CHAPTER - 2
APPROACHES TO INFLATION ACCOUNTING
CHAPTER - 2

Approaches to Inflation Accounting

Introduction

In the preceding chapter, a discussion was made of the conceptual framework and statement of problems of inflation accounting, objectives of the study, chapter scheme etc. A review of literature on the subject was also made. This chapter makes an attempt to throw light on the approaches of inflation accounting. It is proposed to discuss in detail the various techniques and approaches of inflation accounting as it relates to inflation and effect of price changes on the presentation of accounting information. There are basically two techniques and approaches namely the current purchasing power and current cost accounting for rendering accounts for price changes. In the pages that follow we will highlight these two methods and will analyse their comparative utility in the present day transactions. But before discussing the above approaches in details, we should first examine some important controversies in the field of inflation accounting and then make a critical evaluation of methods of accounting for price changes. Also, an attempt has been made to show why the general purchasing power accounting (GPPA) is preferable to other method for the purpose of practical application.

Accounting for price level changes has emerged as one of the most controversial problems in accounting. Though a great deal has been written and much has been said in the recent past on the subject the degree of agreement in respect of various related issues
appears to be disheartening. In the following pages we propose to examine briefly some important issues.

For quite some time there has been a controversy whether historical cost accounts should be adjusted for price level changes. Although there is no unanimity in this regard, a very large section of the accountants, and academics are in favour of such adjustment in historical cost accounts. The main adjustment in favour of such adjustment is that wide and prolonged fluctuations in the price level cause distortion in the historical cost accounts making them quite useless. Although price level changes accounting has been a subject of continuous discussion and research for about fifty years or so, it has not been possible for its proponents to arrive at an agreements about the items of the financial statements which should be considered while accounting for price level changes. There are two schools of opinion. According to one, adjustments in accounts for price level change should be all-inclusive and cover all items. The other group favours adjustments of only those items (mainly inventories and fixed assets) which significantly affect the financial results during the period of checking price level. A close examination of this controversy reveals during the period of changing price level. That it exists due to difference of opinion in three respects viz. unit of measurement, concept of capital maintenance and concept of income. Apart from various theoretical and practical merits of both the view point’s one strong point in favour of an all-inclusive adjustments is its logical appeal. It needs no mention that once an attempt is made to adjust accounts for price level changes, all items should be considered, instead of considering only a few items.
Another important controversy in the field of price level accounting relates to the use of index numbers. Here also there are two schools of opinion depending upon whether an adjustment of all items is suggested or a few items only. The first school favours the use of general purchasing power accounting index whereas the second school advocates the use of several specific indices. The proponents of one general index have advanced the following arguments in support of their approach.

The use of general purchasing power index replaces the monetary unit of measurement in accounting which ceases to be stable during the changes price levels. "Common unit accounting is intended to make all monetary amounts appearing on any one financial statement and on any articulated set of financial statements presented at one time, comparable in terms of purchasing power. A 'scale adjustment' for changes in our measuring instruments – the monetary unit – must be made in order to achieve purchasing power comparability of measurement made at different times under inflationary conditions."

The use of general purchasing power index is most suitable for accounting for changing value of money. The general purchasing power provides uniform measuring rod for the purpose. A general purchasing power index provides a tool for comparison of diverse resources. Paul Rosenfield explains this in the following words: "Individuals or enterprise often wish to compare collections of resources. For example a person may wish to compare his present stock of resources with his stock a year previous or with his anticipated stock a year hence or may wish to compare his resources with the resources of others". Further he says that "comparison are complicated because resources are diverse."
Money is used as the standard of comparison in more specialised economies. Collection of resources are compared based on their relationships to units of money. Thus money is used as the standard because it is accepted widely in exchange for other resources and can, therefore, be rapidly related to them. But money has a defect that makes it less than ideal as a standard: The general purchasing power money—its command over goods and services in general—is notorious fickle. An increase in money may not indicate an increase in general purchasing power. General purchasing power itself is a resource that is widely prized, and general purchasing power may be used as the standard to compare diverse resources to overcome this defect of money as the standard.

The proponents of one general index advocate its use for restating assets as well as shareholders' capital. Their contention is that profit can emerge only after general purchasing power of the shareholder's capital has been maintained.

The use of general purchasing power index is also advocated presenting information to the proprietors showing how their funds have been utilized and the profits derived from such use.

However, the critics of the general purchasing power index approach do not agree with the above noted agreement.

They maintain that the concept of general purchasing power is so uncertain and ambiguous that cannot be used in the field of accounting. It is incapable of being used with reasonable about of accuracy to any one entity included in the regimen. On the other hand, the specific purchasing power can be applied to individual and entities
We do not subscribe to the above viewpoint. We are of the opinion that one general index should be used to adjust financial accounts for price level changes. There are three important reasons. Firstly, the general purchasing power index replaces monetary unit during the period of changing price levels. Secondly, it provides a standard—a uniform unit—of measurement and comparison of resources. Lastly, in any attempt to adjust historical cost accounts for price level changes, all items of accounts should be considered and not only a few items.

Despite an agreement on the need for price level adjustments on historical cost accounting, there is lack of uniformity of opinion regarding the techniques to be adopted for price level adjustments. The main proposals which have so far been made for dealing with the problems raised by changing price level fall under two categories, viz., the replacement cost and the purchasing power approach. The first approach emphasises the need for adjusting only a few items that is only those items of financial statements, which are significantly affected by price changes and need replacement. Such items are fixed assets and inventories. The main purpose of such adjustments is to arrive at the current replacement cost of the assets used in operation of the firm and the suggested adjustment is made mainly by the use of specific price indices. The second approach recommends an all-inclusive adjustments are made in purchasing power units that the monetary unit of uniform purchasing power. The purchasing power of monetary unit may refer to the first or the last balance sheet date or any other period. The purchasing power approach appears to be more logical because to take into account the effect of price level changes on all items of financial statements.
The Inflation-Accounting has gathered a large number of committed supporters' staunch converts, reluctant converts spread all through academia, business, government and legal bodies. The Inflation-Accounting itself is neither homogenous nor unanimous but their front against historical cost accounts is a united one. There are two alternative approaches to modifying our accounting process to cope with inflation have received much attention. One is to adjust historical cost figures for changes in the purchasing power of the monetary unit and the second is to use current values instead of historical cost in preparing financial statements. The former is a pure scale adjustment for changes in the measuring unit i.e., the purchasing power of the rupee and known as the current purchasing power method. The second involves regular valuation of assets and deals with specific price changes of individual items held or dealt with by the firm. This method is known as current cost accounting (CCA). These two approaches enjoy the majority adherents. Also, the real replacement cost accounting method is a middle-of-the-road approach based on replacement cost accounting and general purchasing power accounting. Another approach that has lately emerged on the accounting horizon is the cash flow accounting. All these approaches are different in substance and in technique from one and another. In the following paragraphs we propose to discuss the two main approaches in details besides real replacement cost accounting method.

Current Purchasing Power Accounting (CPPA) Method: The origin of purchasing power accounting is usually traced to H.W. Sweeney, in his book Stabilised Accounting first publication in 1936. Since then a large number of individuals and institutions have
worked on the method with a view to developing it as a useful and practicable method of
price level accounting. This method is also called by different names such as General Purchasing Power
Accounting (GPPA), General Price-Level Accounting (GPLA) or Constant Rupee
Accounting and Constant Dollar Accounting (used in U.S.A.). The objectives of this
method are to show the affairs of a firm in terms of a unit of measurement of constant
value when cost and prices are changing. The purchasing power accounting method
drives theoretically from the rule that the profit of a firm should be so computed as to
maintain intact the purchasing power of the shareholders capital originally invested in the
business. The method involves expressing historical cost accounts in terms of purchasing
power units rather than money. Thus, the methods eliminates the effects on account of
changes in the value of money. The accounting numbers no longer represent merely an
assembly of non-additive money units of different years having different purchasing
power. The required adjustments are made on the assumptions that each and every
transaction takes place evenly during the year i.e., at the average price level of the year.

The system conversion of accounting figures under the GPPA method makes use
of a general index that portrays changes in GPPA of money, i.e., changes in the value of
money in general. More clearly, the index to be used in the index of commodities and
services in general and not of some specific commodities. The need and rational of an
approach of price level accounting based of the GPP of money has been emphasised time
and again by large number of thinkers of this problem.
The system of adjustment of historical cost accounts for changes in the purchasing power of rupee may be presented under the following three heads:

1. General:
   
i. All items in the balance sheet and income statement are restated adjusted in terms of current rupee. Also a distinction is made between restatement and adjustment of an item. Restatement refers to the translation of historical cost numbers in terms of uniform monetary unit. Adjustment is the process of correcting for price-level changes the different items of the accounts.

   ii. The items in the historical cost financial statements are classified into monetary and non-monetary groups. A monetary item is one, the amount of which is fixed by statute or contract and is, therefore, not affected by a change in the price-level. Thus, a monetary item remains fixed in terms of the current rupee regardless of what happens to the general price-level. Items of long and short term borrowings other current liabilities, receivables, cash and investments belong to monetary items. Since the monetary items remain unchanged as per contract, they do not come under conversion procedure and their present figures appearing in historical statements are taken as current value figure. The remaining items of the balance sheet, which are affected by changes in the price-level, are called non-monetary. They are gross fixed assets, provision for depreciation and stocks. Equities are considered as neither monetary nor non-monetary as they represent residual interest. Monetary items are simply restated in current rupees; they do not require
adjustment. Non-monetary items, on the other hand, are adjusted in accordance with changes in the purchasing power of rupee.

iii. Transactions, both capital and revenue, (e.g., sales & purchase of goods, payment of expenses etc.), are assumed to have taken place evenly throughout the year, i.e., at the average price-level of the year. It is advisable to convert them according to average index of the period. Average price index is calculated by taking the average of the index numbers at the beginning and at the end of the period in case information regarding average index is not available.

II. Adjustment in the Profit and Loss Statement
i. Items such as sales, purchases, expenses, etc., are adjusted in terms of the year-end rupee by applying the average price index for the year.

ii. Opening and closing inventories are adjusted by the price index of the average date of their acquisition.

iii. For computing adjusted depreciation, the fixed assets are first aged and grouped according to the date of their acquisition, and then their cost, in current rupee, is obtained. The depreciation charges are computed with reference to such adjusted costs either by applying regular rates of depreciation or on a proportionate basis.

III. Adjustments in the Balance Sheet
i. Fixed assets are adjusted with reference to the index numbers of the dates of their acquisition or if deemed satisfactory, with reference to the index number of the average date of their acquisition.

ii. The method of adjusting inventories is the same as Stated above in II (ii).
iii. The remaining current assets and all liabilities require no adjustment, as they are monetary in nature.

iv. The equity share capital at the beginning of the year is adjusted by index number at the date of issue, or if deemed satisfactory, by the average index of the year. The preference share capital is treated as a monetary item and is simply restated.

General Purchasing Power refers ability to buy all types of goods and services available in the economy and it is measured by changes in the general price level based on approved general price index at a given date. A price index here means a ratio that express the relationship between the price of a given object (or service) at a specific time and the price of the same object during a period selected as a base year assigned a value of 100. For example, if a building has been purchased on January 1, 1985 for Rs. 50,000 when the general price index was 100. The general price index of January 1, 1990 was 200. Here the cost of building in terms of rupee on January 1, 1990 would be Rs. 1,00,000 (i.e., 200/100 x 50,000). Thus, the general price level adjustment restates financial data by bringing past rupee amounts in line to current rupee purchasing power by general index multiplier or conversion factor which measures the relationship between the current price index and the price index at the time of acquisition of the asset. This can be expressed by the following formula:

\[
\text{Average price index for current year} \times \frac{\text{Historical cost}}{\text{Index at the date of historical cost}} = \text{Equivalent number of current rupee.}
\]
To illustrate, assume that a firm has Rs. 40,000 cash at the beginning of 1985 and no transactions take place during the period so that it holds Rs. 40,000 cash till the end of 1985. Assume further that if price index rose by 20% from 180 at the beginning of 1985 to 216 at the end of December 1985. By the end of the year this Rs. 40,000 cash balance will have lost 20% of its purchasing power i.e., monetary assets at the beginning of the period expressed in terms of the year-end purchasing power

\[ 40,000 \times \frac{216}{180} = Rs. 48,000 \]

Less monetary asset amount in terms of year-end purchasing power

\[ 40,000 \times \frac{100}{100} = Rs. 40,000 \]

Loss in purchasing power as a result of holding monetary assets i.e. cash

\[ 8,000 \]

This loss can also calculate simply by multiplying the amount of monetary assets held throughout the year by the inflation rate (i.e., \( 40,000 \times \frac{20}{100} \)) = Rs. 8,000.

In contrast, a similar analysis is applied to any monetary liability. A monetary liability represents the sum payable by one economic unit to another. The amount so payable is being on a fixed rupee basis. Thus, owing money during period of rising prices gives rise to a gain in purchasing power because debts are repaid using rupee of less purchasing power than those originally borrowed. For example, assume, a firm has Rs. 60,000 outstanding debts in the beginning of 1985 when price index was 180, if the price index increases by 20% at the end of the year (i.e., from 180 to 216) the general purchasing power gain on amount of loan is:
Monetary liability as the beginning of the period expressed in terms of the year end 216/180 x 60,000 = 72,000

Less monetary liability in terms of year end

Purchasing power 100/100 x 60,000 = 60,000

A gain in purchasing power as a result of owing fixed rupee 12,000

If we consider only these two items i.e., assets (Cash Rs. 40,000) and liabilities (loan Rs. 60,000) the overall net gain on general purchasing power is (12,000 - 8,000) = Rs. 40,000 because its monetary liabilities were greater than its monetary assets. Rs. 40,000 net gain in purchasing power is caused entirely by the effect of inflation upon the purchasing power of monetary assets and liabilities.

Thus, a business that owns monetary assets or owes money may have a purchasing power gain or loss even if it earns no revenue and earns no expenses. If a business maintains high level of cash or account receivable from customers, we should recognise that inflation will continuously erode the purchasing power of these assets. On the other hand, if a business is able to finance its operations with borrowed capital, inflation will benefit the concern by allowing it to repay smaller amount of purchasing power than its originally borrowed.

Like monetary items, there are non-monetary items also which denote such assets and liabilities that do not represent specific monetary claim and include land and building, machinery, stock and so on. In conventional financial statements, these appear at mixed rupees viz., in varying general purchasing power of rupees. These rupees, therefore, need conversion or restatement to an equivalent number of current purchasing
power rupee as at the balance sheet date. For the conversion of non-monetary items, specific prices of each item as on the day of financial statements are required. But here we are only concerned with the effects of changes in the general purchasing power of the monetary unit and not the specific price changes. So, the restatements of non-monetary items are done by applying the following formula.

\[
\text{Price index when financial statements are prepared} \times \text{Historical cost} \over \text{Price index when the non-monetary items are acquired}
\]

To illustrate, assume a company purchases a plant and machinery for Rs. 1,00,000 on January 1, 1985 when the price index was 100. The price index on December 31, 1990 was 200. The company practices the straight-line method of depreciation on the rate of depreciation is 10%. Accumulated depreciation on the plant was Rs. 80,000 by the end of 1990. The book value was Rs. 20,000. In this case, the adjusted value for the change in the price level is shown below:

<table>
<thead>
<tr>
<th>Cost unadjusted</th>
<th>Conversion factor</th>
<th>Expected amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Rs.)</td>
<td>(Rs.)</td>
<td></td>
</tr>
<tr>
<td>Cost</td>
<td>1,00,000</td>
<td>200/100</td>
</tr>
<tr>
<td>Less Accumulated</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depreciation</td>
<td>80,000</td>
<td>200/100</td>
</tr>
<tr>
<td>Net book value</td>
<td>20,000</td>
<td>200/100</td>
</tr>
</tbody>
</table>
The depreciation expenses of the year 1990 would be Rs. 20,000 (10% x 2,00,000). Also, the same procedure to adjust the value of other non-monetary assets like building, land, tools etc. can be followed.

Thus, CPPA restates historical costs in terms of current purchasing power and attempts to stabilize the measuring unit at a constant value. This method retains all the characteristics of historical cost accounting except for the change in unit of measurement and meets a very important feature of an ideal accounting system.

CPPA provides necessary information regarding purchasing power gain and loss resulting from holding monetary items to the management for decision making. Besides, this approach removes the shortcomings of money as a measuring rod during inflation and seeks to remove the negative effects of changes in the value of the rupee. It does not consider changes in the specific prices. Finally, this method is simple to apply and is not very expensive.

Let us examine, in brief, the merits and demerits of the current purchasing power accounting method.

Firstly, the current purchasing power method uses uniform purchasing power as the measuring unit hence possesses the quality of comparability. General price level statements present data expressed in a common denominator, which is purchasing power of the rupees at the end of the period. Such statements facilitate comparison between firms because a common unit of measure is used.

Secondly, this method retains the historical cost accounts as the basic accounts and price level adjusted accounts are shown only on a supplementary basis. In this way
the current purchasing power accounting can be applied with a high degree of objectivity. Price level adjustments are easily verifiable by simply making a reference to the index used to measure changes in the purchasing power of money and results in alternations to historical measurements which are themselves objective. Thus the GPP accounting satisfies both the criteria of objectivity and verifiability.

Thirdly, the conventional historical cost accounting does not determine income properly due to the matching of rupees of different size on the income statement. Expenses incurred in the previous years are matched against revenues that are usually expressed in current rupees. General purchasing power accounting provides a better matching of revenues and expenses because common measuring unit is used.

Fourthly, GPP accounting provides relevant information for the management evaluation and use. Thus, the general purchasing power gain or loss resulting from holding monetary items reveals the management’s response to inflation. The restated non-monetary items indicate approximately the purchasing power need to replace the assets.

Fifthly, current purchasing power accounting presents to the users in general the impact of general inflation on profit and provides more realistic return on investment rates.

Lastly, the method is comparatively simple to apply, and is not very expensive. After having described the GPPA method and the steps in its application, we shall now examine various objection leveled against GPPA method. R. S. Gynther, in his paper “why use GPPA?” seems to be a strong opponent of the GPP approach have critically
examined various arguments for GPP to show that these arguments do not hold much ground. He has attempted to establish a strong case for the use of several specific indices in adjusting financial statements for price changes.

1. The use of general purchasing power index is advocated because it replaces the monetary unit of measurement, which ceases to be stable during the period of changing price levels. However, the advocates of specific index do not agree with this viewpoint. They maintain that although it might be physically possible to calculate general index in any country, it would have no real measuring to any one entity, e.g. person, firm, company etc. we find it difficult to agree with the viewpoint. Whenever, we have money in our pockets, we see ourselves holding general purchasing power in the sense that it can be used anywhere acquire any combination of goods and services we might need. The same thing holds good for a firm. The decision whether the money held should be used to acquire asset A or B or C or any combination thereof is influenced by fact that money representing special purchasing power is being held as claimed by Gynther, but by a large number of other factors internal and external.

2. The use of general purchasing power index is advocated in 'Accounting for Inflation' and 'Accounting for changing value of money'. Gynther has asked two questions:

(a) How can we account for inflation using just one price index series when inflation affects every entity in a different way? (b) How can we use just one index to account for the changing value of money when money means something different to every entity / especially through time? It can not be denied that inflation affects every entity
in a different way. This, however, does not warrant that the effect of inflation on different entities should be measured in different units. The measuring rod is provided by the GPP index.

Similarly, it is not convincing to suggest that a general index being based on average of various individual prices does not serve any purpose and hence it should not be considered or used. In fact such argument tends to give a wrong impression that individual prices are independent of each other so that some prices would always behave quite differently from those of others as well as from general index which itself is based on individual prices. However, this is not so. The sub-markets are closely connected with each other and the movements in one single price influence and in turn are influenced by the movements in many other prices in practices, index numbers are never prepared for one individual or entity, they are prepared for groups and are based on average.

3. The measurement function and comparison functions of money are inter-related. Money is measuring unit and it serves as a standard of comparison of resources. The use of GPP is advocated for comparing collection of resources during the period of changes price levels because the money unit does not remain stable.

Gynther does not agree with this and maintains that money is not used as a standard. It is used as means of exchange it is not a common standard to the people who use it. It means something different from person to person. However, this amounts to a denial of an important function of money viz. a standard of comparison. In the same way as money provides a 'standard' during stable prices, the GPP provides a 'common standard' of comparison during the period of changing price levels.
4. The use of GPP is advocated for restating shareholder's capital so that the profit emerges only after GPP of shareholder's capital has been maintained. However, such use has been criticised by the proponents of a specific index. It is pointed out that a general index is not representative of the purchasing power relevant to the shareholders of a firm and hence it cannot be applied to individual cases. Further it is suggested that the shareholders should themselves against their accounts to restate their capital with reference to an appropriate general index e.g. a retail price index.

The suggestion that a consumer price index should be used to restate financial reports does not seem logical. The most appropriate indicator of the purchasing power applicable to the firm is a whole price index of goods and services used by business in general. In our view the more general is the index, the better it is.

5. The real objectives of restating financial statements are also questioned. Suffice it to note that if historical cost accounts meet the stewardship and fiduciary accountabilities during the period of stable prices the adjusted accounts would also meet these requirements when the prices are change.

Also there are certain general objections put against the GPPA method let us examine there:

(i) Index number at their best is statistical average and suffers from serious limitation. Being statistical average, the index numbers cannot be applied with reasonable degree of precision to individual cases such as a particular firm. There is no denying fact that index numbers are mere averages and are not perfect. Nevertheless, they are useful tools and are used in decision making. There is no
reason why index numbers should not give satisfactory results in the field of accounting. In fact the utility of index numbers would increase and the scope for window-dressing and manipulation in company accounts would lesson if index numbers are prepared and published by an impartial body.

(ii) There are various price indices characterising various price situations and it is not possible to determine with reasonable degree of accuracy which index to use in price level accounting.

The main reason for such controversy regarding the choice of an appropriate index is the adoption of different concepts of 'capital maintenance' by each group supporting the use of particular index. What is, therefore, important in this regard is to decide the thing i.e. capital that is to be maintained in tact? It may be real capital i.e., physical assets, and replacement cost of asset or purchasing power of money capital original invested. Once this done, the choice of index to be used in accounting for price changes is an easy task.

(iii) The amount of work and cost involved in implementing general purchasing power accounting is also large that smaller companies may not opt for such price level adjusted account.

It is an exaggeration. The amount of energy and money required may be large in the beginning when financial statements and depreciation charges are adjusted in accordance with their date of acquisition and all past accounts are restated in current money units. Once this is done the amount of labour and cost needed to update the accounts each year is small. Moreover, it may be found that
benefits derived from adjusted accounts for outweigh the cost involved in such adjustment. It may also be hoped that if big companies make a beginning in this direction, others will follow suit either by utilizing their own accounting staff or by employing professional accountants.

(iv) The financial accounts of previous years will have to be updated each on a new base. This exercise is just mechanical and does not involve much labour and money.

(v) The use of index numbers to adjust accounts makes possible measurement of purchasing power, but such treatment of costs and receipts does not create or destroy actual purchasing power.

This criticism is due to misunderstanding regarding the objectives of applying index numbers to historical cost accounts. The exercise is aimed at merely measuring transaction costs and receipts in units of homogeneous purchasing power. Being a measurement device it does not and cannot create or destroy purchasing power.

(vi) The application of GPPA method recognises purchasing power gains or losses arising due to price changes which it is feared may be confused with operating profits. Thus, the results of managerial skills and decision are likely to be obscured.

This criticism seems to be unfounded. The truth of the matter is quite opposite. The use of index method, in fact, makes it possible to distinguish
between earnings arising out of price changes and earnings as result of managerial efforts and efficiency.

(vii) The adjusted accounts are not useful from taxation point of view because the tax authorities accept only historical cost accounts. Accordingly, it is difficult from practical point of view to reconcile the results of two sets of accounts.

This objection is valid but the approach is incorrect. The suggestion that the adjusted accounts should not be prepared so long as the tax authorities do not accept them appears to be pessimistic. The tax authorities would develop some inclination towards adjusted accounts in past years on a regular basis. We firmly believe that if a large number of firms in the country start working out adjusted accounts on a regular basis even in the absence of any tax concession, the government would become conscious of the problem and a satisfactory solution would ultimately emerge.

(viii) The critics of the index method adjusting historical cost accounts also maintain that the adjusted accounts would hardly be of any values to various users of accounts.

It is well known that important business decisions of firm are taken keeping in mind the performance of the business in real terms and in monetary terms. Similarly, the decisions of the outside users of accounts are also influenced by real business performance. Needless to mention that such is made available by the use of the GPPA method accounting for price level changes.
Current Cost Accounting (CCA) Method: This method differs from General Purchasing Power Accounting and has now emerged as an important variant of the replacement cost. This method was first suggested in 1975 by the Sandilands Committee – an independent committee of inquiry into inflation accounting appointed by the Government of U.K. under the Chairmanship F.E.P. Sandilands, the then Chancellor of the Exchequer in the United Kingdom. Hard on the heels of Sandilands Committee Report (1975) came Exposure Draft (ED) – 18 issued by the Inflation Accounting Steering Group (IASG) also known as Morpeth. ED-18 required the companies to give inflation-adjusted accounts in the primary financial statements. However, due to some technical flows ED-18 was not well received. After considerable study and debate, in 1980, the Accounting Standard Committee in U.K. issued the standards on this subject i.e., "Statement of Standard Accounting Practice (SSAP) –16". Until 1985 SSAP-16 remained as the current accounting for price level changes (APC) standard despite many shortcoming leveled against it. Exposure Draft (ED) 35 was issued in 1985 as proposed successor to SSAP-16. The ED-35 (Accounting for the effect of changing price) will apply to all listed companies that are neither value-based nor wholly-owned subsidiaries.

So the current cost accounting method gains popularity and this evident in the report of inflation accounting committee in the United Kingdom (Sandilands 1975): "CCA will indicates, more clearly than existing accounting conventions, the effect of inflation on a company's affairs and that it is urgent that it should be introduced as soon as possible. However, it should not be assumed that accounting for inflation is in itself a panacea for the difficulties during a time of inflation".
The current cost accounting approach belongs the family of accounting concepts that measures assets reference to their present value rather than their historical cost. Particularly, the business income is not recognised as earned until operations have been changed for the current value of the assets consumed during the accounting period.

The Current Cost Accounting may be defined as "a form a accounting where all assets are shown at current replacement value otherwise named as entry value and all liabilities are shown at present value". The main object of CCA is to provide useful information that is available from historical cost based accounts alone, for the guidance of the management and outsiders (Shareholders, Creditors, Potential Investors, Tax Authorities etc.) on certain important issues such as financial viability, return on investment, pricing policy, cost control and distribution decision and gearing. It seeks to judge the ability of the business to perform in the future as in the past and pays dividend or finances expansion without requiring new external financing.

Beside, this method is based on an economic theory of value and reflects a correct profit after matching current costs with current revenues and gives a correct valuation of assets and liabilities in the balance sheet at their current value.

The current cost accounting accepts money as the appropriate unit of measurement. They propose however that the assets and liabilities must be show on the balance sheet at "the value to the business". The value to the business is that which the firm would lose if deprived of the assets usually this is estimated at the replacement cost of the asset i.e., the current market price of the asset.
The Current Cost Accounting based on the concept of 'operating capability', which may be viewed capable of providing with its existing resources during a given period. The capital gains, which accrue as a result of the rise in the price of real assets owned by the firm, are shown in a special reserve account along with the shareholder's reserve.

Further current cost accounting differentiates between operational gains and holding gains. Operating gains are defined as revenue less current cost of assets consumed. Holding gains are the gains that result from an increase in the value of physical assets owned by the firm. Holding gains should be retained in the firm so as to provide sufficient capital for maintaining the physical capacity of the business. Only operating profits are distributable profit.

The current cost accounting makes three main adjustments to trading profit calculated on historical cost basis before interest. These three adjustments are: depreciation adjustments, Cost Of Sales Adjustment (COSA) and Monetary Working Capital Adjustment (MWCA) besides gearing adjustment under which the current cost profit attributable to shareholder is obtained.

Now we will discuss here the procedure for preparation of current profit and loss account by calculating these adjustments. Also, an attempt is being made to evaluate the converted financial statement under current cost accounting method.

Cost of Sales Adjustment (COSA) represents the difference between the current cost of inventories at the date of sale and the amount charged as the cost of goods sold in computing historical cost profit. As far as sales is concerned, it is current revenue hence
requires no adjustment in the historical profit and loss account. Historical cost of sales is equal to \((\text{opening stock} + \text{purchased} + \text{direct expenses})\) minus \((\text{closing stock})\). Likewise, current cost of sales is calculated by applying mid-period concept and converted opening and closing stock are revalued at mid-year indices as shown in the following example. Cost of Sales Adjustment is ascertained (i) by deducting historical cost of the opening stock from the historical closing stock (ii) the average current cost of closing stock so ascertained, deduct there from the average current cost of the opening stock and finally, from the result in (i) deduct the result in (ii) to give the Cost of Sales Adjustment.

To illustrate, assume: Opening stock at historical cost is Rs. 20,000 index number 180, purchases during the year Rs. 60,000 index number 198 (average) and closing stock Rs. 25,000 index number 220.

\[
\begin{align*}
\text{Rs.} \\
\text{Cost of goods sold is opening stock} & \quad 20,000 \\
\text{Plus Purchased} & \quad 60,000 \\
\text{Cost of goods available for sale} & \quad 80,000 \\
\text{Less: Closing Stock} & \quad 25,000 \\
\text{Cost of goods sold at historical cost} & \quad 55,000 \\
\end{align*}
\]

Cost of sales Adjustment will be calculated as under:

\[
25,000 - 20,000 = 5,000
\]

Average current cost of opening stock

\[
(25,000 \times 198/200) = 22,500
\]

Less: Average current cost of opening stock

\[
(20,000 \times 198/180) = 22,000 = 500
\]

Therefore COSA \(4,500\)

In other way we can ascertain COSA by computing the current cost of sale for using revised amounts of the opening and closing stock, that is,
Opening stock Rs. 22,000 + purchased Rs. 60,000 minus closing stock Rs. 22,500 = Rs. 82,000 current cost of sales minus Rs. 55,000 cost of goods at historical cost = Rs. 45,000 COSA.

The next item in the preparation of current income statement for the current financial year is the depreciation adjustment. This reflects the difference between depreciation calculated on current cost and depreciation already charged on the basis of historical cost income. Therefore, the current year’s depreciation under current cost accounting method is calculated as under:

Current year’s depreciation = opening current value of the asset + closing balance of current value of asset divided \( \frac{2 \times \text{total live of the asset}}{2} \). For example, on 1-1-1984, opening balance of current value of machine is Rs. 30,000 and closing balance of converted value is Rs. 40,000 and the useful life of machine is 10 years. In this case the depreciation will be:

\[
\frac{30,000 + 40,000}{2} = \frac{70,000}{2} = 35,000
\]

Depreciation will be Rs. 35,000 x \( \frac{1}{10} \) = Rs. 3,500

Similarly, the current cost depreciation can be calculated by revising the depreciation charge in accordance with the charge in the appropriate index level between the year of purchase of the asset and the current year. The formula for this is:

\[
\frac{\text{Historical cost} \times \text{closing index}}{\text{Opening index}}
\]

For instance, a firm purchased a machine on 1.1.1984 for Rs. 1,00,000. Its estimate useful life is 10 years. The index numbers for the assets are: January 1, 1984 = 100 December 31, 1990 = 200
If the rate of depreciation is 10% under SLM, then the value of machine as on 31.12.1990 under historical cost accounting and current cost account will be as under:

<table>
<thead>
<tr>
<th>Machine</th>
<th>Rs. 1,00,000</th>
<th>200/100</th>
<th>Rs. 2,00,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depreciation @ 10% (accumulated amount up to 31-12-1990)</td>
<td>Rs. 70,000</td>
<td>200/100</td>
<td>Rs. 1,40,000</td>
</tr>
<tr>
<td></td>
<td>30,000</td>
<td>200/100</td>
<td>60,000</td>
</tr>
</tbody>
</table>

Depreciation adjustment:

Current cost depreciation @ 10% on Rs. 2,00,000 = 20,000
Less historical cost depreciation @ 10% on Rs. 1,00,000 = 10,000
Depreciation adjustment = 10,000

Backlog depreciation arises every time when a depreciation asset is revalued. This is the difference between the actual depreciation charged to provision for depreciation through profit and loss account and the depreciation that should have been charged on the basis of the current value of the asset. This should be charged either to general reserve or against the related revaluation surplus on the fixed assets. The former will ensure that a concern maintains its operating capital at the time of the replacement of fixed assets. The latter procedure has been recommended in U.K. standard (SSAP-16).

To illustrate, assume a machine was purchased on 1-1-1981 for Rs. 50,000 and its expected life was ten years. On 1-1-1984 a similar machine new one cost Rs. 15,000 and on 31-12-1984 Rs. 20,000. In this example the current value of the machine as on 1-1-1984 Rs. 15,000 and expired proportion is 3/10 (out of 10 years), therefore,
Depreciation provision under current cost accounting is $\frac{3}{10} \times 15,000 = 4,500$. The current value of machine as on 31-12-1984 is Rs. 20,000 and expired proportion is $\frac{4}{10}$, therefore depreciation provision under current cost accounting is $\frac{4}{10} \times 20,000 = Rs. 8,000$.

Average current cost of machine during the year = $\frac{15,000 + 20,000}{2} = 17,500$

Depreciation of $\frac{1}{10} \times 17,500 = 1,750$.

Therefore backlog depreciation = $(8,000 - 4,500)$ minus depreciation adjustment i.e., $8000-45,000 = Rs. 3,500 - 1,750 = 1,750$.

Another adjustment called as the monetary working capital adjustment (MWCA) reflects the amount of addition (or reduced) finance needed for monetary working capital as a result of changes in the input prices of goods and services used and financed by the business. Monetary working capital is the aggregate of (trade debtors + B/R + repayment + amount of the stock which has not been included in the cost of goods sold) minus (trade creditors + B/P + that part of the bank overdraft which is related with the stock). At the time of raising prices, a business needs more funds to finance monetary working capital. This adjustment reflects the additional need of funds.

The procedure to calculate monetary working capital is (i) monetary working capital in the beginning; (ii) monetary working capital at the end; (iii) monetary working capital at the end minus monetary working capital at the beginning (iv) above two monetary working capitals are adjusted with the general price as under:-
(a) Opening monetary working capital x average index number
    opening index number.

(b) Closing monetary working capital x average index number
    closing index number.

Deduct (a) above from (b) above and (v) the amount found out as per (iv) above is
deducted from the amount found out as per (iii) above and thus amount so found out will
be monetary working capital adjustment.

To illustrate, assume the opening balance of trade debtors is Rs. 90,000 and closing
balance of trade debtors is Rs. 10,500 similarly, the opening balance of trade creditors is
Rs. 5,000 and closing balance of trade creditors is Rs. 6,000 Index No. in the beginning
100, Average 120 at the end 150 MWC in the beginning – 9,000 – 6,000 = Rs. 4,000
MWC at the end = 10,500 - 6,000 = 4,500
4,500 - 4,000 = 500
4000 x 120/100 = 4800
4500 x 120/150 = 3600
3600 - 4800 = (-) Rs. 1,200.
500 - (-) Rs. 1,200 = 1700 this is the monetary working capital adjustment (MWCA).
The MWCA should not include creditors or debtors relating to fixed assets bought or sold
or under construction.

The last adjustment called ‘gearing adjustment’ is made where a proportion of the
assets of the business is financed by borrowing. In other words the net total by the
proportion that borrowings bear to the total operating capital employed. This adjustment reflects the capital structure of the company. The procedure to calculate the gearing adjustment is:

\[
\text{Gearing adjustment} = \frac{L}{L + S} \times A
\]

Where \( L \) = Average net borrowing

\( S \) = Average shareholder interest.

\( A \) = the total of the current cost adjustment.

A comprehensive illustration showing the application of current cost accounting (CCA) and general purchasing power accounting based on historical cost accounts is given in appendix –I at the end of this chapter.

The current cost accounting suffers from many serious defects and has been severely criticised. Before examining their criticism, let us look strong points in favour of the current cost accounting in brief.

1. It is gratifying that a government appointed committee has for the first time in the U.K. recognised the serious nature of the problem of price changes in accounts and has recommended for the use of accounting technique to overcome this problem.

2. The contention of the committee that earning and assets of the firm should be measured by reference to valuation is quite logical and useful for some groups of users of accounts.
3. The current cost accounting recognises that it is only the current costs that should enter into determination of income.

4. The separation of holding and operating gains enables the measurement to evaluate its performance.

5. The breakup value of assets and liabilities as given by the CCA represents a more accurate and real financial position of an enterprise than that given by the existing accounting practices.

The various criticism will be examined under the following four heads.

1. Characteristic of an ideal unit of measurement.

2. Principals of a careful accounting system.

3. Theoretical objections.

4. Practical problems.

1. The Sandilands Committee has suggested that an ideal unit of measurement should develop the following important criteria:

(a) The unit should be equally useful to all users of accounts.

(b) The unit should not change from year to year.

(c) The unit should be the same for all enterprise presenting financial statements.

(d) The unit should preferably be a physical object, which should be exchanged by the users of accounts.

(e) The unit should represent a constant value through unit.

A close analysis of the whole issue reveals that the criteria No. a, b, & c are equally well satisfied by the purchasing power unit. Criteria (d) does not seem to be much relevant.
No useful purpose is served if a unit of measurement is a physical object capable of being exchanged by its users.

The above account brings to light various limitations of the Sandilands current cost accounting. It is theoretically weak and involves many practical problems. Commenting upon the recent development in inflation accounting vis-à-vis current cost accounting, Prof. Baxter rightly remarked that “because of inflation the old pattern must change abruptly. Accountants have been ordered to take great leap forward. They are being pressed to bring in a big reform for which their tradition and training fit them properly. They are to choose between strange concepts and learn novel techniques. For comparatively, they are being exhorted to hurry yet they known what a false move will do much harm to business, to investors and to their own profession. Small wonder that they are rattled and rebellious”.

Following the submission of Sandilands report, the Inflation Accounting Steering Group (IASG) was formed on Jan. 6, 1976 under the Chairmanship of Mr. Gouglas Morpeth. The IASG was entrusted with the responsibility of preparing a draft based on the report of Sandilands Committee taking nil account the comment on that report by the consultative Committee of Accountancy bodies (CCAB) and other representative bodies. Then came ‘Inflation Accounting – the interim period a statement issued in January, 1976 by the ASSC (Accounting Standard Steering Committee) with the authority of the councils of member of the Consultative Committee of Accountancy Bodies (CCAB) for the guidance of the members of these bodies on presentation of accounts during the interim period between the publication of the Sandilands report and the issued of related
SSAP-7 (Statement of standard Accounting Practice-7) \(^{17}\). The companies were advised to continue with the method already in use and not to apply CCA for the time being. However, they were suggested to develop CCA information for the use in their management accounts. The companies were also urged to prepare in the interim supplementary statements adjusting the results and financial position of the company for the efforts of specific and general price level changes, using the CCA method as amplified in the Initial Reactions to the Report of the Inflation Accounting Committee by CCAB, issued in November, 1975 or CCA method or the CPP method based on historical cost set out in PSSAP-7. After about a year of its implementation theIASG prepared 'Proposed Statement of Standard Accounting Practices- ED 18: CCA and the same was issued for comment by the Accounting standards Committee (ASC) on December 1, 1976 \(^{18}\). The exposcer period was kept six months and it was envisaged that the SSAP would be published on Jan 31, 1978. Its implication was phased over 3 years period and the first accounts covered by it were to be those of the largest enterprises for accounting periods beginning on after July 1, 1978. No specific date was mentioned for application of the standard to business which did not disclose in their accounts. For previous period either to turnover or total assets in excess of £ 1,00,000. To provide continuity of information during the transition period before full-scale adoption of CCA, it was suggested that for a two-year period companies should publish their results on historical cost basis in addition to their current cost accounting results. The historical cost accounts should continue to be prepared in conformity with Statement of Standard Accounting Practice based on the historical cost convention.
ED-18 was received with the mixed reaction. The council of ICAEM (Institute of Chartered Accountant in England and Wales) submitted its view on the document by May 1977 and favoured most of the proposals contained therein. The Institute suggested that Form of ED-18 should be simplified. The Institute also approved the proposal of ED-18 that the CCA accounts should be accompanied for the time being by a full set of historical cost accounts, but it opined that the question whether this should be continued for more or less than two years should be left open.

The events took a dramatic turn when at the English Institute's of Special Meeting on July 6, 1977, a resolution that the members of the ICA in England and Wales does not wish any system of CCA to be made compulsory was carried by 54 per cent majority. The similar rebellion was notified among the members of the Association of Certified Accountants. Following the attitude of the ICAEW, the President of the Institute of Cost and Management Accountants said that if a standard is to be of any value it must be mandatory. However, the Accounting Standard Committee (ASC) still held its view that a generally acceptable system of current cost accounting was urgently necessary. The Accounting Standard Committee working partly under the Chairmanship of Mr. William Hyde was still busy developing interim guidelines for inflation accounting. The Hyde guidelines 'Inflation Accounting: An interim recommendations were issued by the Accounting Standard Committee in the month of Nov. 1977. These recommendations were applicable to the companies listed on the Stock Exchange. After the issue of ED-18 by the ASC, the Accounting Standard Committee constituted various working parties each entrusted with the task of developing proposals on different aspects of inflation
accounting based on ED-18 in the light of comments on discussion. The final outcome of these deliberations would form the basis of contents of four discussion papers which were expected from the IASG in November, December, 1977. Paper 1, would contain proposals for a 'core' standard on the main elements of current cost accounting. Other three papers would contain 'Satellite' standards on fixed asset, stock of smaller companies. Assuming that the discussion papers would be issued according to the schedule, it was hoped to produce standard or standards on current cost accounting by the middle of 1978 and the projected starting date for major companies was put at Jan.1, 1979. It was also envisaged that for two years the current cost accounting information would be given as supplementary to historical cost figures and thereafter the current cost accounting would become a definitive system, but with historical cost figures produced on a supplementary basis for a further two years. As the four discussion papers expected from the IASG have not come out as per the schedule, the finalization of a standard by the Accounting Standard Committee and the implementation of the current cost accounting are likely to be further delayed.

When compared current cost accounting the general purchasing power accounting method possesses the following important superiorities over CCA.

(i) The general purchasing power accounting method permits the relation of historical cost accounts whereas the current cost accounting method replaces them by new sets of accounts. This feature of the general purchasing power accounting method meets the contention of the advocates of historical cost accounting that accounts should be based on the results of the actual business transactions.
(ii) The general purchasing power accounting method stresses upon the need for an all-incentive adjustment of financials statements. Accordingly all items of the profits and loss accounts and the balance sheet are considered in this method. On the other hand, the current cost accounting method considers only two items namely inventories and fixed assets.

(iii) The purchasing power gains / losses, which are in the nature of costs of holding monetary asset and liabilities during the period of changing price-level, are considered under the general purchasing power accounting method but not under current cost accounting method.

(iv) The index-adjusted accounts enable their users to distinguish meaningfully between capital and income, a fact, which is vital to the survival and growth of the firm.

(v) Unlike the current cost accounting the general purchasing power accounting are free from weaknesses common to different assets valuation techniques, which discard transaction criterion and are subjected to varying degrees of individual judgment and opinion. Naturally, therefore, the general purchasing power accounting method can lay claim, among others, to objectivity, which are lacking in the current cost accounting method involving property appraisals.

Real Replacement Cost: Another method has recently been suggested in some quarter is essentially a compromise formula based on current cost accounting or RCA and GPPA. The objective underlying this method is to remove the effects of inflation from the appropriate replacement cost accounts and, where necessary, restate the real balance in end-of-period money units. Under this method the adjustments of fixed assets an
inventories are to be made with reference to specific indices. In addition the monetary items are considered for calculating purchasing power gains and losses. By combining general price level adjustments with the use of current prices of specific assets, all the advantages of both the methods can be obtained. The use of price level adjustments enables the measurement of purchasing power gains and losses on monetary items, and the use of current prices of specific assets makes possible the measurement of holding gains. However, on account of various reasons this method cannot be recommended practical application at the present moment. Its practical application may prove difficult because of theoretical objections against such compromise.

Conclusion.

In this chapter we examined three important proposals for price-level accounting viz. replacement cost accounting (including Sandilands current cost accounting) general purchasing power accounting and replacement cost accounting. It was noted that replacement cost accounting fell on many grounds both theoretical and practical. In comparison with replacement cost accounting (or current cost accounting), general purchasing power accounting was found to be theoretically better and it could be used without much practical difficulty. The above discussion makes it clear that the general purchasing power accounting method is critically better and practically more convenient. The criticisms against this method do not hold much ground. Besides, the misgivings of some opponents with regard to practical difficulties in the application of this method do not seem to be well founded. The empirical studies undertaken and use of this method by companies to produce supplementary financial statements on an experimental basis have
shown that this method can be used with out much difficulty. In the next chapter, therefore, we would like to analyse the presentation of inflation accounting information as it may relate to the practice of inflation accounting in the companies in India and their comparison with the foreign companies where the developments are given on the basis of price level changes.
Appendix-I

T.V. Suzuki limited started a business on 1st January 1999 with an initial investment of Rs. 28,00,000, which comprised Rs. 24,00,000 as capital by the owners of the company and Rs. 4,00,000 as loan from bank at 10% interest.

On the same day, the company purchased a machine costing Rs. 20,00,000 and goods worth Rs. 8,00,000. It is decided to depreciate the machine at 10%. On the 30th June of the same year, one half of the goods were sold for Rs. 12,00,000.

The movements in the price index numbers during the year were as under.

<table>
<thead>
<tr>
<th></th>
<th>Jan. 1</th>
<th>June 30</th>
<th>Dec. 31</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index of general prices</td>
<td>100</td>
<td>120</td>
<td>132</td>
</tr>
<tr>
<td>Index of Specific prices</td>
<td>100</td>
<td>160</td>
<td>180</td>
</tr>
</tbody>
</table>

Assuming that the movements in the prices of goods and machine were similar, an income statement and balance sheet of the company is prepared according to the following methods.

1. Historical Cost Accounting
2. Current Cost Accounting and
3. General Purchasing Power Accounting (Ignore income tax).
Income Statement for the year ended 31st December 1999

According to various methods of accounting for changing prices.

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Historical cost Accounting (HCA)</th>
<th>Current Cost Accounting (CCA)</th>
<th>General Purchasing Power Accounting (GPPA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales Revenues</td>
<td>12,00,000</td>
<td>12,00,000</td>
<td>13,20,000 (4)</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>4,00,000</td>
<td>6,40,000</td>
<td>5,28,000 (5)</td>
</tr>
<tr>
<td>Depreciation</td>
<td>2,00,000</td>
<td>3,60,000 (1)</td>
<td>2,64,000 (6)</td>
</tr>
<tr>
<td>Operating Income</td>
<td>6,00,000</td>
<td>2,00,000</td>
<td>5,28,000</td>
</tr>
<tr>
<td>Interest</td>
<td>40,000</td>
<td>40,000</td>
<td>40,000</td>
</tr>
<tr>
<td>Income after interest</td>
<td>5,60,000</td>
<td>1,60,000</td>
<td>4,88,000</td>
</tr>
<tr>
<td>Realised holding gain</td>
<td>-</td>
<td>2,40,000 (2)</td>
<td>-</td>
</tr>
<tr>
<td>Purchasing power gain (Loss) on monetary items</td>
<td>-</td>
<td>-</td>
<td>8,000 (7)</td>
</tr>
<tr>
<td>Realised Income</td>
<td>5,60,000</td>
<td>4,00,000</td>
<td>4,96,000</td>
</tr>
<tr>
<td>Unrealised holding gain</td>
<td>-</td>
<td>3,20,000 (3)</td>
<td>-</td>
</tr>
<tr>
<td>Net Income</td>
<td>5,60,000</td>
<td>7,20,000</td>
<td>4,96,000</td>
</tr>
</tbody>
</table>

**Working Note**

1. Depreciation on Machine

\[
\text{Depreciation at H.C} = \frac{20,00,000 \times 10}{100} = 2,00,000 \\
\text{Depreciation at CCA} = \frac{20,00,000 \times 180}{100} = 3,60,000 \\
\]
2. Realised holding gains

\[(6,40,000 - 4,00,000) = 2,40,000\]

3. Unrealised holding gains

\[(4,00,000 \times \frac{180}{100}) = 7,20,000 - 4,00,000 = 3,20,000\]

4. Sales revenue under GPPA

\[(12,00,000 \times \frac{132}{120}) = 13,20,000\]

5. Cost of goods sold under GPPA

\[(4,00,000 \times \frac{132}{100}) = 5,28,000\]

6. Depreciation under GPPA

\[(2,00,000 \times \frac{132}{100}) = 2,64,000\]

7. Purchasing Power gain (Loss) on monetary items.

\[
\frac{[(4,00,000 \times \frac{132}{120}) - 4,00,000] - [(12,00,000 \times \frac{132}{120}) - 1,20,000]}{120} = 1,28,000
\]
\[= 13,20,000 - 12,00,000 = 1,20,000\]
\[= 1,28,000 - 1,20,000 = 8,000\]
**Balance Sheet as on 31st December 1999**

According to various methods of accounting for changing prices

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Historical Cost Accounting (HCA)</th>
<th>Replacement Cost Accounting (RCA)</th>
<th>General Purchasing Power Accounting (GPPA)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Liabilities</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital</td>
<td>24,00,000</td>
<td>24,00,000</td>
<td>31,68,000 (1)</td>
</tr>
<tr>
<td>Loans</td>
<td>4,00,000</td>
<td>4,00,000</td>
<td>4,00,000</td>
</tr>
<tr>
<td>Retained Income</td>
<td>5,60,000</td>
<td>4,00,000</td>
<td>4,96,000</td>
</tr>
<tr>
<td>Revaluation on Surplus</td>
<td>-</td>
<td>16,00,000 (2)</td>
<td></td>
</tr>
<tr>
<td>Unrealised holding gains</td>
<td>33,60,000</td>
<td>51,20,000</td>
<td>40,64,000</td>
</tr>
<tr>
<td><strong>Assets</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Machines</td>
<td>18,00,000</td>
<td>32,40,000 (3)</td>
<td>23,76,000 (4)</td>
</tr>
<tr>
<td>Inventory</td>
<td>4,00,000</td>
<td>7,20,000</td>
<td>5,28,000</td>
</tr>
<tr>
<td>Cash (5)</td>
<td>11,60,000</td>
<td>11,60,000</td>
<td>11,60,000</td>
</tr>
</tbody>
</table>

Working Note:

1. Capital under GPPA. \( (24,00,000 \times \frac{132}{100}) = 31,68,000 \)
2. Revaluation Surplus \( (20,00,000 \times \frac{180}{100}) = 20,00,000 \)
   \( = 36,00,000 - 20,00,000 = 16,00,000 \)
3. Machine under CCA \( (20,00,000 \times \frac{180}{100}) = 36,00,000 - \frac{(36,00,000 \times \frac{10}{100})}{100} = 3,60,000 \)
   \( = 36,00,000 - 3,60,000 = 32,40,000 \)
4. Value Machine under GPPA
   \( (20,00,000 \times \frac{132}{100}) = 26,40,000 - \frac{(26,40,000 \times \frac{10}{100})}{100} = 2,64,000 \)
   \( = 26,40,000 - 2,64,000 = 23,76,000 \)
5. **Cash Account**

<table>
<thead>
<tr>
<th></th>
<th>Rs.</th>
<th></th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital</td>
<td>24,00,000</td>
<td>Machine</td>
<td>20,00,000</td>
</tr>
<tr>
<td>Loans</td>
<td>4,00,000</td>
<td>Purchases</td>
<td>8,00,000</td>
</tr>
<tr>
<td>Sales</td>
<td>12,00,000</td>
<td>Interest</td>
<td>40,000</td>
</tr>
<tr>
<td></td>
<td>40,00,000</td>
<td>Balance (B/F)</td>
<td>11,60,000</td>
</tr>
</tbody>
</table>

|          | 40,00,000 |
References.

1. *See* Report of Inflation Accounting Committee, U.K., (Chairman: F. E. P. Sandilands), classified the users of accounts into nine groups viz. Shareholders, investment analysts, the city (Stock Exchange) creditors and lenders, other companies, Employees, Management, the Government and Official bodies and the General Public.


8. Mason, Perry, op.cit, and Hendrickson, E.S. op.cit.


12. Ibid.


17. Inflation Accounting- the interim period ASSC CCAB, January 1976.

