative statement, an item is compared with itself in the previous year to know whether it has increased or decreased or remained constant. Common size is observed to know whether the proportion of an item (say cost of goods sold) is increasing or decreasing in the common base (say sales). But in case of trend analysis, we learn about the behaviour of the same item over a given period, say, during the last 5 years. Take for example, administrative expenses, whether they are exhibiting increasing tendency or decreasing tendency or remaining constant over the period of comparison, generally trend analysis is done for a reasonably long period. Many companies present their financial data for a period of 5 or 10 years in various forms in their annual reports.

4.7.1 Procedure for Calculating Trend Percentage

One year is taken as the base year. Generally, the first year is taken as the base year. The figure of base year is taken as 100. The trend percentages are calculated in relation to this base year. If a figure in other year is less than the figure in base year, the trend percentage will be less than 100 and it will be more than 100 if figure is more than the base year figure. Each year's figure is divided by the base year figure.

$$\text{Trend Percentage} = \frac{\text{Present year value}}{\text{Base year value}} \quad 100$$

The accounting procedures and conventions used for collecting data and preparation of financial statements should be similar; otherwise the figures will not be comparable.

Illustration 7

Calculate the trend percentages from the following figures of sales, stock and profit of X Ltd., taking 2001 as the base year and interpret them.

(Rs. in lakhs)

Year	*Sales (Rs.)*	*Stock (Rs.)*	*Profit before tax (Rs.)*
2001	1,881	709	321
2002	2,340	781	435
2003	2,655	816	458
2004	3,021	944	527
2005	3,768	1,154	627

Solution

Trend Percentages (base year 2001 = 100)

(Rs. in lakhs)

Year	*Sales Rs.*	*Trend %*	*Stock Rs.*	*Trend %*	*Profit Rs.*	*Trend %*
2001	1881	100	709	100	321	100
2002	2340	124	781	110	435	136
2003	2655	141	816	115	458	143
2004	3021	161	944	133	527	164
2005	3768	200	1154	163	627	195

Interpretation :

1. The sales have continuously increased in all the years up to 2005, though in different proportions. The percentage in 2005 is 200 as compared to 100 in 2001. The increase in sales is quite satisfactory.
2. The figures of stock have also increased over a period of five years. The increase in stock is more in 2004 and 2005 as compared to earlier years.
3. Profit has substantially increased. The profits have increased in greater proportion than sales which implies that the company has been able to reduce their cost of goods sold and control the operating expenses.

Do it Yourself

The following data is available from the P&L A/c of Deepak Ltd.

Particulars	*2003 (Rs.)*	*2004 (Rs.)*	*2005 (Rs.)*	*2006 (Rs.)*
Sales	3,10,000	3,27,500	3,20,000	3,32,500
Wages	1,07,500	1,07,500	1,15,000	1,20,000
Selling Expenses	27,250	29,000	29,750	27,750
Gross Profit	90,000	95,000	77,500	80,000

You are required to show Trend Percentages of different items.

Illustration 8

From the following data relating to the assets side of Balance Sheet of ABC Ltd., for the period ended March 31, 2003 to March 31, 2006, calculate trend percentages.

(Rs. in Lakhs)

Particulars	*2003*	*2004*	*2005*	*2006*
Cash	100	120	80	140
Debtors	200	250	325	400
Stock	300	400	350	500
Other current assets	50	75	125	150
Land	400	500	500	500
Buildings	800	1000	1200	1500
Plant	1000	1000	1200	1500

Solution

Trend Percentages

(Rs. in lakhs)

Assets	*2003 %*	*Trend*	*2004 %*	*Trend*	*2005*	*Trend %*	*2006*	*Trend %*
Current Assets								
Cash	100	100	120	120	80	80	140	140
Debtors	200	100	250	125	325	162.5	400	200
Stock	300	100	400	133.33	350	116.67	500	166.67
Other Current Assets	50	100	75	150	125	250	150	300
	650	**100**	**845**	**130**	**880**	**135.38**	**1,190**	**183.08**
Fixed Assets								
Land	400	100	500	125	500	125	500	125
Buildings	800	100	1,000	125	1,200	150	1,500	187.5
Plant	1000	100	1,000	100	1,200	120	1,500	150
	2,200	**100**	**2,500**	**113.64**	**2,900**	**131.82**	**3,500**	**159.00**
Total Assets	**2,850**	**100**	**3,345**	**117.36**	**3,780**	**132.63**	**4,690**	**164.56**

Interpretation:

1. The assets have exhibited a continuous increasing trend over the period.
2. The current assets increased much faster than the fixed assets.
3. Sundry debtors and other current assets and buildings have shown higher growth.

Illustration 9

From the following data relating to the liabilities side of balance sheet of X Ltd., for the period March 31, 2003 to 2006, calculate the trend percentages taking 2003 as the base year.

(Rs. in lakhs)

Liabilities	*2003*	*2004*	*2005*	*2006*
Equity Share Capital	1,000	1,000	1,200	1,500
General Reserve	800	1,000	1,200	1,500
12% Debentures	400	500	500	500
Bank Overdraft	300	400	550	500
Bills Payable	100	120	80	140
Sundry Creditors	300	400	500	600
Outstanding Liabilities	50	75	125	150

Solution

Trend Percentages

(Rs. in Lakhs)

Liabilities	*2003*	*Trend %*	*2004*	*Trend %*	*2005*	*Trend %*	*2006*	*Trend %*
Shareholder Funds								
Equity Share Capital	1,000	100	1,000	100	1200	120	1,500	150
General Reserve	800	100	1,000	125	1200	150	1,500	187.5
	1,800	**100**	**2,000**	**111.11**	**2400**	**133.33**	**3,000**	**166.67**
Long-term Debts								
Debentures	400	100	500	125	500	125	500	125
	400	**100**	**500**	**125**	**500**	**125**	**500**	**125**
Current Liabilities								
Bank Overdraft	300	100	400	133.33	550	183.33	500	166.67
Bills Payable	100	100	120	120	80	80	140	140
Sundry Creditors	300	100	400	133.33	500	166.67	600	200
Outstanding Expenses	50	100	75	150	125	250	150	300
	750	**100**	**995**	**132.67**	**1,255**	**167.33**	**1,390**	**185.33**
Total (Liabilities)	**2,950**	**100**	**3,495**	**118.47**	**4,155**	**140.85**	**4,890**	**165.76**

Interpretation:

1. Shareholders' funds have increased over the period because of retention of profits in the business in the form of reserves, and the share capital has also increased, may be due to issue of fresh shares or bonus shares.
2. The increase in current liabilities is more than that of long term debt. This may be due to expansion of business and/or availability of greater credit activities.

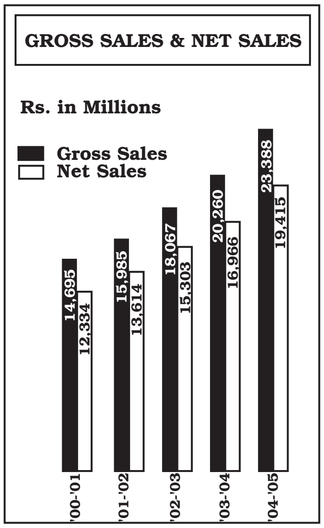
Exhibit - 3

UNICHEM LABORATORIES LTD.
Five - year Financial Highlights
Profit and Loss Account

For the year ended March 31	**2002**	**2003**	**2004**	**2005**	**2006**
Sales and income from operations	3,010.60	3,250.10	3,817.96	4,245.61	4,777.06
Other Income	25.30	29.26	12.04	119.85	42.08
Total Income	**3,035.90**	**3,279.36**	**3,884.00**	**4,365.46**	**4,819.14**
Material consumption	815.78	858.27	1,037.06	1,045.53	1,183.14
Purchase of goods	401.26	512.26	610.20	741.75	796.29
Increase/(Decrease) in stocks of semi-finished and finished goods	(13.87)	(45.83)	(49.78)	(37.57)	(27.27)
Research & Development Expenses	53.30	66.60	68.23	85.13	100.63
Stores and spares	8.54	15.79	21.31	24.67	33.33
Power and fuel	63.58	70.55	88.08	90.66	119.63
Staff costs	233.88	259.97	320.99	378.93	439.86
Excise	309.22	308.03	337.47	310.95	219.52
Selling expenses	343.56	336.68	336.80	400.70	434.11
Other expenses	340.10	388.37	473.86	581.87	567.50
Total cost	2,555.45	2,770.69	3,244.22	3,622.63	3,866.74
Profit Before Depreciation Interest and Tax (PBIDT)	**480.45**	**508.67**	**639.78**	**742.83**	**952.40**
Interest	44.94	48.78	31.23	23.07	22.74
PBDT	**435.51**	**459.89**	**608.55**	**719.76**	**929.67**
Depreciation	65.54	69.85	83.78	93.13	114.20
Profit before tax	**369.97**	**390.04**	**524.77**	**626.63**	**815.47**
Extra ordinary & prior period items	0.55	(0.27)	1.85	0.12	(133.48)
Current tax	41.50	83.46	127.57	141.50	81.00
Fringe benefit tax	-	-	-	-	19.00
Profit after current tax	327.92	306.85	395.35	485.01	848.95
Deferred tax	**20.37**	**36.00**	**16.43**	**37.80**	**15.00**
Profit after tax	307.55	270.85	378.92	447.21	833.95
Export at FOB value	194.85	242.85	411.26	591.18	890.62
Equity dividend	68.24	68.24	102.36	119.42	180.02
Expenditure on					
R & D - capital	47.41	19.82	16.04	68.80	22.62
- Recurring	53.30	66.60	68.23	85.13	100.63
Total R & D expenditure	**100.71**	**86.42**	**84.27**	**153.93**	**123.25**

UNICHEM LABORATORIES LTD.
Balance Sheet

As on March 31	2002	2003	2004	2005	2006
Sources of funds					
Equity share capital	85.30	85.30	170.60	170.60	180.02
Reserves & surplus	901.69	1,096.55	1,340.12	1,655.62	2,826.09
Net worth	**986.99**	**1,181.85**	**1,510.72**	**1,826.22**	**3,006.11**
Secured Loans	186.76	211.80	228.83	258.31	104.67
Unsecured Loans	191.06	337.49	248.56	190.55	178.16
Total Loans	**377.82**	**549.29**	**477.39**	**448.86**	**282.83**
Total Liabilities	**1,364.80**	**1,731.14**	**1,988.11**	**2,275.08**	**3,288.94**
Application of funds					
Gross block	1,247.36	1,545.95	1,672.47	1,977.48	2,436.69
Depreciation	336.20	395.09	474.03	557.23	656.19
Net block	911.16	1,150.86	1,198.44	1,420.25	1,780.50
Capital WIP	85.62	23.84	72.33	365.82	100.48
NB + CWIP	**996.78**	**1,174.70**	**1,270.77**	**1,786.07**	**1,880.98**
Investment	6.17	147.33	142.58	31.18	274.93
Current Assets					
Inventories	286.89	379.62	472.57	540.80	597.46
Debtors	522.00	569.39	657.29	711.45	956.56
Cash and bank balance	19.79	14.45	26.78	18.95	436.15
Loans & advances	104.71	165.95	240.43	189.91	219.40
Total Current Assets	**933.39**	**1,129.41**	**1,397.06**	**1,461.11**	**2,209.57**
Current Liabilities					
Creditors	322.33	428.12	459.88	534.47	522.45
Other current liabilities	43.59	43.05	59.60	87.93	72.86
Provisions	70.72	78.22	115.48	155.74	241.09
Total Current Liabilities	**436.65**	**549.40**	**634.96**	**778.14**	**836.40**
Deferred tax liability	134.91	170.91	187.34	225.14	240.14
Net Current Assets	**361.85**	**409.11**	**574.77**	**457.83**	**1,133.03**
Total Assets	**1,364.80**	**1,731.14**	**1,988.11**	**2,275.08**	**3,288.94**


GROSS SALES & NET SALES
Rs. in Millions
Gross Sales
Net Sales
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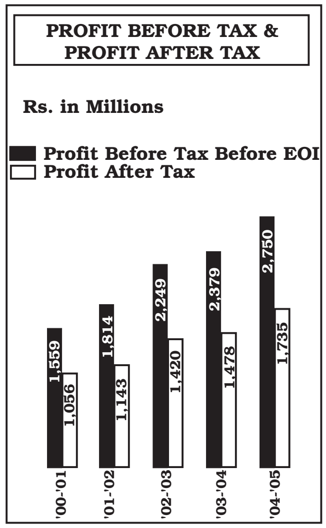
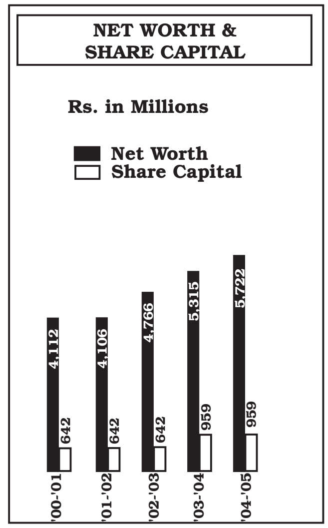
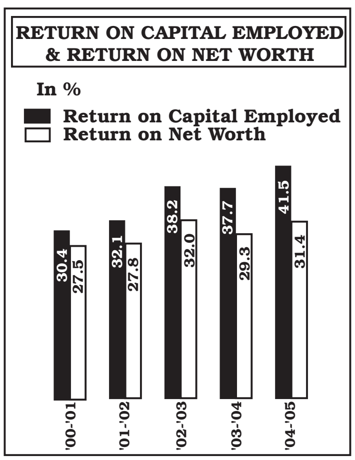
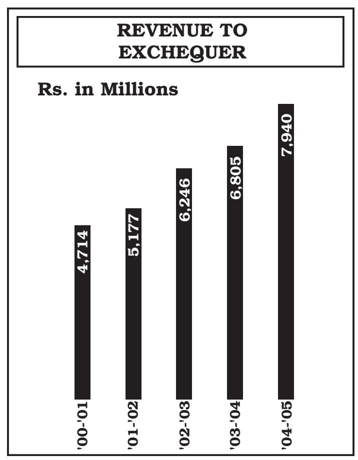
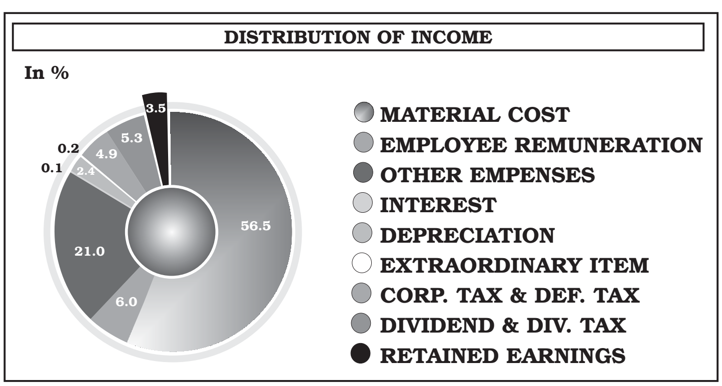
12,334
15,985
13,614
18,067
15,303
20,260
16,966
23,388
19,415
'00-'01
'01-'02
'02-'03
'03-'04
'04-'05

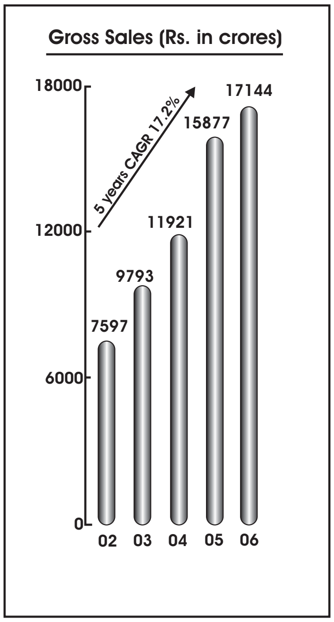

PROFIT BEFORE TAX & PROFIT AFTER TAX
Rs. in Millions
Profit Before Tax Before EOI
Profit After Tax
1,559
1,056
1,814
1,143
2,249
1,420
2,379
1,478
2,750
1,735
'00-'01
'01-'02
'02-'03
'03-'04
'04-'05

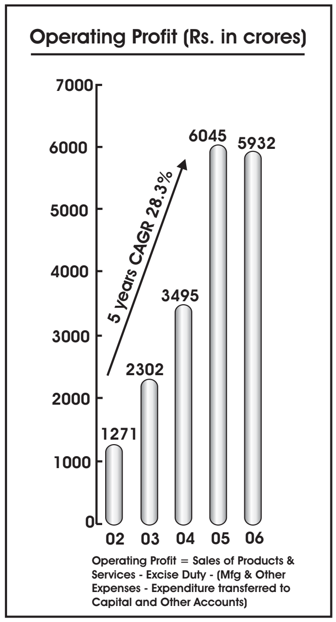

NET WORTH & SHARE CAPITAL
Rs. in Millions
Net Worth
Share Capital
4,112
642
4,106
642
4,766
642
5,315
959
5,722
959
'00-'01
'01-'02
'02-'03
'03-'04
'04-'05

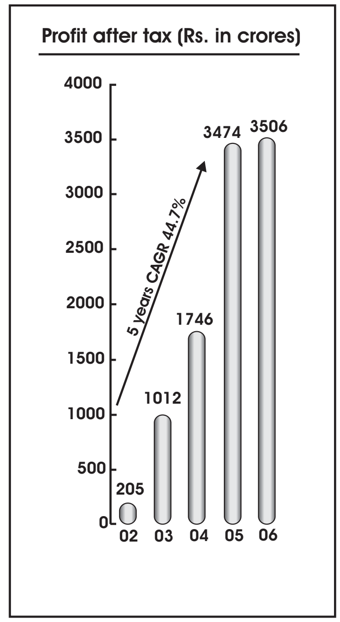

RETURN ON CAPITAL EMPLOYED & RETURN ON NET WORTH
In %
Return on Capital Employed
Return on Net Worth
30.4
27.5
32.1
27.8
38.2
32.0
37.7
29.3
41.5
31.4
'00-'01
'01-'02
'02-'03
'03-'04
'04-'05

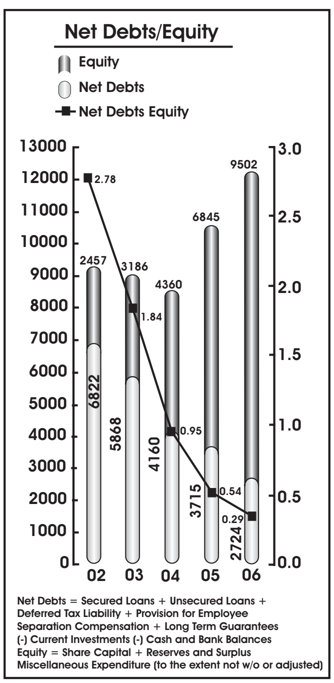

REVENUE TO EXCHEQUER
Rs. in Millions
4,714
5,177
6,246
6,805
7,940
'00-'01
'01-'02
'02-'03
'03-'04
'04-'05

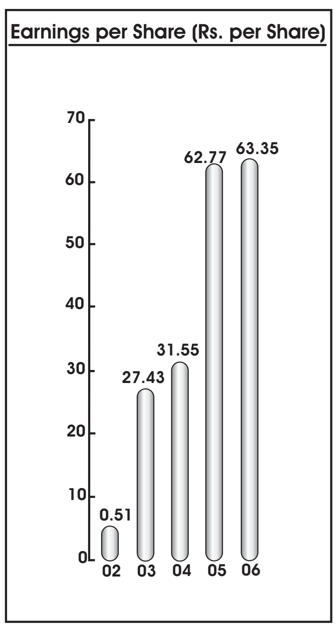

DISTRIBUTION OF INCOME
In %
3.5
5.3
4.9
0.2
0.1
2.4
56.5
21.0
6.0
MATERIAL COST
EMPLOYEE REMUNERATION
OTHER EMPENSES
INTEREST
DEPRECIATION
EXTRAORDINARY ITEM
CORP. TAX & DEF. TAX
DIVIDEND & DIV. TAX
RETAINED EARNINGS

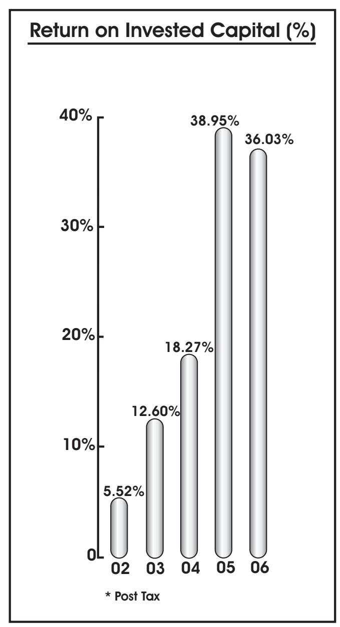

Gross Sales (Rs. in crores)
5 years CAGR 17.2%
18000
12000
6000
0
7597
9793
11921
15877
17144
02 03 04 05 06

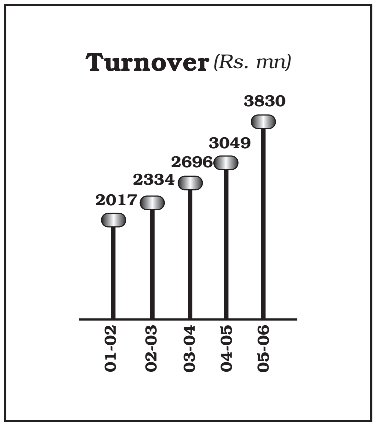

Operating Profit (Rs. in crores)
5 years CAGR 28.3%
7000
6000
5000
4000
3000
2000
1000
0
1271
2302
3495
6045
5932
02 03 04 05 06
Operating Profit = Sales of Products & Services - Excise Duty - (Mfg & Other Expenses - Expenditure transferred to Capital and Other Accounts)

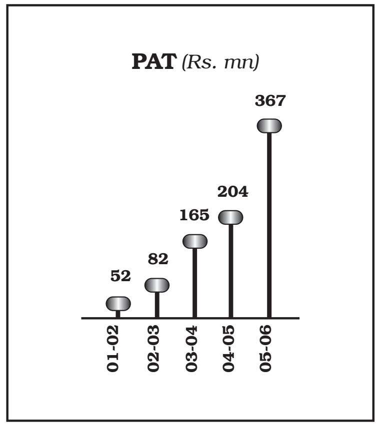

Profit after tax (Rs. in crores)
5 years CAGR 44.7%
4000
3500
3000
2500
2000
1500
1000
500
0
205
1012
1746
3474
3506
02 03 04 05 06

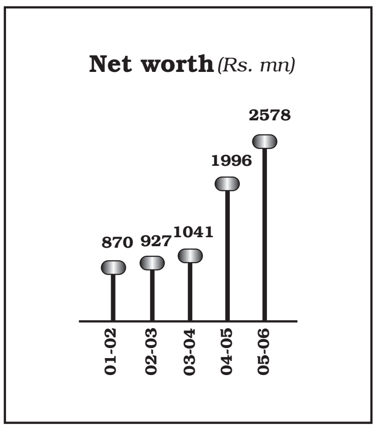

Net Debts/Equity
Equity
Net Debts
Net Debts Equity
13000
12000
11000
10000
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
3.0
2.5
2.0
1.5
1.0
0.5
0.0
2457
3186
4360
6845
9502
6822
5868
4160
3715
2724
2.78
1.84
0.95
0.54
0.29
02 03 04 05 06
Net Debts = Secured Loans + Unsecured Loans + Deferred Tax Liability + Provision for Employee Separation Compensation + Long Term Guarantees (-) Current Investments (-) Cash and Bank Balances
Equity = Share Capital + Reserves and Surplus Miscellaneous Expenditure (to the extent not w/o or adjusted)

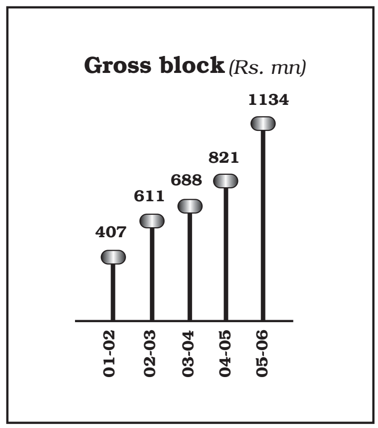

Earnings per Share (Rs. per Share)
70
60
50
40
30
20
10
0
0.51
27.43
31.55
62.77
63.35
02 03 04 05 06

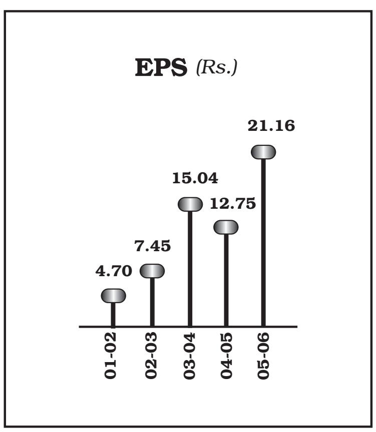

Return on Invested Capital (%)
40%
30%
20%
10%
0
5.52%
12.60%
18.27%
38.95%
36.03%
02 03 04 05 06
* Post Tax

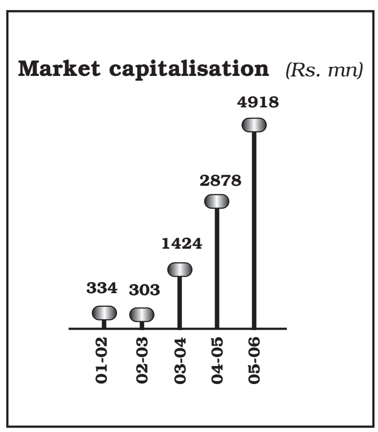

Turnover (Rs. mn)
2017
2334
2696
3049
3830
01-02
02-03
03-04
04-05
05-06


PAT (Rs. mn)
52
82
165
204
367
01-02
02-03
03-04
04-05
05-06


Net worth (Rs. mn)
870
927
1041
1996
2578
01-02
02-03
03-04
04-05
05-06


Gross block (Rs. mn)
407
611
688
821
1134
01-02
02-03
03-04
04-05
05-06


EPS (Rs.)
4.70
7.45
15.04
12.75
21.16
01-02
02-03
03-04
04-05
05-06


Market capitalisation (Rs. mn)
334
303
1424
2878
4918
01-02
02-03
03-04
04-05
05-06

Test your Understanding – III

State whether each of the following is True or False :

(a) The financial statements of a business enterprise include funds 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) 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.

4.8 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 interim reports.
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 on-going concept, as such, it does not reflect the current position.

Terms Introduced in the Chapter

1. Financial Analysis
2. Common Size Statements
3. Comparative Statements
4. Trend Analysis
5. Ratio Analysis
6. Cash Flow Analysis
7. Intra Firm Comparison
8. Inter Firm Comparison
9. Horizontal Analysis
10. Vertical Analysis

Summary

Major Parts of an Annual Report

An annual report contains basic financial statements, viz. Balance Sheet, Profit and Loss Account and Cash Flow Statement. It also carries management's discussion of corporate performance of the year under review and peeps into the future prospects.

Tools of Financial Analysis

Commonly used tools of financial analysis are: Comparative statements, Common size statement, trend analysis, ratio analysis, funds flow analysis and cash flow analysis.

Comparative Statement

Comparative statement captures changes in all items of financial statements in absolute and percentage terms over a period of time for a firm or between two firms.

Common Size Statement

Common size statements expresses all items of a financial statements as a percentage of some common base such as sales for profit and loss account and total assets for balance sheet.

Ratio Analysis

Ratio analysis is a tool of financial analysis which involves the methods of calculating and interpreting financial ratios in order to assess the strengths and weaknesses in the performance of a business enterprise.

Question for Practice

A. Short Answer Questions

1. List the techniques of Financial Statement Analysis.
2. Distinguish between Vertical and Horizontal Analysis of financial data.
3. Explain the meaning of Analysis and Interpretation.
4. Bring out the importance of Financial Analysis?
5. What are Comparative Financial Statements.
6. What do you mean by Common Size Statements?

B. 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 their importance.
5. Explain how common size statements are prepared giving an example.

Numerical Questions

1. From the following information of Narsimham Company Ltd., prepare a Comparative Income Statement for the years 2004-2005

Particulars	*2004 (Rs.)*	*2005 (Rs.)*
Gross Sales	7,25,000	8,15,000
Less : Returns	25,000	15,000
Net Sales	7,00,000	8,00,000
Cost of Goods Sold	5,95,000	6,15,000
Gross Profit	1,05,000	1,85,000
Other Expenses		
Selling & distribution Expenses	23,000	24,000
Administration Expenses	12,700	12,500
Total Expenses	35,700	36,500
Operating Income	69,300	1,48,500
Other Income	1,200	8,050
	70,500	1,56,550
Non Operating Expenses	1,750	1,940
Net Profit	**68,750**	**1,54,610**

2. The following are the Balance Sheets of Mohan Ltd., at the end of 2004 and 2005.

Rs.'000

Liabilities	*2004*	*2005*	*Assets*	*2004*	*2005*
Equity Share Capital	400	600	Land & buildings	270	170
Reserves & Surplus	312	354	Plant & Machinery	310	786
Debentures	50	100	Furniture & Fixtures	9	18
Long-term Loans	150	255	Other Fixed Assets	20	30
Accounts Payable	255	117	Loans and Advances	46	59
Other Current Liabilities	7	10	Cash and Bank	118	10
			Account Receivable	209	190
			Inventory	160	130
			Prepaid Expenses	3	3
			Other current Assets	29	40
	1,174	**1,436**		**1,174**	**1,436**

Prepare a Comparative Balance Sheet and study the financial position of the company.

3. The following are the balance sheets of Devi Co. Ltd at the end of 2002 and 2003. Prepare a Comparative Balance Sheet and study the financial position of the concern.

Liabilities	*2002 (Rs.)*	*2003 (Rs.)*	*Assets*	*2002 (Rs.)*	*2003 (Rs.)*
Equity Capital	1,20,000	1,85,000	Fixed Assets	1,40,000	1,95,000
Preference Capital	70,000	95,000	Stock	40,000	45,000
Reserves	30,000	35,000	Debtors	70,000	82,500
P & L	17,500	20,000	Bills Receivables	20,000	50,000
Bank overdraft	35,000	45,450	Prepaid Expenses	6,000	8,000
Creditors	25,000	35,000	Cash at bank	40,000	48,500
Provision for Taxation	15,000	22,500	Cash in hand	5,000	29,000
Proposed Dividend	8,500	20,050			
	3,21,000	**4,58,000**		**3,21,000**	**4,58,000**

4. Convert the following income statement into Common Size Statement and interpret the changes in 2005 in the light of the conditions in 2004.

	2004 *(Rs.)*	*2005* *(Rs.)*
Gross Sales	30,600	36,720
Less : Returns	600	700
Net Sales	30,000	36,020
Less : Cost of Goods Sold	18,200	20,250
Gross Profit	11,800	15,770
Less : Operating Expenses		
Administration Expenses	3,000	3,400
Sales Expenses	6,000	6,600
Total Expenses	9,000	10,000
Income from Operations	2,800	5,770
Add : Non-operating Income	300	400
Total Income	3,100	6,170
Less : Non-operating Expenses	400	600
Net Profit	**2,700**	**5,570**

5. Following are the balance sheets of Reddy Ltd. as on 31 March 2003 and 2004.

Liabilities	*2004*	*2005*	*Assets*	*2004*	*2005*
Share Capital	2,400	3,600	Land & buildings	1,620	1,040
Reserves & Surplus	1,872	2,124	Plant & Machinery	1,860	4,716
Debentures	300	600	Furniture & Fixtures	54	108
Long-term Debt	900	1,530	Other Fixed Assets	120	180
Bills Payable	1,530	702	Long-terms Loans	276	354
Other Current Liabilities	42	60	Cash & Bank Balances	708	60
			Bill Receivable	1,254	1,120
			Stock	960	780
			Prepaid Expenses	18	18
			Other Current Assets	174	240
	7,044	8,616		7,044	8,616

Analyse the financial position of the company with the help of the Common Size Balance Sheet.

6. The accompanying balance sheet and profit and loss account related to SUMO Logistics Pvt. Ltd. convert these into Common Size Statements.

   Previous Year = 2005   Current Year= 2006

Rs.'000

	Previous Year	*Current Year*
Liabilities		
Equity Share Capital (of Rs. 10 each)	240	240
General Reserve	96	182
Long Term loans	182	169.5
Creditors	67	52
Outstanding expenses	6	-
Other Current liabilities	9	6.5
Total Liabilities	**600**	**650**
Assets		
Plant assets net of accumulated less depreciation	402	390
Cash	54	78
Debtors	60	65
Inventories	84	117
Total Assets	**600**	**650**

Income Statement for the year ended

Rs.'000

	Previous Year	*Current Year*
Gross Sales	370	480
Less : Returns	20	30
Net sales	350	450
Less : Cost of goods sold	190	215
Gross Profit	160	235
Less : Selling general and administration expenses	50	72
Operating profit	110	163
Less : Interest expenses	20	17
Earnings before tax	90	146
Less : Taxes	45	73
Earnings After Tax	45	73

7. From the following particulars extracted from P&L A/c of Prashanth Ltd., you are required to calculate trend percentages

Year	*Sales (Rs.)*	*Wages (Rs.)*	*Bad debts (Rs.)*	*Profit after tax (Rs.)*
2003	3,50,000	50,000	14,000	16,000
2004	4,15,000	60,000	26,000	24,500
2005	4,25,000	72,200	29,000	45,000
2006	4,60,000	85,000	33,000	60,000

8. Calculate trend percentages from the following figures of ABC Ltd., taking 2000 as base and interpret them.

Year	*Sales*	*Stock*	*Profit before tax*
2000	1,500	700	300
2001	2,140	780	450
2002	2,365	820	480
2003	3,020	930	530
2004	3,500	1160	660
2005	4000	1200	700

9. From the following data relating to the liabilities side of balance sheet of Madhuri Ltd., as on 31st March 2006, you are required to calculate trend percentages taking 2002 as the base year.

(Rs. in Lakhs)

Liabilities	*2002*	*2003*	*2004*	*2005*	*2006*
Share capital	100	125	130	150	160
Reserves & Surplus	50	60	65	75	80
12% Debentures	200	250	300	400	400
Bank overdraft	10	20	25	25	20
Profit & Loss A/c	20	22	28	26	30
Sundry Creditors	40	70	60	70	75

Answers to Test your Understanding

Test your Understanding – I

1. Simplification 2. explaining 3. the impact of 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