

## Unit-2

### Preparation of final accounts

#### Introduction

The most important function of an accounting system is to provide information about the profitability of the business. A sole trader furnishes a Trading and Profit and loss Account which depicts the result of the business transactions of the sole trader. Along with the Trading and Profit and Loss Account he also prepares a Balance Sheet which shows the financial position of the business.

#### Steps in the Process of Finalization of Accounts

##### A. For Trading Concerns:

1. Trading Account.
2. Profit and Loss Account.
3. Balance Sheet.

##### B. For Manufacturing and Trading Concerns:

1. Manufacturing Account.
2. Trading Account.
3. Profit and Loss Account.
4. Balance Sheet.

#### Preparation of Financial Statements

**Profitability Statement** – This statement is related to a complete accounting period. It shows the outcome of business activities during that period in a summarized form. The activities of any business will include purchase, manufacture, and sell.

**Balance Sheet** – Business needs some resources which have longer life (say more than a year). Such resources are, therefore, not related to any particular accounting period, but are to be used over the useful life thereof. The resources do not come free. One requires finance to acquire them. This funding is provided by owners through their investment, bank & other through loans, suppliers by way of credit terms. The Balance Sheet shows the list of resources and the funding of the resources i.e. assets and liabilities (towards owners and outsiders). It is also referred as sources of funds (i.e. liabilities & capital) and application of funds (i.e. assets). Let us discuss these statements in depth.

**Trading Account:** It is an account which is prepared by a merchandising concern which purchases goods and sells the same during a particular period. The purpose of it to find out the gross profit or gross loss which is an important indicator of business efficiency.

The following items will appear in the debit side of the Trading Account:

**(i) Opening Stock:** In case of trading concern, the opening stock means the finished goods only. The amount of opening stock should be taken from Trial Balance.

**(ii) Purchases:** The amount of purchases made during the year. Purchases include cash as well as credit purchase. The deductions can be made from purchases, such as, purchase return, goods withdrawn by the proprietor, goods distributed as free sample etc.

**(iii) Direct expenses:** it means all those expenses which are incurred from the time of purchases to making the goods in suitable condition. This expenses includes freight inward, octroi, wages etc.

**(iv) Gross profit:** If the credit side of trading A/c is greater than debit side of trading A/c gross profit will arise.

The following items will appear in the credit side of Trading Account:

**(i) Sales Revenue:** The sales revenue denotes income earned from the main business activity or activities.

The income is earned when goods or services are sold to customers. If there is any return, it should be deducted from the sales value. As per the accrual concept, income should be recognized as soon as it is accrued and not necessarily only when the cash is paid for. The Accounting standard 7 (in case of contracting business) and Accounting standard 9 (in other cases) define the guidelines for revenue recognition. The essence of the provisions of both standards is that revenue should be recognized only when significant risks and rewards (vaguely referred to as ownership in goods) are transferred to the customer. For example, if an invoice is made for sale of goods and the term of sale is door delivery; then sale can be recognized only on getting the proof of delivery of goods at the door of customer. If such proof is pending at the end of accounting period, then this transaction cannot be taken as sales, but will be treated as unearned income.

**(ii) Closing Stocks:** In case of trading business, there will be closing stocks of finished goods only. According to convention of conservatism, stock is valued at cost or net realizable value whichever is lower.

**(iii) Gross Loss:** When debit side of trading account is greater than credit side of trading account, gross loss will appear.

| Dr.                        |        | Trading Account for the year ended |        | Cr. |  |
|----------------------------|--------|------------------------------------|--------|-----|--|
| Particulars                | Amount | Particulars                        | Amount |     |  |
| Opening Stock:             |        | Sales                              |        |     |  |
| Finished goods             |        | Less : Sales return                |        |     |  |
| Purchases                  |        | Closing stock                      |        |     |  |
| Less : Purchase returns    |        | Finished goods                     |        |     |  |
| Gross Profit               |        | Gross Loss                         |        |     |  |
| (transferred to P & L A/c) |        | (transferred to P & L A/c)         |        |     |  |
| Total                      |        | Total                              |        |     |  |

### Preparation of Trading Account

#### Illustration 1.

Following are the ledger balances presented by M/s. P. Sen as on 31<sup>st</sup> March 2013.

| Particulars      | Amount<br>(₹) | Particulars           | Amount<br>(₹) |
|------------------|---------------|-----------------------|---------------|
| Stock (1.4.2012) | 10,000        | Sales                 | 3,00,000      |
| Purchase         | 1,60,000      | Return Inward         | 16,000        |
| Carriage Inwards | 10,000        | Return Outward        | 10,000        |
| Wages            | 30,000        | Royalty on Production | 6,000         |
| Freight          | 8,000         | Gas and Fuel          | 2,000         |

Additional Information: All figures in Rs,

- (1) Stock on 31.3.2013: (i) Market Price ` 24,000; (ii) Cost Price ` 20,000;
- (2) Stock valued ` 10,000 were destroyed by fire and insurance company admitted the claim to the extent of ` 6,000.
- (3) Goods purchased for ` 6,000 on 29th March, 2013, but still lying in-transit, not at all recorded in the books.
- (4) Goods taken for the proprietor for his own use for ` 3,000.
- (5) Outstanding wages amounted to ` 4,000.
- (6) Freight was paid in advance for ` 1,000.

| In the books of M/s. P. Sen<br>Trading Account<br>For the year ended 31 <sup>st</sup> March, 2013 |  |               |               |                       |               |
|---|--|---------------|---------------|-----------------------|---------------|
| Dr.   | Particulars  | Amount<br>(₹) | Amount<br>(₹) | Particulars           | Amount<br>(₹) |
|   | To Openign Stock                                   |               | 10,000        | By, Sales             | 3,00,000      |
|   | To Purchase  | 1,60,000      |               | Less: Return Inward   | 16,000        |
|   | Less: Return Outward                               | 10,000        |               |                       | 2,84,000      |
|   |  | 1,50,000      |               | By, Closing Stock     | 20,000        |
|   | Less: Goods taken by Proprietor                    | 3,000         |               | Add: Stock Destroyed  | 10,000        |
|   |  | 1,47,000      |               |                       | 30,000        |
|   | Add: Goods-in-transit                              | 6,000         | 1,53,000      | Add: Goods-in-Transit | 6,000         |
|   |  |               |               |                       | 36,000        |
|   | To Wages   | 30,000        |               |                       |               |
|   | Add: Outstanding                                   | 4,000         | 34,000        |                       |               |
|   |  |               |               |                       |               |
|   | To, Carriage Inwards                               |               | 10,000        |                       |               |
|   | To, Freight  | 8,000         |               |                       |               |
|   | Less: Prepaid                                      | 1,000         | 7,000         |                       |               |
|   |  |               |               |                       |               |
|   | To, Royalty on production                          |               | 6,000         |                       |               |
|   | To, Gas & fuel                                     |               | 2,000         |                       |               |
|   | `` Profit & Loss A/c<br>(Gross profit transferred) |               | 98,000        |                       |               |
|   |  |               | 3,20,000      |                       | 3,20,000      |

**Note:** (a) Stock should be valued as per cost price or market price whichever is lower.  
 (b) The claim which was admitted by insurance company and the loss of stock, will not appear in Trading Account.

### Profit and Loss Account:

The following items will appear in the debit side of the Profit & Loss A/c:

**(i) Cost of Sales:** This term refers to the cost of goods sold. The goods could be manufactured and sold or can be directly identified with goods.

**(ii) Other Expenses:** All expenses which are not directly related to main business activity will be reflected in the P & L component. These are mainly the Administrative, Selling and distribution expenses. Examples are salary to office staff, salesmen commission, insurance, legal charges, audit fees, advertising, free samples, bad debts etc. It will also include items like loss on sale of fixed assets, interest and provisions.

**(iii) Abnormal Losses:** All abnormal losses are charged against Profit & Loss Account. It includes stock destroyed by fire, goods lost in transit etc.

The following items will appear in the credit side of Profit & Loss A/c:

**(i) Revenue Incomes:** These incomes arise in the ordinary course of business, which includes commission received, discount received etc.

**(ii) Other Incomes:** The business will generate incomes other than from its main activity. These are purely incidental. It will include items like interest received, dividend received, etc. The end result of one component of the P & L A/c is transferred over to the next component and the net result will be transferred to the balance sheet as addition in owners' equity. The profits actually belong to owners of business. In case of company organizations, where ownership is widely distributed, the profit figure is separately shown in balance sheet.

separately shown in balance sheet.

| Dr.                                |        | Profit and Loss Account for the year ended |        | Cr. |
|------------------------------------|--------|--|--------|-----|
| Particulars                        | Amount | Particulars                                | Amount |     |
| Gross Loss                         |        | Gross Profit                               |        |     |
| (transferred from Trading A/c)     |        | (transferred from Trading A/c)             |        |     |
| Administrative expenses            |        | Other Income                               |        |     |
| Office salaries                    |        | Interest received                          |        |     |
| Communication                      |        | Commission received                        |        |     |
| Travel & Conveyance                |        | Profit on sale of assets                   |        |     |
| Office rent                        |        | Rent received                              |        |     |
| Depreciation of office assets      |        | Net loss                                   |        |     |
| Audit fees                         |        | Total                                      |        |     |
| Insurance                          |        |  |        |     |
| Repairs & maintenance              |        |  |        |     |
| Selling & Distribution expenses    |        |  |        |     |
| Advertising                        |        |  |        |     |
| Salesmen commission                |        |  |        |     |
| Delivery van expenses/Depreciation |        |  |        |     |
| on delivery vans/Bad debts         |        |  |        |     |
| Financial expenses                 |        |  |        |     |
| Bank charges                       |        |  |        |     |
| Interest on loans                  |        |  |        |     |
| Loss on sale of assets             |        |  |        |     |
| Net profit                         |        |  |        |     |
| Total                              |        |  |        |     |

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Example :

From the following particulars presented by Sri Tirlhankar for the year ended 31st March 2013, Prepare Profit and Loss Account.( All figures in Rs)

Gross Profit ` 1,00,000, Rent ` 22,000; Salaries, ` 10,000; Commission (Cr.) ` 12,000; Insurance ` 8,000; Interest (Cr.) ` 6,000; Bad Debts ` 2,000; Provision for Bad Debts (1.4.2012) ` 4,000; Sundry Debtors ` 40,000; Discount Received ` 2,000; Plant & Machinery ` 80,000.

Adjustments:

- (a) Outstanding salaries amounted to ` 4,000;
- (b) Rent paid for 11 months;
- (c) Interest due but not received amounted to ` 2,000
- (d) Prepaid Insurance amounted to ` 2,000;
- (e) Depreciate Plant and Machinery by 10% p.a.
- (f) Further Bad Debts amounted to ` 2,000 and make a provision for Bad Debts @5% on Sundry Debtors.
- (g) Commissions received in advance amounted to ` 2,000.

**In the Books of Sri Tirlhankar  
Profit and Loss Account  
for the year ended 31<sup>st</sup> March 2013.**

| Dr.  |               |                 | Cr.   |               |                 |
|--|---------------|-----------------|---|---------------|-----------------|
| Particulars  | Amount<br>(₹) | Amount<br>(₹)   | Particulars                                     | Amount<br>(₹) | Amount<br>(₹)   |
| To, Rent   | 22,000        |                 | By, Trading A/c.                                |               | 1,00,000        |
| Add: Outstanding                                     | 2,000         | 24,000          | -Gross Profit                                   |               |                 |
| `` Salaries  | 10,000        |                 | ``Commission                                    | 12,000        |                 |
| Add: Outstanding                                     | 4,000         | 14,000          | Less: Received in advance                       | 2,000         | 10,000          |
| `` Insurance   | 8,000         |                 | ``Interest                                      | 6,000         |                 |
| Less: Prepaid  | 2,000         | 6,000           | Add: Accrued Interest                           | 2,000         | 8,000           |
| `` Bad Debts   | 2,000         |                 |   |               |                 |
| Add: further Bad Debts                               | 2,000         | 4,000           | ``Discount received                             |               | 2,000           |
| ``Depreciation on Plant & Machinery @10% on ₹ 80,000 |               | 8,000           | ``Provisions for Bad Debts                      | 4,000         |                 |
| ``Capital A/c (Net Profit Transferred)               |               | 66,100          | Less: New Provision @ 5% on ₹ 40,000 – ₹ 2,000) | 1,900         | 2,100           |
|  |               | <b>1,22,100</b> |   |               | <b>1,22,100</b> |

Balance Sheet: Horizontal format of Balance Sheet is also used by the business other than company

#### A. Liabilities

(a) Capital: This indicates the initial amount the owner or owners of the business contributed. This contribution could be at the time of starting business or even at a later stage to satisfy requirements of funds for expansion, diversification etc. As per business entity concept, owners and business are distinct entities, and thus, any contribution by owners by way of capital is liability.

(b) Reserves and Surplus: The business is a going concern and will keep making profit or loss year by year. The accumulation of these profit or loss figures (called as surpluses) will keep on increasing or decreasing owners' equity. In case of non-corporate forms of business, the profits or losses are added to the capital A/c and not shown separately in the balance sheet of the business.

(c) Long Term or Non-Current Liabilities: These are obligations which are to be settled over a longer period of time say 5-10 years. These funds are raised by way of loans from banks and financial institutions. Such borrowed funds are to be repaid in installments during the tenure of the loan as agreed. Such funds are usually raised to meet financial requirements to procure fixed assets. These funds should not (d) Short Term or Current Liabilities: A liability shall be classified as Current when it satisfies any of the

following :

- It is expected to be settled in the organisation's normal Operating Cycle,
- It is held primarily for the purpose of being traded,
- It is due to be settled within 12 months after the Reporting Date, or
- The organization does not have an unconditional right to defer settlement of the liability for at least 12 months after the reporting date (Terms of a Liability that could, at the option of the counterparty, result in its settlement by the issue of Equity Instruments do not affect its classification)

Current liabilities comprise of :

(i) Sundry Creditors - Amounts payable to suppliers against purchase of goods. This is usually settled within 30-180 days.

(ii) Advances from customers – At times customer may pay advance i.e. before they get delivery of goods. Till the business supplies goods to them, it has an obligation to pay back the advance in case of failure to supply. Hence, such advances are treated as liability till the time they get converted to sales.

(iii) Outstanding Expenses: These represent services procured but not paid for. These are usually settled within 30–60 days e.g. phone bill of Sept is normally paid in Oct.

(iv) Bills Payable: There are times when suppliers do not give clean credit. They supply goods against a promissory note to be signed as a promise to pay after or on a particular date. These are called as bills payable or notes payable.

(v) Bank Overdrafts: Banks may give fund facilities like overdraft whereby, business is permitted to issue cheques up to a certain limit. The bank will honour these cheques and will recover this money from business. This is a short term obligation.

## B. Assets

In accounting language, all debit balances in personal and real accounts are called as assets. Assets are broadly classified into fixed assets and current assets.

(a) Fixed Assets: These represent the facilities or resources owned by the business for a longer period of time. The basic purpose of these resources is not to buy and sell them, but to use for future earnings. The benefit from use of these assets is spread over a very long period. The fixed assets could be in tangible form such as buildings, machinery, vehicles, computers etc, whereas some could be in intangible form viz. patents, trademarks, goodwill etc. The fixed assets are subject to wear and tear which is called as depreciation. In the balance sheet, fixed assets are always shown as "original cost less depreciation".

(b) Investments: These are funds invested outside the business on a temporary basis. At times, when the business has surplus funds, and they are not immediately required for business purpose, it is prudent to invest it outside business e.g. in mutual funds or fixed deposit. The purpose is to earn a reasonable return on this money instead of keeping them idle. These are assets shown separately in balance sheet. Investments can be classified into Current Investments and Non-current Investments. Non-current Investments are investments which are restricted beyond the current period as to sale or disposal.

Whereas, current investments are investments that are by their nature readily realizable and is intended to be held for not more than one year from the date on which such investment is made.

(c) Current Assets: An asset shall be classified as Current when it satisfies any of the following :

- It is expected to be realised in, or is intended for sale or consumption in the organisation's normal Operating Cycle,
- It is held primarily for the purpose of being traded,
- It is due to be realised within 12 months after the Reporting Date, or
- It is Cash or Cash Equivalent unless it is restricted from being exchanged or used to settle a Liability

for at least 12 months after the Reporting Date.

Current assets comprise of:

(i) Stocks: This includes stock of raw material, semi-finished goods or WIP, and finished goods.

Stocks are shown at lesser of the cost or market price. Provision for obsolescence, if any, is also reduced. Generally, stocks are physically counted and compared with book stocks to ensure that there are no discrepancies. In case of discrepancies, the same are adjusted to P & L A/c and stock figures are shown as net of this adjustment.

(ii) Debtors: They represent customer balances which are not paid. The bad debts or a provision for bad debt is reduced from debtors and net figure is shown in balance sheet.

(iii) Bills receivables: Credit to customers may be given based on a bill to be signed by them payable to the business at an agreed date in future. At the end of accounting period, the bills accepted but not yet paid are shown as bills receivables.

(iv) Cash in Hand: This represents cash actually held by the business on the balance sheet date. This cash may be held at various offices, locations or sites from where the business activity is carried out. Cash at all locations is physically counted and verified with the book balance. Discrepancies if any are adjusted.

(v) Cash at Bank: Dealing through banks is quite common. Funds held as balances with bank are also treated as current asset, as it is to be applied for paying to suppliers. The balance at bank as per books of accounts is always reconciled with the balance as per bank statement, the reasons for differences are identified and required entries are passed.

(vi) Prepaid Expenses: They represent payments made against which services are expected to be received in a very short period.

(vii) Advances to suppliers: When amounts are paid to suppliers in advance and goods or services are not received till the balance sheet date, they are to be shown as current assets. This is because advances paid are like right to claim the business gets.

Please note that both current assets and current liabilities are used in day-to-day business activities. The current assets minus current liabilities are called as working capital or net current assets. The following report is usual horizontal form of balance sheet. Please note that the assets are normally shown in descending order of their liquidity. Also, capital, long term liabilities and short term liabilities are shown in that order.

Example:

From the following particulars prepare a Balance Sheet of Mr. X, for the year ended 31st March, 2013.

Capital : ` 2,00,000; Drawings : ` 40,000 ; Cash In Hand : ` 15,000 ; Loan from Bank : ` 40,000;  
Sundry

Creditors : ` 40,000; Bills Payable : ` 20,000; Bank Overdraft : ` 20,000; Goodwill : ` 60,000;  
Sundry

Debtors : ` 80,000; Land and Building : ` 50,000; Plant and Machinery : ` 80,000; Investment :  
` 20,000;

Bills Receivable : ` 10,000. Cash at Bank : ` 25,000.



The following adjustments are made at the time of preparing final accounts:

I. Outstanding Liabilities for : Salaries ` 10,000; wages ` 20,000; Interest on Bank Overdraft ` 3,000; and

Interest on Bank Loan ` 6,000.

II. Provide Interest on Capital @ 10% p.a.

III. Depreciation on Plant and Machinery by 10% p.a.

IV. Bad Debts amounted to ` 10,000 and make a provision for Bad Debts @ 10% on Sundry Debtors.

V. Closing stock amounted to ` 1,20,000.

Net profit for the year amounted to ` 96,000 after considering all the above adjustments.

**In the books of Mr. X  
Balance Sheet as at 31.03.2013**

| Liabilities                    | Amount (₹) | Amount (₹) | Assets                        | Amount (₹) | Amount (₹) |
|--------------------------------|------------|------------|-------------------------------|------------|------------|
| Capital                        | 2,00,000   |            | Goodwill                      |            | 60,000     |
| Add: Interest on Capital @ 10% | 20,000     |            | Land and Building             |            | 50,000     |
| Add: Net Profit                | 96,000     |            | Plant and Machinery           | 80,000     |            |
|                                | 3,16,000   |            | Less: Depreciation@ 10%       | 8,000      | 72,000     |
| Less: Drawings                 | 40,000     | 2,76,000   | Investment                    |            | 20,000     |
|                                |            |            | Closing Stock                 |            | 1,20,000   |
| Bank Overdraft                 | 20,000     |            |                               |            |            |
| Add: Out. Interest             | 3,000      | 23,000     | Sundry Debtors                | 80,000     |            |
| Bank Loan                      | 40,000     |            | Less: Bad Debts               | 10,000     |            |
| Add: Out. Interest             | 6,000      | 46,000     |                               | 70,000     |            |
|                                |            |            | Less: Prov. for Bad debts@10% | 7,000      | 63,000     |
| Sundry Creditors               |            | 40,000     | Bills Receivable              |            | 10,000     |
| Bills Payable                  |            | 20,000     | Cash at Bank                  |            | 25,000     |
| Outstanding Liabilities:       |            |            | Cash in Hand                  |            | 15,000     |
| Salaries                       | 10,000     |            |                               |            |            |
| Wages                          | 20,000     | 30,000     |                               |            |            |
|                                |            | 4,35,000   |                               |            | 4,35,000   |

### Accounting books and Accounts of Non-profit Organizations

Until now, we have seen accounting treatment for business transaction of business entities whose main objective is to earn profit. There are certain organisations that are not established for making profit but to provide some service. These services are generally given to members who make subscriptions to avail them. These are also called as non-trading entities. The examples of such organisations are:

- Gymkhana / sports clubs

- Educational institutions
- Public hospitals
- Libraries
- Cultural clubs like Rotary or Lions club
- Religious institutions
- Charitable trusts

These organisations get their funds in the form of contributions by way of entrance fees, life membership fees, annual subscriptions, donations, grants, legacies etc. The accounting of such organisations is based on similar principles followed by the other organisations. Given the nature of these institutions, there are certain items of revenue and expenses that need special understanding so that accounting treatment could be correctly decided.

#### Financial Statements

These non-profit organisations prepare Receipt and Payment Account – This is similar to cash book. Entries are made on cash basis and items pertaining to previous year or current year or subsequent years are also recorded. Receipts are shown on debit side and payments are shown on credit side. Capital as well as revenue items are entered in the R & P Account. This account is real account in nature. No provisions are recorded in this account.

The account has an opening and a closing balance which is reflected as an asset in the balance sheet.

#### Features of receipts and payment account

1. It is an Account which contains all Cash and Bank transactions made by a nonprofit organization during a particular financial period.
2. It starts with the opening balances of Cash and Bank. All Cash Receipts both capital & revenue during the period are debited to it.
3. All Cash Payments both capital & revenue during the period are credited to this Account. It ends with the closing Cash and Bank Balances.
4. While recording the Cash and Bank transactions all entries are made on Cash Basis.
5. It is a summary of Cash Book.
6. It follows Real Account

Income and Expenditure account – This is similar to the Profit and loss Account and is prepared exactly based on same principles. As the name suggests only revenue items are recorded herein. Incomes are recorded on the credit side while the expenses on the debit side. Both incomes and expenses must be taken on the basis of accrual concept. This account should reflect only items that are pertaining to current period. Previous and subsequent year

items are to be excluded. This account shows either a surplus or deficit. Excess of income over expenditure is called surplus and excess of expenditure over income is called as deficit.

#### Features of income and expenditure Account

1. It follows Nominal Account.
2. All expenses of revenue nature for the particular period are debited to this Account on accrual basis.
3. Similarly all revenue incomes related to the particular period are credited to this account on accrual basis.
4. All Capital incomes and Expenditures are excluded.
5. Only current year's incomes and expenses are recorded. Amounts related to other periods are deducted. Amounts outstanding for the current year are added.
6. Profit on Sale of Asset is credited. Loss on Sale of Asset is debited. Annual Depreciation on Assets is also debited.
7. If income is more than expenditure, it is called a Surplus, and is added with Capital or General Fund etc. in the Balance Sheet.
8. If expenditure is more than income, it is a deficit, and is deducted from Capital or General Fund etc. in the Balance Sheet.

#### Difference between Receipts and Payments Account and Income and Expenditure Account

|    | Receipts & Payments Account   | Income & Expenditure Account   |
|----|---|--|
| 1. | It is a summarised Cash Book  | It closely resembles the Profit & Loss Account of a Trading concern.   |
| 2. | Receipts are debited and Payments are credited.   | Incomes are credited and Expenditures are debited.   |
| 3. | Transactions are recorded on Cash basis.  | Transactions are recorded on Accrual Basis   |
| 4. | Amounts related to previous period or future period may remain included. Outstanding amount for current year is excluded. | Transactions are recorded on accrual basis. All amounts not related to the current period are excluded. Outstanding amounts of current period are added. |
| 5. | It records both Capital and Revenue transactions.   | It records Revenue transactions only.  |

|     |   |  |
|-----|---|--|
| 6.  | It serves the purpose of a Real Account.  | It serves the purpose of a Nominal Account.  |
| 7.  | It starts with opening Cash and Bank Balances and ends with closing Cash and Bank Balances. | It does not record such balances, rather its final balance shows a surplus or a deficit for the period.                    |
| 8.  | It does not record notional loss or noncash expenses like bad debts, depreciations etc.     | It considers all such expenses for matching against revenues   |
| 9.  | Its closing balance is carried forward to the same account of the next accounting Period.   | Its closing balance is transferred to Capital Fund or General Fund or Accumulated Fund in the same period's Balance Sheet. |
| 10. | It helps to prepare an Income & Expenditure Account.  | It helps to prepare a Balance Sheet.   |

Fund Asset Accounting and its peculiarities:

Following are the concepts of some funds which are generally maintained by organizations:

(i) Capital Fund : It is also called “General Fund” or “Accumulated Fund.” It is actually the Capital of a non-profit concern. It may be found out as the excess of assets over liabilities. Usually “Surplus” or “Deficit” during a period is added with or deducted from it. A portion of Capitalised incomes like donations may be added with it.

(ii) Special Fund: It may be created out of special donation or subscription or out of a portion of the “Surplus”. For example a club may have a “Building Fund”. It may be used for meeting some specific expenses or for acquiring an asset. If any income is derived out of investments made against this fund or if any profit or loss occurs due to sale of such investments, such income or profit or loss is transferred to this fund.

Other Treatments

(a) If the Special Fund is used to meet an expense

Special Fund A/c Dr.

To Bank A/c (amt. of expense)

The balance of the Fund is shown as a liability.

If the balance is transferred to Capital Fund, the entry will be—

Special Fund A/c Dr.

To Capital Fund A/c (Balance of Special Fund )

(b) If the Special Fund is used to purchase an asset

Asset A/c Dr.

To Bank A/c (Cost of the asset )

Special Fund A/c Dr.

To Capital Fund A/c (Special Fund closed)

(iii) Donations

(a) Donation received for a particular purpose should be credited to Special Fund. For example,

Donation received for Building should be credited to Building Fund Account.

(b) For other donations received the by-laws or rules of the concern should be followed.

(c) If there is no such rule, donations received of non-recurring nature should be credited to Capital

Fund. Recurring donations received should be credited to Income & Expenditure Account.

- (d) Donation paid by the concern should be debited to Income & Expenditure Account.
- (iv) Legacy received : It is to be directly added with Capital Fund after deduction of tax, (if any). It is a kind of donation received according to the will made by a deceased person.
- (v) Entrance Fees or Admission Fees
- (a) The rules or by-laws of the concern should be followed.
- (b) If there is no such rule, Admission or Entrance Fees paid once by members for acquiring membership should be added with Capital Fund.
- (c) If such fees are of small amounts covering the expenses of admission only, the fees may be credited to Income & Expenditure Account.
- (vi) Subscriptions
- (a) Annual subscriptions are credited to Income & Expenditure Account on accrual basis.
- (b) Life membership subscription is usually credited to a separate account shown as a liability.

Annual Subscription apportioned out of that is credited to Income & Expenditure Account and deducted from the liability. Thus the balance is carried forward till the contribution by a member is fully exhausted. If any member dies before hand, the balance of his life Membership contribution is transferred to Capital Fund or General Fund.

Example: All figures in Rs

Ujjwal Vavishwa Club was holding a building valuing ` 10 lakhs as on 31.03.2012.

Building Fund stands ` 8 lakhs and Cash at Bank is ` 15 lakhs as on 01.04.2012.

During the year 2012-13 donation received for the building fund is ` 20 lakhs.

Give the journal entries and the effect in the Balance Sheet as on 31.03.2013

If (i) It purchases building of ` 15 lakhs during 2012-13

(ii) It purchases building of ` 30 lakhs during 2012-13

#### Journal entries

(₹ in Lakhs)

| Date | Particulars  | L.F | Debit | Credit |
|------|--|-----|-------|--------|
|      | Bank A/c<br>To, Donation for Building Fund A/c<br>(Donation received for Building Fund)                      | Dr. | 20    | 20     |
|      | Building A/c<br>To, Bank A/c<br>(Building purchased utilizing the Building Fund)                             | Dr. | 15    | 15     |
|      | Building Fund A/c<br>To, Capital Fund A/c<br>(Being the capital expenditure transferred to the Capital Fund) | Dr. | 15    | 15     |

**Balance Sheet as on 31.03.2013**

| Liabilities                              | Amount<br>(₹) | Amount<br>(₹ Lakh) | Assets                     | Amount<br>(₹) | Amount<br>(₹ Lakh) |
|--|---------------|--------------------|----------------------------|---------------|--------------------|
| Capital Fund                             |               |                    | Building                   | 10.00         |                    |
| Add: Building                            | 15.00         |                    | Add: Purchase of building  | 15.00         | 25.00              |
| Fund (Amount Transferred)                |               |                    | Bank                       | 15.00         |                    |
| Building Fund                            | 8.00          |                    | Add: Donation Received     | 20.00         |                    |
| Add: Donation                            | 20.00         |                    |                            |               |                    |
|  | 28.00         |                    |                            | 35.00         |                    |
| Less: Amount transferred to Capital Fund | 15.00         | 13.00              | Less: Purchase of Building | 15.00         | 20.00              |
|  |               |                    |                            |               |                    |

**Journal entries**

(₹ in Lakhs)

| Date | Particulars  | L.F | Debit | Credit |
|------|--|-----|-------|--------|
|      | Bank A/c Dr.<br>To, Donation for Building Fund A/c<br>(Donation received for Building Fund)                      |     | 20    | 20     |
|      | Building A/c Dr.<br>To, Bank A/c<br>(Building purchased utilizing the Building Fund)                             |     | 30    | 30     |
|      | Building Fund A/c Dr.<br>To, Capital Fund A/c<br>(Being the capital expenditure transferred to the Capital Fund) |     | 28    | 28     |

**Balance Sheet as on 31.03.2013**

| Liabilities                              | Amount<br>(₹ Lakh) | Amount<br>(₹ Lakh) | Assets                     | Amount<br>(₹ Lakh) | Amount<br>(₹ Lakh) |
|--|--------------------|--------------------|----------------------------|--------------------|--------------------|
| Capital Fund                             |                    |                    | Building                   | 10.00              |                    |
| Add: Building                            | 28.00              |                    | Add: Purchase of building  | 30.00              | 40.00              |
| Fund (Amount Transferred)                |                    |                    | Bank                       | 15.00              |                    |
| Building Fund                            | 8.00               |                    | Add: Donation Received     | 20.00              |                    |
| Add: Donation                            | 20.00              |                    |                            | 35.00              |                    |
|  | 28.00              |                    | Less: Purchase of Building | 30.00              | 5.00               |
| Less: Amount transferred to Capital Fund | 28.00              | NIL                |                            |                    |                    |

**Analysis and interpretation of financial statements – meaning, importance and techniques,**

**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

## Significance of Analysis of Financial Statements

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 statement of profit and loss. 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. It has a broad scope which includes top management in general and other functional managers. Management of the firm would be interested in every aspect of the financial analysis. It is Analysis of Financial Statements 177

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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 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 longterm 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.

### Tools of Analysis of Financial Statements

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 statement of profit and loss 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 a common item by expressing each item as a percentage of that common item. The percentage thus calculated can be easily compared with the results of 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'.
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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.



## Comparative Statements

As stated earlier, these statements refer to the statement of profit and loss and the 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 accounts 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 Exhibit 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.

$$\frac{\text{Absolute Increase or Decrease (Col.4)}}{\text{First year absolute figure (Col.2)}} \times 100$$

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

### Example

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, 2014 and 2015:

| Particulars               | Note No. | 2013-14<br>Rs. | 2014-15<br>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 %             |          |                |                |

***Solution:***

**Comparative statement of profit and loss of Madhu Co. Limited  
for the year ended March 31, 2014 and 2015:**

| <i>Particulars</i>           | <i>2013-14</i> | <i>2014-15</i> | <i>Absolute<br/>Increase (+) or<br/>Decrease (-)</i> | <i>Percentage<br/>Increase (+)<br/>or Decrease (-)</i> |
|------------------------------|----------------|----------------|--|--|
|                              | Rs.            | Rs.            | Rs.  | %  |
| I. Revenue from operations   | 16,00,000      | 20,00,000      | 4,00,000   | 25   |
| II. Less: Expenses           |                |                |  |  |
| a) Employee benefit expenses | 8,00,000       | 10,00,000      | 2,00,000   | 25   |
| b) Other expenses            | 2,00,000       | 1,00,000       | (1,00,000)   | (50)   |
| Profit before tax            | 6,00,000       | 9,00,000       | 3,00,000   | 50   |
| III. Less tax @ 40%          | 2,40,000       | 3,60,000       | 1,20,000   | 50   |
| Profit after tax             | 3,60,000       | 5,40,000       | 1,80,000   | 50   |

**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 statement of profit and loss, the items of expenditure are shown as a percentage of the net revenue from operations. If such a statement is prepared for successive periods, it shows the changes of the respective percentages over a period of time. 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 4.2).
2. Choose a common base (as 100). For example, revenue from operations may be taken as base (100) in case of statement of profit and loss and total assets or total liabilities (100) in case of balance sheet.
3. For all items of Col. 2 and 3 work out the percentage of that total.

Column 4 and 5 shows these percentages in Exhibit

Example

From the following information, prepare a Common size Income Statement for the year ended March 31, 2014 and 2015:

| <i>Particulars</i>     | <i>2014-15</i><br>Rs. | <i>2013-14</i><br>Rs. |
|------------------------|-----------------------|-----------------------|
| Net sales              | 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, 2013 and March 31, 2014**

| <i>Particulars</i>            | <i>Absolute Amounts</i> |                       | <i>Percentage of Net Sales</i> |                       |
|-------------------------------|-------------------------|-----------------------|--------------------------------|-----------------------|
|                               | <i>2013-14</i><br>Rs.   | <i>2014-15</i><br>Rs. | <i>2013-14</i><br>(%)          | <i>2014-15</i><br>(%) |
| Net Sales                     | 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.

## Ratio Analysis

### Meaning of Accounting Ratios

As stated earlier, accounting ratios are an important tool of financial statements analysis. A ratio is a mathematical number calculated as a reference to relationship of two or more numbers and can be expressed as a fraction, proportion, percentage and a number of times. When the number is calculated by referring to two accounting numbers derived from the financial statements, it is termed as accounting ratio. 'Revenue from Operations'. This ratio is termed as gross profit ratio. Similarly, inventory turnover ratio may be 6 which implies that inventory turns into 'Revenue from Operations' six times in a year. It needs to be observed that accounting ratios exhibit relationship, if any, between accounting numbers extracted from financial statements. Ratios are essentially derived numbers and their efficacy depends a great deal upon the basic numbers from which they are calculated. Hence, if the financial statements contain some errors, the derived numbers in terms of ratio analysis would also present an erroneous scenario. Further, a ratio must be calculated using numbers which are meaningfully correlated. A ratio calculated by using two unrelated numbers would hardly serve any purpose. For example, the furniture of the business is Rs. 1,00,000 and Purchases

are Rs. 3,00,000. The ratio of purchases to furniture is 3 ( $3,00,000/1,00,000$ ) but it hardly has any relevance. The reason is that there is no relationship between these two aspects.

### Objectives of Ratio Analysis

Ratio analysis is indispensable part of interpretation of results revealed by the financial statements. It provides users with crucial financial information and points out the areas which require investigation. Ratio analysis is a technique which involves regrouping of data by application of arithmetical relationships, though its interpretation is a complex matter. It requires a fine understanding of the way and the rules used for preparing financial statements. Once done effectively, it provides a lot of information which helps the analyst:

1. To know the areas of the business which need more attention;
2. To know about the potential areas which can be improved with the effort in the desired direction;
3. To provide a deeper analysis of the profitability, liquidity, solvency and efficiency levels in the business;
4. To provide information for making cross-sectional analysis by comparing the performance with the best industry standards; and
5. To provide information derived from financial statements useful for making projections and estimates for the future.

### Types of Ratios

There is a two way classification of ratios: (1) traditional classification, and (2) functional classification. The traditional classification has been on the basis of financial statements to which the determinants of ratios belong. On this basis the ratios are classified as follows:

1. *Statement of Profit and Loss Ratios:* A ratio of two variables from the statement of profit and loss is known as statement of profit and loss ratio. For example, ratio of gross profit to revenue from operations is known as gross profit ratio. It is calculated using both figures from the statement of profit and loss.
2. *Balance Sheet Ratios:* In case both variables are from the balance sheet, it is classified as balance sheet ratios. For example, ratio of current assets to current liabilities known as current ratio. It is calculated using both figures from balance sheet.
3. *Composite Ratios:* If a ratio is computed with one variable from the statement of profit and loss and another variable from the balance sheet, it is called composite ratio. For example, ratio of credit revenue from operations to trade receivables (known as trade receivables turnover ratio) is calculated using one figure from the statement of profit and loss (credit revenue from operations) and another figure (trade receivables) from the balance sheet.

Although accounting ratios are calculated by taking data from financial statements but classification of ratios on the basis of financial statements is rarely used in practice. It must be recalled that basic purpose of accounting is to throw light on the financial performance

(profitability) and financial position (its capacity to raise money and invest them wisely) as well as changes occurring in financial position (possible explanation of changes in the activity level). As such, the alternative classification (functional classification) based on the purpose for which a ratio is computed, is the most commonly used classification which is as follows:

1. *Liquidity Ratios*: To meet its commitments, business needs liquid funds. The ability of the business to pay the amount due to stakeholders as and when it is due is known as liquidity, and the ratios calculated to measure it are known as 'Liquidity Ratios'. These are essentially short-term in nature.

2. *Solvency Ratios*: Solvency of business is determined by its ability to meet its contractual obligations towards stakeholders, particularly towards external stakeholders, and the ratios calculated to measure solvency position are known as 'Solvency Ratios'. These are essentially long-term in nature.

3. *Activity (or Turnover) Ratios*: This refers to the ratios that are calculated for measuring the efficiency of operations of business based on effective utilisation of resources. Hence, these are also known as 'Efficiency Ratios'.

4. *Profitability Ratios*: It refers to the analysis of profits in relation to revenue from operations or funds (or assets) employed in the business and the ratios calculated to meet this objective are known as 'Profitability Ratios'.

### **Liquidity Ratios**

Liquidity ratios are calculated to measure the short-term solvency of the business, i.e. the firm's ability to meet its current obligations. These are analysed by looking at the amounts of current assets and current liabilities in the balance sheet. The two ratios included in this category are current ratio and liquidity ratio.

#### **1. Current Ratio:**

*Current ratio is the proportion of current assets to current liabilities. It is expressed as follows:*

$$\text{Current Ratio} = \text{Current Assets} : \text{Current Liabilities} \text{ or } \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Current assets include current investments, inventories, trade receivables (debtors and bills receivables), cash and cash equivalents, short-term loans and advances and other current assets such as prepaid expenses, advance tax and accrued income, etc.

Current liabilities include short-term borrowings, trade payables (creditors and bills payables), other current liabilities and short-term provisions.

*Significance*: It provides a measure of degree to which current assets cover current liabilities. The excess of current assets over current liabilities provides a measure of safety margin

available against uncertainty in realisation of current assets and flow of funds. The ratio should be reasonable. It should neither be very high or very low. Both the situations have their inherent disadvantages. A very high current ratio implies heavy investment in current assets which is not a good sign as it reflects under utilisation or improper utilisation of resources. A low ratio endangers the business and puts it at risk of facing a situation where it will not be able to pay its short-term debt on time. If this problem persists, it may affect firms credit worthiness adversely. Normally, it is safe to have this ratio within the range of 2:1.

## 2. Quick Ratio

It is the ratio of quick (or liquid) asset to current liabilities. It is expressed as

$$\text{Quick ratio} = \text{Quick Assets} : \text{Current Liabilities} \quad \text{or} \quad \frac{\text{Quick Assets}}{\text{Current Liabilities}}$$

The quick assets are defined as those assets which are quickly convertible into cash. While calculating quick assets we exclude the inventories at the end and other current assets such as prepaid expenses, advance tax, etc., from the current assets. Because of exclusion of non-liquid current assets it is considered better than current ratio as a measure of liquidity position of the business. It is calculated to serve as a supplementary check on liquidity position of the business and is therefore, also known as 'Acid-Test Ratio'.

Significance: The ratio provides a measure of the capacity of the business to meet its short-term obligations without any flaw. Normally, it is advocated to be safe to have a ratio of 1:1 as unnecessarily low ratio will be very risky and a high ratio suggests unnecessarily deployment of resources in otherwise less profitable short-term investments.

## Solvency Ratios

The persons who have advanced money to the business on long-term basis are interested in safety of their periodic payment of interest as well as the repayment of principal amount at the end of the loan period. Solvency ratios are calculated to determine the ability of the business to service its debt in the long run. The following ratios are normally computed for evaluating solvency of the business.

1. Debt-Equity Ratio;
2. Debt to Capital Employed Ratio;
3. Proprietary Ratio;
4. Total Assets to Debt Ratio;
5. Interest Coverage Ratio.

### 1. Debt-Equity Ratio

Debt-Equity Ratio measures the relationship between long-term debt and equity. If debt component of the total long-term funds employed is small, outsiders feel more secure. From security point of view, capital structure with less debt and more equity is considered

favourable as it reduces the chances of bankruptcy. Normally, it is considered to be safe if debt equity ratio is 2 : 1. However, it may vary from industry to industry. It is computed as follows:

$$\text{Debt-Equity Ratio} = \frac{\text{Long-term Debts}}{\text{Shareholders' Funds}}$$

**Significance:** This ratio measures the degree of indebtedness of an enterprise and gives an idea to the long-term lender regarding extent of security of the debt. As indicated earlier, a low debt equity ratio reflects more security. A high ratio, on the other hand, is considered risky as it may put the firm into difficulty in meeting its obligations to outsiders. However, from the perspective of the owners, greater use of debt (trading on equity) may help in ensuring higher returns for them if the rate of earnings on capital employed is higher than the rate of interest payable.

## 2. Debt to Capital Employed Ratio

The Debt to capital employed ratio refers to the ratio of long-term debt to the total of external and internal funds (capital employed or net assets). It is computed as follows:

$$\text{Debt to Capital Employed Ratio} = \text{Long-term Debt} / \text{Capital Employed (or Net Assets)}$$

**Significance:** Like debt-equity ratio, it shows proportion of long-term debts in capital employed. Low ratio provides security to lenders and high ratio helps management in trading on equity. In the above case, the debt to Capital Employed ratio is less than half which indicates reasonable funding by debt and adequate security of debt.

## 3. Proprietary Ratio

Proprietary ratio expresses relationship of proprietor's (shareholders) funds to net assets and is calculated as follows :

$$\text{Proprietary Ratio} = \text{Shareholders, Funds} / \text{Capital employed (or net assets)}$$

**Significance:** Higher proportion of shareholders funds in financing the assets is a positive feature as it provides security to creditors. This ratio can also be computed in relation to total assets instead of net assets (capital employed). It may be noted that the total of debt to capital employed ratio and proprietary ratio is equal to 1.

## 4. Total Assets to Debt Ratio

This ratio measures the extent of the coverage of long-term debts by assets. It is calculated as

$$\text{Total assets to Debt Ratio} = \text{Total assets} / \text{Long-term debts}$$

**Significance:** This ratio primarily indicates the rate of external funds in financing the assets and the extent of coverage of their debts are covered by assets.

## **Interest Coverage Ratio**

It is a ratio which deals with the servicing of interest on loan. It is a measure of security of interest payable on long-term debts. It expresses the relationship between profits available for payment of interest and the amount of interest payable. It is calculated as follows:

$$\text{Interest Coverage Ratio} = \frac{\text{Net Profit before Interest and Tax}}{\text{Interest on long-term debts}}$$

Significance: It reveals the number of times interest on long-term debts is covered by the profits available for interest. A higher ratio ensures safety of interest on debts.

## **Activity (or Turnover) Ratio**

These ratios indicate the speed at which, activities of the business are being performed. The activity ratios express the number of times assets employed, or, for that matter, any constituent of assets, is turned into sales during an accounting period. Higher turnover ratio means better utilisation of assets and signifies improved efficiency and profitability, and as such are known as efficiency ratios.

The important activity ratios calculated under this category are

1. Inventory Turnover;
2. Trade receivable Turnover;
3. Trade payable Turnover;
4. Investment (Net assets) Turnover
5. Fixed assets Turnover; and
6. Working capital Turnover.

### **1. Inventory Turnover Ratio**

It determines the number of times inventory is converted into revenue from operations during the accounting period under consideration. It expresses the relationship between the cost of revenue from operations and average inventory.

The formula for its calculation is as follows:

$$\text{Inventory Turnover Ratio} = \frac{\text{Cost of Revenue from Operations}}{\text{Average Inventory}}$$

Where average inventory refers to arithmetic average of opening and closing

inventory, and the cost of revenue from operations means revenue from operations less gross profit.

Significance : It studies the frequency of conversion of inventory of finished goods into revenue from operations. It is also a measure of liquidity. It determines how many times inventory is purchased or replaced during a year. Low turnover of inventory may be due to bad buying, obsolete inventory, etc., and is a danger signal. High turnover is good but it must



be carefully interpreted as it may be due to buying in small lots or selling quickly at low margin to realise cash.

### **Trade Receivables Turnover Ratio**

It expresses the relationship between credit revenue from operations and trade receivable. It is calculated as follows :

Trade Receivable Turnover ratio =  $\frac{\text{Net Credit Revenue from Operations}}{\text{Average Trade Receivable}}$

Where Average Trade Receivable =  $\frac{(\text{Opening Debtors and Bills Receivable} + \text{Closing Debtors and Bills Receivable})}{2}$

It needs to be noted that debtors should be taken before making any provision for doubtful debts.

*Significance:* The liquidity position of the firm depends upon the speed with which trade receivables are realised. This ratio indicates the number of times the receivables are turned over and converted into cash in an accounting period. Higher turnover means speedy collection from trade receivable. This ratio also helps in working out the average collection period. The ratio is calculated by dividing the days or months in a year by trade receivables turnover ratio.

### **Trade Payable Turnover Ratio**

Trade payables turnover ratio indicates the pattern of payment of trade payable.

As trade payable arise on account of credit purchases, it expresses relationship between credit purchases and trade payable. It is calculated as follows:

$$\begin{aligned}\text{Trade Payables Turnover ratio} &= \frac{\text{Net Credit purchases}}{\text{Average trade payable}} \\ \text{Where Average Trade Payable} &= \frac{(\text{Opening Creditors and Bills Payable} + \text{Closing Creditors and Bills Payable})}{2} \\ \text{Average Payment Period} &= \frac{\text{No. of days/month in a year}}{\text{Trade Payables Turnover Ratio}}\end{aligned}$$

*Significance :* It reveals average payment period. Lower ratio means credit allowed by the supplier is for a long period or it may reflect delayed payment to suppliers which is not a very good policy as it may affect the reputation of the business. The average period of payment can be worked out by days/months in a year by the Trade Payable Turnover Ratio.

## Profitability Ratios

The profitability or financial performance is mainly summarised in the statement of profit and loss. Profitability ratios are calculated to analyse the earning capacity of the business which is the outcome of utilisation of resources employed in the business. There is a close relationship between the profit and the efficiency with which the resources employed in the business are utilised. The various ratios which are commonly used to analyse the profitability of the business are:

1. Gross profit ratio
2. Operating ratio
3. Operating profit ratio
4. Net profit ratio
5. Return on Investment (ROI) or Return on Capital Employed (ROCE)
6. Return on Net Worth (RONW)
7. Earnings per share
8. Book value per share
9. Dividend payout ratio
10. Price earning ratio.

### *1. Gross Profit Ratio*

Gross profit ratio as a percentage of revenue from operations is computed to have an idea about gross margin. It is computed as follows:

$$\text{Gross Profit Ratio} = \frac{\text{Gross Profit}}{\text{Net Revenue of Operations}} \times 100$$

*Significance:* It indicates gross margin on products sold. It also indicates the margin available to cover operating expenses, non-operating expenses, etc. Change in gross profit ratio may be due to change in selling price or cost of revenue from operations or a combination of both. A low ratio may indicate unfavourable purchase and sales policy. Higher gross profit ratio is always a good sign.

### *2. Operating Ratio*

It is computed to analyse cost of operation in relation to revenue from operations.

It is calculated as follows:

$$\text{Operating Ratio} = \frac{\text{Cost of Revenue from Operations} + \text{Operating Expenses}}{\text{Net Revenue from Operations}} \times 100$$

Operating expenses include office expenses, administrative expenses, selling expenses, distribution expenses, depreciation and employee benefit expenses etc.

Cost of operation is determined by excluding non-operating incomes and expenses such as loss on sale of assets, interest paid, dividend received, loss by fire, speculation gain and so on.

### **Operating Profit Ratio**

It is calculated to reveal operating margin. It may be computed directly or as a residual of operating ratio.

$$\text{Operating Profit Ratio} = 100 - \text{Operating Ratio}$$

Alternatively, it is calculated as under:

$$\text{Operating Profit Ratio} = \frac{\text{Operating Profit}}{\text{Revenue from Operations}} \times 100$$

$$\text{Where Operating Profit} = \text{Revenue from Operations} - \text{Operating Cost}$$

*Significance:* Operating ratio is computed to express cost of operations excluding financial charges in relation to revenue from operations. A corollary of it is 'Operating Profit Ratio'. It helps to analyse the performance of business and throws light on the operational efficiency of the business. It is very useful for inter-firm as well as intra-firm comparisons. Lower operating ratio is a very healthy sign.

### **Net Profit Ratio**

Net profit ratio is based on all inclusive concept of profit. It relates revenue from operations to net profit after operational as well as non-operational expenses and incomes. It is calculated as under:

$$\text{Net Profit Ratio} = \frac{\text{Net profit}}{\text{Revenue from Operations}} \times 100$$

Generally, net profit refers to profit after tax (PAT). *Significance:* It is a measure of net profit margin in relation to revenue from operations. Besides revealing profitability, it is the main variable in computation of Return on Investment. It reflects the overall efficiency of the business, assumes great significance from the point of view of investors.

### **Return on Capital Employed or Investment**

It explains the overall utilisation of funds by a business enterprise. Capital employed means the long-term funds employed in the business and includes shareholders' funds, debentures and long-term loans. Alternatively, capital employed may be taken as the total of non-current assets and working capital.

Profit refers to the Profit Before Interest and Tax (PBIT) for computation of this ratio. Thus, it is computed as follows:

$$\text{Return on Investment (or Capital Employed)} = \frac{\text{Profit before Interest and Tax}}{\text{Capital Employed}} \times 100$$

*Significance:* It measures return on capital employed in the business. It reveals the efficiency of the business in utilisation of funds entrusted to it by shareholders.

### ***Return on Shareholders' Funds***

This ratio is very important from shareholders' point of view in assessing whether their investment in the firm generates a reasonable return or not. It should be higher than the return on investment otherwise it would imply that company's funds have not been employed profitably. A better measure of profitability from shareholders point of view is obtained by determining return on total shareholders' funds, it is also termed as Return on Net Worth (RONW) and is calculated as under :

$$\text{Return on Shareholders' Fund} = \frac{\text{Profit after Tax}}{\text{Shareholders' Funds}} \times 100$$

### **Earnings per Share**

The ratio is computed as:

$$\text{EPS} = \frac{\text{Profit available for equity shareholders}}{\text{Number of Equity Shares}}$$

In this context, earnings refer to profit available for equity shareholders which is worked out as

Profit after Tax – Dividend on Preference Shares.

This ratio is very important from equity shareholders point of view and also for the share price in the stock market. This also helps comparison with other to ascertain its reasonableness and capacity to pay dividend.

### **Book Value per Share**

This ratio is calculated as :

$$\text{Book Value per share} = \frac{\text{Equity shareholders' funds}}{\text{Number of Equity Shares}}$$

Equity shareholder fund refers to Shareholders' Funds – Preference Share Capital. This ratio is again very important from equity shareholders point of view as it gives an idea about the value of their holding and affects market price of the shares.

### ***Dividend Payout Ratio***

This refers to the proportion of earning that are distributed to the shareholders.

It is calculated as

$$\text{Dividend Payout Ratio} = \frac{\text{Dividend per share}}{\text{Earnings per share}}$$

This reflects company's dividend policy and growth in owner's equity.

### ***Price / Earning Ratio***

The ratio is computed as –

$P/E \text{ Ratio} = \text{Market Price of a share} / \text{earnings per share}$

For example, if the EPS of X Ltd. is Rs. 10 and market price is Rs. 100, the price earning ratio will be 10 (100/10). It reflects investors expectation about the growth in the firm's earnings and reasonableness of the market price of its shares. P/E Ratio vary from industry to industry and company to company in the same industry depending upon investors perception of their future.

### **Provisions and Reserves - Concepts, objectives and types.**

#### Meaning of Provisions

As per The Institute of Chartered Accountants of India "Any amount written off or retained by the way of providing depreciation or diminution in the value of assets or for providing any known liability of which the amount cannot be determined with substantial accuracy."

#### Meaning of Reserves

As per The Institute of Chartered Accountants of India "That portion of earnings, receipts or other surplus of an enterprise (whether capital or revenue) appropriated by the management for general or a specific purpose other than a provision for depreciation or diminution in the value of assets or for a known liability."

Reserve is an appropriation of profits; on the other hand, Provision is a charge against profit. Reserves are not meant to meet out contingencies or liabilities of a business. Reserve increases working capital of a company to strengthen the financial position.

There are two types of reserves –

**Capital Reserve** – Capital reserve is not readily available for distribution as the dividends among the shareholders of the company, and it creates only out of capital profit of the company. It is like Premium on issue of shares or debentures and Profit prior to incorporation.

**Revenue Reserve** – Revenue reserves are readily available for the distribution of profit as dividend to the shareholders of the company. Some of the examples of this are general reserve, staff welfare fund, dividend equalization reserve, debenture redemption reserve, contingency reserve, and investment fluctuation reserves.

#### Distinction between Provisions and Reserves

1. Reserve can be made only out of profit and provisions are the charge to profit.
2. Reserves reduce divisible profits and provisions reduce the profit.
3. Reserves, if remain un-utilized for some period can be distributed as dividends, but provisions cannot be transferred to General Reserve for the distribution.
4. Purpose of provision is very specific, but reserve is created to meet out any probable future liabilities or losses.
5. Creation of provisions is legally necessary, but reserves are created to save a concern from the future losses and liabilities.

## Secret Reserves

Banking Company, Insurance Company, and Electricity Companies create secret reserves, where the public confidence is required. In this case, to create secret reserve, assets showed at lower cost or liabilities at higher value. Some of the examples of it are as follows –

- By undervaluing goodwill or stock
- By excessive depreciation
- By creating excessive provisions
- Showing free reserves as creditors
- By charging capital expenditure to profit and loss account

## Advantages of Secret Reserves

Some of the important advantages are given below –

- Without disclosing to its shareholders, it increases working capital of a concern, which is a clear indication of the sound financial position.
- With the help of secret reserves, directors can maintain the rate of dividends during the unfavourable time.
- Non-disclosure of a big profit is useful to avoid an un-due competition.

## Limitations of Secret Reserves

Major limitations or objections of secret reserves are as follows –

- Due to non-disclosure of actual profit, financial statements do not presents true and fair view of the state of affairs.
- There are lots of chances of misuse of reserves by the directors for their personal benefits.
- Due to secret reserves, chances for the concealment of worst position of a company are very high.
- Company will get very lower amount of claim of insurance at the time of loss of stock or other assets, as valuation of the assets are done at very low value to create secret reserve.

## General and Specific Reserves

Specific reserves are created and utilized for the purpose only for which they are created, like dividend equalization reserve and debenture redemption reserve.

General reserves are created for any future contingency or to utilize at the time of expansion of a business. Purpose of creation of General reserve is to strengthen the financial position of the company and to increase the working capital.

## Sinking Fund

For the purpose to repay of any liabilities or to replace any fixed assets after particular period, sinking funds are created. For this, some amount are charged or appropriated from the profit and loss account every year and invested in any outside securities. Without any extra ordinary burden, replacement of an asset may be done in a systematic manner or pay any known liability on maturity of the sinking fund.

## Investment of Reserves

It is a controversial issue, whether a reserve should be invested in outside securities or not. Thus, to decide anything, it is important to study the need and requirement of a firm according to the financial position of a firm. Therefore, investment in outside securities is justified only in a case where company has the extra fund to invest.

## Nature of Reserve

In spite of showing reserves on the liabilities side of a Balance Sheet, reserves are actually not at all any liabilities of a firm. Reserve represents as accumulated profits, which are available to disburse among the shareholders.

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