

STUDY MATERIAL

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SEMESTER : II

SUBJECT : ADVANCED ACCOUNTS

UNIT : V

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SYLLABUS

UNIT – V (Only theory) Inflation Accounting - Human Resource Accounting.

Introduction

Human Resources are the most valuable resources of any organisation. The success or failure of an organisation mainly depends on the quality, caliber and character of the people who are employed in the organisation. Different organisations employ different classes of workers according to the requirements of the job / work. In educational institutions, teachers, who put in a lot of hard work are responsible for the overall development of the students. But, their hard and efforts are not assigned any monetary value and not shown anywhere in the Balance Sheet of the concerned educational institution. Similarly, in corporate sector, the directors, considered as the pillars of the company, are responsible to make any vital decisions on various aspects so as to enhance the capacity of the company.. But no one made efforts to assign any monetary value to such individuals in the Balance Sheet of the Nation. So, human elements are completely ignored while recording the transactions in the books of accounts. Unless the efforts and contributions of people are measured in terms of money, it is not possible to understand the real value of human beings present in the organisation. In order to ascertain the value of human beings, a new system of accounting has been evolved which is popularly known as 'Human Resource Accounting' (HRA).

Meaning of HRA

HRA refers to accounting for people as an 'organisational resource'. It involves measuring the costs incurred by business firms and other organisations to recruit, select, hire train and develop 'human assets'. It also includes measuring the economic value of people to organisations. It serves both the internal and external users Providing management (internal users), with relevant data on which to base recruiting training and other development decisions and supplying investors, lenders and other external users of financial statement with information concerning the investment in and utilisation of human resources in the organisation.

Definitions of HRA

(i) Woodruff," HRA is an attempt to identify and report investments made in human resources of an organisation that are presently not accounted for in conventional accounting practice. Basically, it is an information system that tells the management what changes over time are occurring to human resources of the business'.

Objectives of HRA

The following are the major objectives of an HRA system:

- (i) To provide quantitative information for making managerial decisions about acquiring, allocating, developing and maintaining human resources in order to attain cost effective organisation objectives;
- (ii) To permit managerial personnel to monitor effectively the use of human resources;
- (iii) To help in the development of management principles by classifying the financial consequences of various practices;
- (iv) To recognise the nature of all resources used or cultivated by a firm and improvement of the management of human resources, so that the quality and quantity of goods and services are increased;
- (v) To evaluate the return on investment of human resources;
- (vi) To communicate the value of human resources to the organisation the society at large.

From the above, it is quite evident that there are several important aspects of HRA as given below:

- Valuation of human resources;
- Recording the valuation in the books of accounts and
- Presenting the information in the financial statements for communication

Valuation of Human Resources

Valuation of human resources can be made on the basis of either the 'cost of the resource' or on the basis of 'economic value of resource'. Therefore, different methods of valuation of human resources can be classified into the following two categories viz.,

- Cost based methods of human resource valuation.
- Value based methods of human resource valuation.

(a) Cost based Methods of Human Resource Valuation :

The following are the various methods under this category:

- Historical cost method
- Replacement cost method
- Opportunity cost method
- Standard cost method
- Total cost method

Historical Cost Method : This method of valuing human resources was first developed by William C.Pyle and R.GBarry Corporation, USA in 1967. Under the method actual costs incurred on recruiting, selecting, hiring, training and developing the human resources of the organisation are capitalised and amortised over the expected useful life of the human resources. Thus, a proper record of the expenditure made on hiring, selecting, training and developing the human assets is maintained and a part of it is off from the income of the next few years during which human resources will provide service. If the human resources expire before the end of the expected useful life, the whole of the amount not yet written off is charged to the revenue of the year in which such liquidation takes place.

Replacement Cost Method : This method, first suggested by Rensis Likert, was developed by Eric G. Clamholtz. Under this method, the human resources are valued at their present replacement cost. If a new organisation has to be started now, the cost of recruiting, selecting, hiring, training and developing human resources to their present efficiency level

Opportunity Cost Method : This method was first advocated by Hekimian and Jones. Under the method, the value of human resources is ascertained on the basis of its alternative use. i.e. on the basis of ability of doing other jobs. If an employee has no alternative use, he has no value according to this method. To put it in a nutshell, the value of an employee of one department can be determined on the basis of the offers made by other departments of the organisation for his services.

Standard Cost Method : This method was propounded by David Watson. Under the method, the standard cost per grade of employee for recruiting, selecting, hiring, training and developing is determined year after year. The standard cost so arrived for all employees of the organisation, when aggregated, gives the value of human resources of the organisation. The standard costs of recruitment' training and developing individuals, can be developed on the basis Of replacement costs. The standard costs for various purposes are also useful to compare the actual and analyse the variations from standards.

Total Cost Method : This method was advocated by Prof. N;.Dasguta' under the method, the total expenditure incurred by the organisation towards education and training of an employee so as to make him efficient as in the his value present level or to make him fit for the organisation's requirement, it taken as the value of an employee. To an organisation, such value is to be adjusted every year on the basis of age, experience, seniority, status, performance, etc.,

Value based methods of human resource valuation

- Unpurchased goodwill method or capitalisation of super profit method
- Present value of future earning method
- Rewards valuation method:
- Net Benefit Method
- Total payment method

INFLATION ACCOUNTING

Introduction

'Money measurement concept' is a Basic Concept of Accounting. All business transactions are recorded in the books of accounts in terms of 'money' Rupees in India, dollars in U.S.A., etc. The accounting cycle culminates in the Preparation of financial statements — Profit and loss account and Balance sheet which aim at ascertaining the net result of business operations of a period and a u•ue and fair view of the financial position of the business. The reliability of the accounts and financial statements depends on the ' stability' of the unit for recording - rupee or dollar.

In fact stability of the monetary unit is the basic assumption of Historical Cost Approach (HCA). 'HCA' presumes that money value is constant and the price-level over a period of time is stable. Fixed assets acquired are recorded at the 'cost of purchase' (cost concept). Liabilities are recorded at the amounts contracted for. Sales are shown at the current market prices, where as inventories are valued at the prices at which they were purchased.

The historical cost approach which governs recording of business transactions can serve the purpose if the basic assumption holds good i.e., 'Monetary unit' remains the same. However, from the time of ' great depression' before the second world war, changing price levels characterised by inflation have become routine. In the past three decades, rising prices reflecting rampant inflation have become a worldwide phenomenon. Double digit rates of inflation have become common in many countries. In India, the inflation rate oscillates between 4% and per annum.

The changing price levels resulting from inflation have adversely affected the 'stability of the monetary unit'. As a result, the reliability of the financial statements is seriously affected. The fixed assets recorded at cost less depreciation do not reflect the current market values or replacement values. The price levels at which goods are bought and sold are different. Inventories are at unrealistic prices, not revealing their true value. To sum up, operating results shown by a business have become unreliable and the balance sheet does not reflect true and fair view of the financial position of a business.

Limitations of Historical Accounting:

Conventional Accounts based on 'stability of monetary unit' show the business transactions in chronological order, almost like history. No adjustments are made to reflect changing prices. As a result, they suffer from the following limitations.

Unrealistic Values of Fixed assets: Fixed assets are recorded 'at cost' as and when purchased. Subsequent changes in the market values of such assets are ignored. The fixed assets are, thus, shown in the balance sheet at unrealistic values, not at all reflecting the current economic realities.

Insufficient depreciation Provision: Depreciation is computed on the basis of the original cost of the assets and their estimated lifetime. As a result, the depreciation provided on assets and charged to the profit and loss account does not reflect the realistic cost of using such assets, based on their present value.

Problems in replacement of Fixed assets: Depreciation provision made on fixed assets is based on their original cost. So, the accumulated depreciation, when invested in outside securities, is not at all sufficient to replace the assets due to the higher market prices which are the consequence of inflation.

Inflated profits: The profits shown by income statement under historical accounting are highly unreliable. Depreciation on fixed assets is insufficient, resulting in higher profits. Similarly, sales are shown at current market prices whereas cost of goods sold includes stocks purchased in the past at lower price levels. The inflated profits result in payment of higher taxes.

Erosion of owners' capital: Inflation erodes the value of money and thus the value of owners' capital erodes due to the decline in the purchasing power of money. No effort is made in historical accounts to protect the value of capital. In fact, dividends paid out of unrealistic profits shown by the income statement may result in payment of dividend out of capital.

Reliability and Utility of Accounting Records: Accounting records are used by different people for different purposes. Employees, creditors, owners, potential investors, tax authorities etc., are interested in the accounting data. The unreliable profit shown by historical accounts and the unrealistic asset values shown in balance sheet seriously affect the value of the accounting records for the various purposes for which the users need them.

Violation of Matching principle: An important accounting principle is matching of expenses and incomes. During inflationary periods, sales reflect current market prices whereas the purchases reflect earlier prices. Thus, the matching of income and expenditure becomes distorted due to prices.

Holding and operating gains: The legitimate business profit made as a result of trading is called operating gain. Profit made on goods by storing them for appreciation in price is called holding gain. Operating gain is a trading profit whereas holding gain is a speculative profit. No distinction is made in historical accounts between these two types of gains.

Violation of the law of additivity: During the period of inflation, accounting data may not be capable of being added. For example, 500 units purchased at Rs. 10 per unit and another 400 units purchased at Rs. 14 per unit should not be added as they are because the amounts give a picture without the quantities. However, in historical accounts, all the goods and assets purchased are added, irrespective of the purchase prices, thus distorting the results.

Inter-firm and intra-firm comparisons: Historical accounting data is not really useful for comparison purposes; comparing the data of two different periods of the same business is not possible because of different price levels during the periods. Similarly, comparison of the data relating to two or more businesses is also not possible without reference to the price levels at which each business has computed its data.

Managerial decision making: The top management has to make decisions relating to profitability, capital expenditure, etc. Historical accounting data may lead to wrong decisions, adversely affecting the future prospects of the business.

INFLATION ACCOUNTING

The limitations of historical accounting has paved the way for inflation accounting.

The various ways in which financial accounts can be adjusted for changing prices have come to be known as 'inflation accounting'. It is a system of accounting which regularly records all items in financial statements at their current values. It recognises that the purchasing power of money (monetary unit) changes with passage of time. It finds out profit or loss and presents the financial position of the business on the basis of the current prices prevailing in the country.

According to the American Institute of Certified Public Accountants (AICPA) "Inflation Accounting is a system for accounting which purports to record, as a built-in mechanism, all economic events in terms of current cost".

Inflation Accounting at International and National Levels

Before Second World War, the Institute of Chartered Accountants in England and Wales published a paper "Rising price level in relation to the Accounts" • paper and H.H. Sweney's "Stabilised Accounting" have brought into focus the impact of inflation on accounts. In U.S.A and U.K, wide ranging studies were made on the effect of changing prices on accounting methods and practices. The International Accounting Standards Committee (IASC) published IAS-6 titled "Accounting Responses to changing Prices" in June 1977. Later on it was superseded by IAS- 15 titled "Information reflecting the effects of changing prices".

In India, the C.A. Institute has published a ' guidance note' on accounting for changing prices. This note is not recommendatory or mandatory to the members of the institute. The note is meant to encourage the adoption of the accounting for changing prices. The note has dealt with three methods current cost accounting method, current purchasing power approach and periodic revaluation of fixed assets along with the adoption of Last In First Out method (LIFO) for inventory valuation. However, current cost accounting method (CCA) is recommended by the institute as the most appropriate method for Indian environment.

Different Methods of Inflation Accounting

Price level changes or inflation can be measured in various ways. The following are the methods of accounting for price level changes, based on different methods of measuring inflation.

- Current Purchasing Power method (CPP) or General Purchasing Power method (GPP)

- Current Cost Accounting method (CCA)
- Hybrid method, which combines the features of both CPP and CCA methods.

Current Purchasing Power Method (CPP)

This method was evolved in 1974 by the Institute of Chartered Accountants in England and Wales. It was issued as Statement of Standard Accounting Practice No. 7. (SSAP-7), entitled "Accounting changes in the purchasing power of money".

CPP method ensures the maintenance of the purchasing power of the shareholders 'or owners' funds. In this method, all items in the financial statements are to be restated for changes in the general price level. This is accomplished by using any established and approved general price index. In India, the wholesale price index compiled by the Reserve Bank of India which shows the change in the value of Rupee in the past year is an appropriate index.

The CPP method takes into account the changes in the value of items as a result of the general price level alone. It does not account for the changes in the value of individual items. For example, a machine purchased on 1-1-90 at Rs. 5,000 when general price index was 100 is restated as Rs.10,000 on 31-12-95 if the general price index on that date is 200. However, the machine might have actually cheaper in the market due to improvements and may actually be available for Rs.4,000. But this aspect is completely ignored.

Steps in the preparation financial statement under CPP method

(I) Determining the conversion factors: Historical Accounting figures are to be restated at current price level. This has to be done by multiplying the figures in the conventional income statement and Balance sheet with conversion which is computed as follows:

$$\text{Conversion Factor} = \frac{\text{Index on the date of conversion}}{\text{Index on the date the item arose}}$$

Mid period conversion: Many transactions in a business occur throughout a period. For example, sales, purchases, like salaries, etc. They must be converted on the basis of average index as shown in the middle of the period. The adoption of the mid period index for items which take place throughout a period is called 'mid period conversion'. If mid period index is not available, average of the index at the beginning and at the end of the period has to be used.

Gain or loss on monetary items: All assets and liabilities can be broadly divided into two categories based on the variability of their value.

Monetary items are all those assets and liabilities whose amounts are fixed contract or otherwise regardless of the changes in the general price level. The liabilities are payable and the assets are receivable in fixed amounts. For example a creditor for Rs. 10,000 will be paid the same amount without any compensation for the decline in money value from the date the creditor was created till the actual date of payment. Thus, cash, bank balance, bills receivable, sundry debtors prepaid expenses, etc., are all monetary assets. Similarly, bills payable, sundry creditors, outstanding expenses, redeemable preference share capital, etc., are all monetary liabilities.

Non monetary items are all those assets and liabilities whose value is likely to change with the general price index or inflation. So, they cannot be stated in monetary amounts. All the fixed assets like buildings machinery furniture also, inventories and marketable investments are non monetary assets. Equity share capital is a non monetary liability because of the residual claims on the company's net assets which renders it variable in value.

Computation of gain or loss on monetary items

The change in the purchasing power of money or inflation affects the value of all assets and liabilities. The non monetary assets and non monetary liabilities are receivable or payable at the changed values. But the monetary assets and monetary liabilities are receivable and payable at the original amounts only. Thus, holding of monetary liabilities results in gain and holding of monetary assets results in loss in inflationary periods. A firm receives or pays fixed amounts as per the terms of contract but it gains or loses in terms of real purchasing power. Such gain or loss is taken into account in C.P.P method as "general price level gain or loss". It is shown as a separate item in the restated income statement apart from the routine business profit or loss. It is not used for dividend payment though shown as a profit because of its nature as 'revaluation profit'.

Method of computation of general price level gain or loss

There are two ways of computing general price level gain or loss:

Method I: When all the transactions influencing the change in monetary items occur uniformly throughout the year and the average rate of change is applicable to such transactions the first method can be used.

(I) Conversion factors are computed for both opening items and any changes in the items during the year .

Conversion factor for opening items= Closing Index/Opening Index

Conversion factor for change in items during the year= Closing Index/ Average Index

(2) Opening monetary liabilities are converted to the closing level. Change in monetary liabilities during the year is also converted to the closing level. From the total of these two items converted, the closing monetary liabilities as per historical accounts are subtracted. The difference is gain (or loss) on holding monetary liabilities.

(3) Monetary assets at the beginning of the year are converted to the closing level. Change in monetary assets during the year is also converted to the closing level. From the total of these two items converted, the actual closing monetary assets are subtracted. The difference is loss (or gain) on holding monetary assets.

(4) The difference between the result of step 2 and step 3 is the net 'gain or loss on monetary items' or 'monetary result' or 'general price level gain or loss'

Method II : When transactions influencing monetary items do not occur uniformly but their occurrence is random, the following procedure is used to ascertain monetary gain or loss.

(1) Net monetary assets or liabilities at the beginning of the year is ascertained. This is the difference between opening monetary assets and opening monetary liabilities. Sources of monetary assets during the year are to be added to the opening monetary assets. Usually sales, both cash and credit is the source of monetary assets during the year should be subtracted. Purchases and' expenses are the usual uses. The opening net monetary assets as well sources and uses of the monetary assets have to be converted to the closing with the help of appropriate conversion factors. The balance at this stage represents what should be the closing net monetary assets. The net mon on the closing date must be reduced from the above balance. The result is monetary loss for the year. If it is a negative figure, it is net monetary gain. In case the opening monetary liabilities are more than the assets, then, there are net monetary liabilities at the beginning. In such cases, the uses assets i.e., purchases and expenses should be added and the sources i.e., sales etc., should be reduced.

(2) Cost of sales and inventories: Cost of sales and the value of stocks depend on the cost flow assumptions relating to the usage of goods i. e. first-in-first-out (FIFO) or 'Last-in-first-out' (LIFO). When FIFO method is used , it is assumed the stocks acquired first are

used or sold first, When LIFO method is followed goods purchased last are assumed to be used or sold first. In restating the income statement and balance sheet under C.P.P method, it is essential to keep in mind the cost flow assumptions relating to goods because they affect the value of cost of goods sold as well as the closing and opening inventories.

(a) When FIFO method is followed:

(i) Cost of sales includes the entire opening stock and the balance from current year's purchases.

(ii) Closing inventory is completely out of current year's purchases. Since the opening stock is assumed to be completely sold, closing stock can be a part of current year's purchases only

(b) When LIFO method is followed:

(i) Cost of sales includes current year's purchases. If cost of sales is more than the current year's purchases, the excess is out of opening stock.

(ii) Closing inventory includes the opening inventory. If current purchases are not fully sold or used, the closing inventory includes the opening inventory and the unsold portion of the current year's purchases.

The following conversion factors are used for restating inventories and purchases

(a) Opening stock = Closing Index / Opening Index

(b) Current year purchases = Closing Index / Average Index

(c) Goods purchased in previous years but still in stock

= Closing Index / Index on the date of purchase of the goods

Ascertainment of profit: the profit made during a period may be ascertained in two different ways under CPP method.

(A) conversion method or Restatement of income method

The income statement prepared on historical cost basis is restated in C.P.P with the help of conversion factors as follows:

(i) Sales which take place throughout the year and operating expenses which are also paid from the beginning till the end of the year are converted on the basis of average index rate for the year.

The conversion factor is : $\text{Closing Index} / \text{Average Index}$

(ii) Cost of goods sold is converted on the basis of cost flow assumptions (FIFO or LIFO) explained earlier.

(iii) Fixed assets and depreciation thereon have to be converted on the basis of the index numbers prevailing on the dates the assets concerned were purchased.

Conversion factor is : $\text{Closing index} / \text{Index on the date of buying the asset}$

(iv) Dividends and taxes paid should be converted on the basis of the index prevailing on the dates they were paid.

Conversion factor is : $\text{Closing index} / \text{Index on the date of payment}$

(v) Monetary result i. e., gain or loss on monetary items or 'general level gain or loss' should be computed as explained earlier. It should show as a separate item in the restated incomes statement. Of course, gain on this account cannot be used for payment of dividend to the shareholders.

(B) Net change method: This method is based on the concept that profit is the difference between the owners' capital at two different points in time. The same concept is used in 'the statement of affairs method' in ascertaining profit in single entry systems. In simple words, "profit is the change in owner's equity during an accounting period".

The following steps are taken to determine the change in equity.

(i) Opening balance sheet prepared under historical accounting method is converted into C.P.P terms at the end of the accounting period. This is done with the help of appropriate conversion factors. One should remember that both monetary and non-monetary items in the opening balance sheet must be converted.

Even equity capital may be converted and the difference in balance sheet may be taken as reserves. Alternatively, the equity share capital is not converted. Difference in the balance sheet is taken equity.

If there is opening balance sheet which is already converted (at the end of last year) such a balance sheet must be updated for the closing date by converting all the items with the conversion factor.

(ii) Closing balance sheet prepared under historical cost accounting should also be converted into C.P.P terms.

The monetary items in the closing balance sheet are not converted because they are payable or receivable at their face values. All non monetary items have to be converted. If equity capital is also converted the difference in the balance sheet is Reserves. If equity capital is not converted, the difference in the balance sheet is equity.

(iii) Profit or loss for the accounting period is the change of Reserves or equity between the opening balance sheet as converted and the closing balance sheet as converted.

Profit = Closing reserves — Opening Reserves

(or)

Profit = Closing equity — Opening equity

(2) Current Cost Accounting Method

The general complaint that CPP method is not satisfactory in dealing with price level changes has made the British Government withdraw the Statement of Standard Accounting Practice — 7 (SSAP — 7) which was issued in 1974. The committee formed under the Chairmanship of Sir Francis Sandilands recommended the usage of CCA method in its report in September 1975. The method was extensively studied and reported later on. In March 1980, the accounting Committee of U.K has issued SSAP — 16 (Statement of Standard Accounting Practice — 16) recommending the usage of CCA method.

In India also, the Institute of the Chartered Accountants of India has published a guidance note on Accounting for changing prices in 1982, which describes both CPP and CCA methods, but recommends CCA method as the most appropriate to the Indian economic conditions.

Characteristics of CCA method

Current value of individual items are taken as the basis for preparation of financial statements. The general purchasing power of money (The Basis in CPP method) is ignored. Current Values of individual items are ascertained on the basis of specialised index for each specific item.

Fixed assets are shown in the balance sheet at their current replacement values. Original cost of the assets is ignored as basis for depreciation.

Inventories are shown at their current replacement cost. The old rule Of cost or market price whichever is lower is ignored.
