## Chapter 2

Financial Statements Analysis and Interpretation

## Meaning of Financial Statements

- The two statements prepared and presented by a business enterprise at the end of accounting year viz. a balance sheet and a profit and loss account are called financial statements.
- "The end product of the financial accounting process is a set of reports which are called Financial Statements."
- Balance Sheet is a statement of financial position reflecting assets, liabilities and capital on a particular day. It shows the assets of a business on a particular day and the sources of financing these assets, whether the funds are raised from creditors or from owners.
- Profit and Loss Account or the income statement as it is known, show the results of trading achieved during a certain period. It shows either profit or loss made in the business during the year.


## Characteristics of Financial Statements

- Two Statements: There are two basic financial statements i.e., Balance Sheet and Profit and Loss Account.
- Accounting Principles and Concepts: The two statements are prepared on the basis of generally accepted accounting principles and practices.
- Based on Recorded Facts: The financial statements are prepared on the basis of facts recorded in accounting records i.e., they are prepared on the basis of business transactions recorded in the books of accounts only.
- Personal Judgments: In addition to the accounting principles, the personal opinion also plays an important role in preparation of financial statements.
- Reasonable Accuracy: Absolute accuracy is not possible in preparation of financial statements as some of the figures are only estimates. E.g., provision for doubtful debts.
- Multi-Purpose: The profits or losses revealed by income statements prepared for different purposes are bound to differ. E.g., profit as per normal profit and loss account is different from profit computed for income-tax purposes.
- Clarity: The financial statements must be so prepared that they can easily understood by the readers for whom they are meant. Unnecessary details should be avoided. If need be, the additional information must be given in the form of schedules.
- Comparison with Figures of Previous Year: The figures of current year are generally given along with those of the previous year in both the financial statements. The Companies Act has made this preparation compulsory. This presentation is useful to management in taking important policy decisions.


## Purposes of Financial Statements

- To abide by the provisions of Companies Act.
- For income-tax purposes.
- To give necessary information to the shareholders who have invested their savings.
- To give necessary information to the lenders of money or to trade creditors.
- To give a true picture of performance and financial position to the bank for obtaining loan.
- To satisfy the requirements of stock exchanges and controller of capital issues.
- To assist the management in taking important policy decisions like pricing etc.


## Methods of Analysis of Financial Statements

- Comparative Statements
- Trend Percentages
- Common-sized Statements
- Statement of changes in working capital
- Cash-flow Analysis
- Fund-flow Analysis
- Ratio Analysis
- Value-Added Statement


## Comparative Financial Statement

- When financial statements of a few years are presented in columnar form, it indicate the trend of changes taking place in business. The method of presenting both financial statements in columnar form and of judging the trend of profitability and financial condition of business is known as Comparative Statement Analysis.
- Generally, the Balance Sheets and Profit and Loss Accounts are prepared in comparative form, though theoretically any other statement can be so presented.
- The method of comparative statements is used to indicate the changes in the current year's figures as compared to past year's figures. For example, the comparative profit and loss account will reveal the increase or decrease in the expenses or incomes. Likewise, the comparative Balance Sheet will indicate the changes which have taken place in various assets and liabilities over a period of one or more years.


## - Example - 1:

The Balance-Sheets of Jigna Ltd. as on 31-3-2012 and 31-3-2013 are as under:

| Liabilities | 31-3-2012 <br> ₹ | 31-3-2013 <br> ₹ | Assets | 31-3-2012 <br> ₹ | 31-3-2013 <br> ₹ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Equity Share Capital | 4,00,000 | 5,00,000 | Land and Buildings | 2,00,000 | 3,50,000 |
| Preference Share Capital | 1,00,000 | 2,00,000 | Machinery | 1,50,000 | 2,50,000 |
| General Reserve | 1,00,000 | 1,50,000 | Furniture | 50,000 | 1,50,000 |
| Profit and Loss A/c | 50,000 | 1,00,000 | Investments | 1,50,000 | 1,50,000 |
| 10\% Debentures | 1,00,000 | 1,00,000 | Debtors | 2,50,000 | 2,00,000 |
| Creditors | 1,50,000 | 2,00,000 | Stock | 1,50,000 | 1,75,000 |
| Un-paid expenses | 1,00,000 | 50,000 | Cash | 50,000 | 25,000 |
|  | 10,00,000 | 13,00,000 |  | 10,00,000 | 13,00,000 |

Prepare Comparative Balance Sheets in vertical form.

| Particulars | $\begin{gathered} 31-3-2012 \\ ₹ \end{gathered}$ | $\begin{gathered} 31-3-2013 \\ ₹ \end{gathered}$ | $\begin{aligned} & \text { Increase/ } \\ & \text { Decrease (₹) } \end{aligned}$ | Increase/ <br> Decrease (\%) |
| :---: | :---: | :---: | :---: | :---: |
| Shareholder's Fund: |  |  |  |  |
| Equity Share Capital | 4,00,000 | 5,00,000 | 1,00,000 | 25 |
| Preference Share Capital | 1,00,000 | 2,00,000 | 1,00,000 | 100 |
| Reserves and Surplus: |  |  |  |  |
| General Reserve | 1,00,000 | 1,50,000 | 50,000 | 50 |
| Profit and Loss A/c | 50,000 | 1,00,000 | 50,000 | 100 |
| Long-term Liabilities: 10\% Debentures | 1,00,000 | 1,00,000 | ----- | -- |
| Current Liabilities: Creditors | 1,50,000 | 2,00,000 | 50,000 | 33.33 |
| Un-paid expenses | 1,00,000 | 50,000 | $(50,000)$ | (50) |
| TOTAL | 10,00,000 | 13,00,000 | 3,00,000 | 30 |
| Fixed Assets: |  |  |  |  |
| Land and Buildings | 2,00,000 | 3,50,000 | 1,50,000 | 75 |
| Machinery | 1,50,000 | 2,50,000 | 1,00,000 | 66.67 |
| Furniture | 50,000 | 1,50,000 | 1,00,000 | 200 |
| Current Assets: |  |  |  |  |
| Investments | 1,50,000 | 1,50,000 | ---- | -- |
| Debtors | 2,50,000 | 2,00,000 | $(50,000)$ | (20) |
| Stock | 1,50,000 | 1,75,000 | 25,000 | 16.67 |
| Cash | 50,000 | 25,000 | $(25,000)$ | (50) |
| TOTAL | 10,00,000 | 13,00,000 | 3,00,000 | 30 |

## - Working Notes:

(1) Increase/Decrease ( $₹$ ) = Current year amount - Previous year amount
e.g., Equity share capital

$$
\begin{array}{ll}
=5,00,000-4,00,000 & =1,00,000 \\
=2,00,000-1,00,000 & =1,00,000 \\
=50,000-1,00,000 & =(50,000)
\end{array}
$$

Preference share capital $=2,00,000-1,00,000=1,00,000$
Un-paid expenses
(2) Increase/Decrease (\%) $=\frac{\text { Increase or Decrease }(₹)}{\text { Previous year amount }} \times 100$

$$
\begin{array}{lll}
\text { e.g., Equity share capital } & =\frac{1,00,000}{4,00,000} \times 100 & =25 \% \\
\text { Preference share capital } & =\frac{1,00,000}{1,00,000} \times 100 & =100 \% \\
\text { Un-paid expenses } & =\frac{(50,000)}{1,00,000} \times 100 & =(50) \%
\end{array}
$$

## Common-Size Financial Statements:

- The methods so far discussed do not provide any common base with which all items in each statement can be compared. For this purpose common size statements are prepared in which all items are compared with one common item, which is significant.
- For example, in the income statement or profit \& loss account, sales may be taken as 100 and all other items in this statement are computed as percentages of sales.
- Similarly in case of balance sheet the relation of each item to total assets is computed. Suppose, the value of total assets of a company is $₹ 10,00,000$ which is taken as 100 . If the cash balance is ₹ 50,000 , then it is presented as $5 \%$ of the total assets.
- If other company keep a cash balance of $10 \%$ of total assets, then the cash balance of this company is considered to be low.


## - Example - 1:

The Balance-Sheets of Jigna Ltd. as on 31-3-2012 and 31-3-2013 are as under:

| Liabilities | 31-3-2012 <br> ₹ | 31-3-2013 | Assets | 31-3-2012 <br> ₹ | 31-3-2013 <br> ₹ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Equity Share Capital | 4,00,000 | 5,00,000 | Land and Buildings | 2,00,000 | 3,50,000 |
| Preference Share Capital | 1,00,000 | 2,00,000 | Machinery | 1,50,000 | 2,50,000 |
| General Reserve | 1,00,000 | 1,50,000 | Furniture | 50,000 | 1,50,000 |
| Profit and Loss A/c | 50,000 | 1,00,000 | Investments | 1,50,000 | 1,50,000 |
| 10\% Debentures | 1,00,000 | 1,00,000 | Debtors | 2,50,000 | 2,00,000 |
| Creditors | 1,50,000 | 2,00,000 | Stock | 1,50,000 | 1,75,000 |
| Un-paid expenses | 1,00,000 | 50,000 | Cash | 50,000 | 25,000 |
|  | 10,00,000 | 13,00,000 |  | 10,00,000 | 13,00,000 |

Prepare Common-Size Balance Sheets in vertical form.

| Particulars | $\begin{gathered} 31-3-2012 \\ F \end{gathered}$ | $\begin{gathered} 31-3-2013 \\ F \end{gathered}$ | Percentage of Total |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | 31-3-2012 | 31-3-2013 |
| Shareholder's Fund: |  |  |  |  |
| Equity Share Capital | 4,00,000 | 5,00,000 | 40 | 38.46 |
| Preference Share Capital | 1,00,000 | 2,00,000 | 10 | 15.38 |
| Reserves and Surplus: |  |  |  |  |
| General Reserve | 1,00,000 | 1,50,000 | 10 | 11.54 |
| Profit and Loss A/c | 50,000 | 1,00,000 | 5 | 7.69 |
| Long-term Liabilities: 10\% Debentures | 1,00,000 | 1,00,000 | 10 | 7.69 |
| Current Liabilities: Creditors | 1,50,000 | 2,00,000 | 15 | 15.38 |
| Un-paid expenses | 1,00,000 | 50,000 | 10 | 3.86 |
| TOTAL | 10,00,000 | 13,00,000 | 100 | 100.00 |
| Fixed Assets: |  |  |  |  |
| Land and Buildings | 2,00,000 | 3,50,000 | 20 | 26.93 |
| Machinery | 1,50,000 | 2,50,000 | 15 | 19.23 |
| Furniture | 50,000 | 1,50,000 | 5 | 11.54 |
| Current Assets: |  |  |  |  |
| Investments | 1,50,000 | 1,50,000 | 15 | 11.54 |
| Debtors | 2,50,000 | 2,00,000 | 25 | 15.38 |
| Stock | 1,50,000 | 1,75,000 | 15 | 13.46 |
| Cash | 50,000 | 25,000 | 5 | 1.92 |
| TOTAL | 10,00,000 | 13,00,000 | 100 | 100.00 |

## - Working Notes:

(1) Assume total assets/liabilities as $100 \%$ and compare particular asset or liability with it. The following formula should be used:

$$
\text { Percentage }=\frac{\text { Particular asset } / \text { liability }}{\text { Total assets }} \times 100
$$

e.g.,

For 31-3-2012,
Equity share capital $=\frac{4,00,000}{10,00,000} \times 100=40 \%$
For 31-3-2013,
Equity share capital $=\frac{5,00,000}{13,00,000} \times 100=38.46 \%$

- Example: Profit \& Loss Account of A Ltd. for the year ending on 31-3-12 and 31-3-13 are as under:

| Particulars | $\begin{gathered} 31-3-2012 \\ ₹ \end{gathered}$ | 31-3-2013 |
| :---: | :---: | :---: |
| Sales | 8,00,000 | 10,00,000 |
| Less: Cost of Sales | 5,00,000 | 6,00,000 |
| Gross Profit: (A) | 3,00,000 | 4,00,000 |
| Less: Business Expenses: |  |  |
| Administration Expenses | 60,000 | 80,000 |
| Sales Expenses | 80,000 | 1,00,000 |
| Total Business Expenses: (B) | 1,40,000 | 1,80,000 |
| Total Profit of Business ( $\mathrm{A}-\mathrm{B}$ ) | 1,60,000 | 2,20,000 |
| Add: Non-Trading Incomes | 20,000 | 60,000 |
|  | 1,80,000 | 2,80,000 |
| Less: Other Expenses | 40,000 | 20,000 |
| Total Net Profit | 1,40,000 | 2,60,000 |
| Less: Income-tax | 60,000 | 90,000 |
|  | 80,000 | 1,70,000 |
| Less: Abnormal Expenses: |  |  |
| Loss on sale of Fixed Assets | 8,000 | 10,000 |
| Loss by fire | 4,000 | 5,000 |
| Net Profit | 68,000 | 1,55,000 |

Prepare Common-size Profit \& Loss Account in Vertical form.

| Particulars | $\underset{₹}{\text { 31-3-2012 }}$ | $\begin{gathered} 31-3-2013 \\ ₹ \end{gathered}$ | Percentage of Sales |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | 31-3-2012 | 31-3-2013 |
| Sales | 8,00,000 | 10,00,000 | 100.00 | 100.00 |
| Less: Cost of Sales | 5,00,000 | 6,00,000 | 62.50 | 60.00 |
| Gross Profit: (A) | 3,00,000 | 4,00,000 | 37.50 | 40.00 |
| Less: Business Expenses: |  |  |  |  |
| Administration Expenses | 60,000 | 80,000 | 7.50 | 8.00 |
| Sales Expenses | 80,000 | 1,00,000 | 10.00 | 10.00 |
| Total Business Expenses: (B) | 1,40,000 | 1,80,000 | 17.50 | 18.00 |
| Total Profit of Business ( $\mathrm{A}-\mathrm{B}$ ) | 1,60,000 | 2,20,000 | 20.00 | 22.00 |
| Add: Non-Trading Incomes | 20,000 | 60,000 | 2.50 | 6.00 |
|  | 1,80,000 | 2,80,000 | 22.50 | 28.00 |
| Less: Other Expenses | 40,000 | 20,000 | 5.00 | 2.00 |
| Total Net Profit | 1,40,000 | 2,60,000 | 17.50 | 26.00 |
| Less: Income-tax | 60,000 | 90,000 | 7.50 | 9.00 |
|  | 80,000 | 1,70,000 | 10.00 | 17.00 |
| Less: Abnormal Expenses: |  |  |  |  |
| Loss on sale of Fixed Assets | 8,000 | 10,000 | 1.00 | 1.00 |
| Loss by fire | 4,000 | 5,000 | 0.50 | 0.50 |
| Net Profit | 68,000 | 1,55,000 | 8.50 | 15.50 |

## - Working Notes:

(1) Assume Sales as $100 \%$ and compare incomes and expenses with it. The following formula should be used:

$$
\text { Percentage }=\frac{\text { Particular income } / \text { expense }}{\text { Total Sales }} \times 100
$$

e.g.,

For 31-3-2012,
Cost of sales $=\frac{5,00,000}{8,00,000} \times 100=62.50 \%$
For 31-3-2013,

$$
\text { Cost of sales }=\frac{6,00,000}{10,00,000} \times 100=60.00 \%
$$

## Trend Percentages

- For studying the trend of various items of financial statements, figures of a single year are not enough. Comparative figures of some years are significant. Such comparative figures may be either absolute figures or may be presented in percentage form.
- If the items of one year, which may be called base year, are compared with similar items of other years in the form of percentages, the method is known as trend percentages method or trend ratios method.
- The figures of one year are taken as the base. Every item in this base statement is taken as 100. Figures of each item in other year's statements are divided by the corresponding item in the statement of the base year. Thus we get percentage of each item.


## - Example - 1:

The Balance-Sheets of Jigna Ltd. as on 31-3-2012 and 31-3-2013 are as under:

| Liabilities | $\begin{gathered} 31-3-2012 \\ ₹ \end{gathered}$ | 31-3-2013 <br> ₹ | Assets | $\begin{gathered} 31-3-2012 \\ ₹ \end{gathered}$ | 31-3-2013 <br> ₹ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Equity Share Capital | 4,00,000 | 5,00,000 | Land and Buildings | 2,00,000 | 3,50,000 |
| Preference Share Capital | 1,00,000 | 2,00,000 | Machinery | 1,50,000 | 2,50,000 |
| General Reserve | 1,00,000 | 1,50,000 | Furniture | 50,000 | 1,50,000 |
| Profit and Loss A/c | 50,000 | 1,00,000 | Investments | 1,50,000 | 1,50,000 |
| 10\% Debentures | 1,00,000 | 1,00,000 | Debtors | 2,50,000 | 2,00,000 |
| Creditors | 1,50,000 | 2,00,000 | Stock | 1,50,000 | 1,75,000 |
| Un-paid expenses | 1,00,000 | 50,000 | Cash | 50,000 | 25,000 |
|  | 10,00,000 | 13,00,000 |  | 10,00,000 | 13,00,000 |

Find out trend percentage.

Trend Percentage Balance Sheets of Jigna Lid.

| Particulars | $\begin{gathered} 31-3-2012 \\ F \end{gathered}$ | $\begin{gathered} 31-3-2013 \\ ₹ \end{gathered}$ | $\begin{gathered} 31-3-2013 \\ (\%) \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| Shareholder's Fund: |  |  |  |
| Equity Share Capital | 4,00,000 | 5,00,000 | 125 |
| Preference Share Capital | 1,00,000 | 2,00,000 | 200 |
| Reserves and Surplus: |  |  |  |
| General Reserve | 1,00,000 | 1,50,000 | 150 |
| Profit and Loss A/c | 50,000 | 1,00,000 | 200 |
| Long-term Liabilities: 10\% Debentures | 1,00,000 | 1,00,000 | 100 |
| Current Liabilities: Creditors | 1,50,000 | 2,00,000 | 133.33 |
| Un-paid expenses | 1,00,000 | 50,000 | 50 |
| TOTAL | 10,00,000 | 13,00,000 | 130 |
| Fixed Assets: |  |  |  |
| Land and Buildings | 2,00,000 | 3,50,000 | 175 |
| Machinery | 1,50,000 | 2,50,000 | 166.67 |
| Furniture | 50,000 | 1,50,000 | 300 |
| Current Assets: |  |  |  |
| Investments | 1,50,000 | 1,50,000 | 100 |
| Debtors | 2,50,000 | 2,00,000 | 80 |
| Stock | 1,50,000 | 1,75,000 | 116.67 |
| Cash | 50,000 | 25,000 | 50 |
| TOTAL | 10,00,000 | 13,00,000 | 130 |

## - Working Notes:

For finding out trend percentage the following formula should be used. We taken 31-3-2012 figures as a base. Figures of each item in 31-3-2013 are divided by the corresponding item in the statement of the base year.

$$
\text { Trend percentage (\%) } \quad=\frac{\text { Amount of Current year }}{\text { Amount of base year }} \times 100
$$

$$
\begin{array}{ll}
\text { e.g., Equity share capital } & =\frac{5,00,000}{4,00,000} \times 100=125 \% \\
\text { Preference share capital } & =\frac{2,00,000}{1,00,000} \times 100=200 \% \\
\text { Un-paid expenses } & =\frac{50,000}{1,00,000} \times 100=50 \%
\end{array}
$$

## - Example - 2:

Find out trend percentage from the following balance sheet. Take 2009-10 year as the base year. All figures are shown in lakh rupees.

| Liabilities | $\begin{gathered} 09-10 \\ ₹ \end{gathered}$ | $\begin{gathered} 10-11 \\ ₹ \end{gathered}$ | $\begin{gathered} 11-12 \\ ₹ \end{gathered}$ | $\begin{gathered} 12-13 \\ ₹ \end{gathered}$ | Assets | $\begin{gathered} 09-10 \\ ₹ \end{gathered}$ | $\begin{gathered} 10-111 \\ ₹ \end{gathered}$ | $\begin{gathered} 11-12 \\ ₹ \end{gathered}$ | $\begin{gathered} 12-13 \\ ₹ \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Share Capital | 525 | 525 | 525 | 525 | Fixed Assets | 2,229 | 2,219 | 2,332 | 2,439 |
| Reserves | 417 | 509 | 441 | 452 | Investments | 4 | 3 | 17 | --- |
| Secured Loan | 1,623 | 1,385 | 1,442 | 1,601 | Current Assets | 794 | 948 | 1,148 | 1,195 |
| Current Liabilities | 462 | 751 | 1,089 | 1,056 |  |  |  |  |  |
|  | 3,027 | 3,170 | 3,497 | 3,634 |  | 3,027 | 3,170 | 3,497 | 3,634 |


| Particulars | 10-109 <br> (F) | 10-'11 <br> (₹) | 11-12 <br> (₹) | $12-^{\prime} 13$ <br> (₹) | 10-11 (\%) | 11-12 <br> (\%) | $12-13$ <br> (\%) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Share Capital | 525 | 525 | 525 | 525 | 100.00 | 100.00 | 100.00 |
| Reserves | 417 | 509 | 441 | 452 | 122.06 | 105.76 | 108.39 |
| Secured Loan | 1,623 | 1,385 | 1,442 | 1,601 | 85.34 | 88.85 | 98.64 |
| Current Liabilities | 462 | 751 | 1,089 | 1,056 | 162.55 | 235.71 | 228.57 |
|  | 3,027 | 3,170 | 3,497 | 3,634 | 104.72 | 115.53 | 120.05 |
| Fixed Assets | 2,229 | 2,219 | 2,332 | 2,439 | 99.55 | 104.62 | 109.42 |
| Investments | 4 | 3 | 17 | --- | 75.00 | 425.00 | --- |
| Current Assets | 794 | 948 | 1,148 | 1,195 | 119.40 | 144.58 | 150.50 |
|  | 3,027 | 3,170 | 3,497 | 3,634 | 104.72 | 115.53 | 120.05 |

