Chapter - 3

METHODS OF INFLATION ADJUSTMENT IN ACCOUNTING


Accountants all over the world have made determined efforts to develop suitable method for measuring the impact of changing prices on the profitability and financial health of the organisation. The suggestions made from time to time for dealing with this accounting problem are many and varied in nature. Some of them are mere modifications and adaptation of the existing system while others are based on entirely new principles and concepts. The main proposals so far put forward for dealing with the problem of inflation in accounts are as under :-

(i) Modified Historical Cost Accounts or Periodic revaluation of fixed assets along with adoption of LIFO.

(ii) Current Purchasing Power Accounting (C.P.P.A) or, General Purchasing Power Accounting (G.P.P.A).

(iii) Current Cost Accounting (C.C.A)

(iv) Replacement Cost Accounting (R.C.A)

(v) Present value Accounting (P.V.A)

(vi) Continuously Contemporary Accounting (C.O.C.O.A)

(vii) Real Replacement Cost Accounting (R.R.C.A)

(viii) Cash Flow Accounting (C.F.A)
The principles applied in various accounting methods as mentioned above are discussed in greater details along with appraisal of each of the method.

**Modified Historical Cost Accounts or Periodic Revaluation of Fixed Assets alongwith adoption of LIFO.**

Companies have been using "Modified Historical Cost Accounts" approach before any formal method for presenting inflation adjusted accounts. Basically, Modified Historical Cost Accounts consist of two adjustments: -

i) In respect of Fixed Assets and

ii) In respect of Stock.

Both the adjustments are independent and often only the first one is carried out.

The adjustment in respect of fixed assets contemplates revaluation of fixed assets. "The original purpose of revaluation of fixed assets was to improve asset backing for the purposes of borrowing in estate and property development companies".¹ Revaluation of fixed assets is recognised by various accounting standards. Mention may be made of - "Depreciation Accounting AS-6,"Depreciation Accounting IAS-4". Both the standards define

¹ Sanjeev Pandit "Inflation Accounting"
Depreciable amount of a depreciable asset is its historical cost or other amount substituted for historical cost in the financial statement, less the residual value.

Accounting Standard AS-6 provides that where depreciable assets are revalued, provision for depreciation should be based on revalued amount and on the estimate of the remaining useful life of such assets. Theoretically, there are two reasons for revaluation -

i) Historical cost of assets in the books bears no relation to present day costs and

ii) In the light of current values, depreciation on historical costs is unrealistic and hence depreciation charge must be based on a higher amount.

Revaluation may be done in two ways. The original cost may be reviewed and the increase may be credited to revaluation Reserve. Simultaneously, the accumulated depreciation may be increased to bring the net block after revaluation to current value.

The incremental depreciation is adjusted against the past profits to provide for the backlog of depreciation.

The second method which is more common is to charge the incremental depreciation to the revaluation reserve and only the
net revaluation surplus is credited to the Revaluation reserve Account. In effect only the net book value is revalued to bring it in line with the present value of a similar asset.

In the subsequent years, depreciation is charged on the basis of revalued amount. This gives a more realistic picture of operating profits since depreciation charge is more realistic based on current values. If there is no transfer from the revaluation reserve to the profit and loss account, there is an effective retention of funds in the business for the purposes of replacement of assets.

It is worth cognising that in the U.S.A a large number of companies had revalued the assets during the 1920's. However, following the Great Depression, write ups were discontinued and assets were written down again. Accountants were blamed for the stock market crash, for they had permitted the write ups. This has made accountants reluctant to experiment with writing up of asset values, despite inflaion. Accounting Principles Board, (APB) in its opinion No.6 in 1965, opined:

"The board is of the opinion that property, plant and equipment should not be written up by an entity to reflect appraisal, market or current values which are above cost to the entity." 2

In certain countries like Brazil, depreciation on the revalued amount is allowed as a deduction for income tax purposes also. In some of the Scandinavian countries, revaluation is compulsory. However, generally the trend regarding revaluation has been irregular.

But there are some authorities who favour writing up of the value of fixed assets in the Balance Sheet. The determination of the replacement cost of assets on the balance sheet is a difficult problem. This may be arrived at by application of a general price index or specific price index. "There are arguments for and against selection of each of the two types of indices." 3

The purpose of providing additional depreciation on replacement cost method is, as stated earlier, to ensure correct measurement of accounting profit by matching adequate cost of assets consumed against revenues. This process also helps maintenance of real capital in the business. Lastly, replacement of assets becomes feasible without creating other major financial problems.

Many criticisms can be advanced against this practice. Firstly, by the time replacement is expected to be due, new inventions and alterations in technique may take place which will take away the very need for replacement of the old asset by a similar one. Therefore all attempts that have been made in the

past to provide for replacement do not come ultimately to any help. Secondly, the method is not applicable to other types of assets and accordingly the process will not serve the additional purpose of maintenance of real capital in full. Thirdly, in case of write up methods, the process will lead to enhancement of the nominal capital of the business though no mechanism is adopted to distribute a part of the benefits to the shareholders. Preference shareholders are, perhaps, the worst sufferers, as they are not compensated for by any high rate of dividend. Finally, it is extremely difficult to calculate the amount of the reserve accurately as the determination of replacement cost of assets is fraught with difficulties due to index and many other problems.

**Inventory Valuation Using LIFO.**

Stocks or inventories are revalued at cost or net realisable value whichever is lower. The cost is arrived at by applying one of the following three methods:

i) First in First Out (FIFO)

ii) Last in First Out (LIFO)

iii) Weighted Average.

Usually in Historic cost Accounts, either method (i) or method (iii) is used for valuation of inventories.

In modified historical cost accounts, the inventories are valued on LIFO basis.
Consequent upon this the profit and loss account is charged with the latest purchase price for the goods consumed or utilised in earning revenue. When the stock turnover is fast, under LIFO method, the profit and loss account is charged with approximately the current cost of goods consumed. However, if the last purchases themselves are not very recent then, the charge for the inventory consumed is not proper. Further in the Balance Sheet inventories are shown at an amount which is unrealistic, since inventories are valued at the cost based on purchases made much earlier. Thus the balance sheet does not give a true and fair view, although the profit and loss statement incorporates adjustments for current cost of inventories consumed or utilised.

LIFO is one of the recognised methods of inventory valuation. Accounting Standard for Valuation of Inventories AS-2 in para 26.1 permits LIFO method of valuation of inventory.

The LIFO method of inventory valuation has become a very popular one in the United States. The method is also permitted by the tax laws of the country for computing taxable income.

The valuation of inventory using LIFO method may be objected to because of its following limitations.

Under conditions of falling prices and when inventory level comes down, LIFO method will distort the profit figure. Second, it leads to distortions in balance sheet values by
showing closing inventories at older prices. This practice has been defended on the ground that the profit and loss account or the Income statement is the more important document than the balance sheet as the measurement of profit realistically will have a favourably far reaching impact upon the viability of a firm. But according to Moonitz (1953) however, "this leaves unanswered the important query as to how it is possible to have reasonably accurate statements of income accompanied by admittedly inaccurate balance sheets. Where is the difference buried and what is its significance".  

It has already been pointed out that unless the write-up method is followed, the fixed assets are still shown at their cost. In case the LIFO method is adopted for valuation, the inventory is shown even below 'cost'. Both the methods no doubt reduce inflated profit, but because of partial adjustment under each, the balance sheet remains uncared for. If desired, inventories even under LIFO may however be written up in the balance sheet like fixed assets. It should, of course, be pointed out that writing up of any kind of asset whether fixed or inventories should be done against raising the measure of capital and not 'profit'.

Modified Historical Cost Accounts incorporating depreciation on revalued costs of fixed assets and inventory valuation on LIFO method overcome to some extent the limitations of conventional historical cost accounts.

**General Purchasing Power Accounting (G.P.P.A)** or **Current Purchasing Power Accounting (C.P.P.A)**

"When it is a question of money, everybody is of the same religion" - Voltaire.

Assumptions in historical cost accounts of a stable unit of measurement has been an unrealistic one. When evidence of instability of monetary unit became overwhelming, a method of accounting, purportedly, to overcome the same was advocated in the form of General purchasing power method.

This method seeks to restate the financial statements in terms of units of equal purchasing power. General purchasing power seeks to eliminate the effects of changes in the value of money itself. This method is based on the thinking that profit of an enterprise should be computed in such a manner that shareholder's capital originally invested in business remains intact.

General Purchasing Power Accounts are indexed historical Cost Accounts. They preserve the cost basis and realisation rules.
Methodology of General Purchasing Power Accounting

General purchasing power accounts make the following main adjustments to historical cost accounts.

(i) In GPP accounts all the items are stated in a unit of measurement that represents the same amount of general purchasing power, i.e. purchasing power on the date of balance sheet or any other specified date.

(ii) GPP accounts take into consideration gains and losses in the purchasing power held by the company, arising from holding monetary assets and liabilities.

GPP accounts neither claim nor are supposed to represent the values of various assets and liabilities in contemporary terms. The accounts merely represent historic costs of assets and liabilities in terms of purchasing power at the year end. Thus the unit of measurement is changed from currency to a common purchasing power. "A general purchasing power unit may therefore, be defined as an entity which could at all times purchase the same amount of goods and services covered by the RPI as it would purchase at the point of time to which it relates." 5

The Sandilands committee of the U.K. has emphasised the distinction between 'current purchasing power units' and 'monetary units'. It says that when the prices of goods and services covered by the RPI are changing, a monetary unit does not satisfy the definition and it is clear that a monetary unit is not the same as a current purchasing power unit.

iii) **Use of Index numbers** :- As the emphasis is on exhibiting the impact of change in purchasing power on the enterprise, all items in balance sheet and profit and loss account are restated/adjusted in terms of current rupee by use of index numbers.

There is a controversy regarding use of index number. Both Consumer Price Index (CPI) and Wholesale Price Index (WPI) are monthly indices and the time lag of publication is not significant. One may argue that the shareholders who are the ultimate beneficiaries of the company's earnings as an individual would be more interested in the consumer Price index. However, in the past the companies who have made attempts to restate their financial statements have used the whole sale price index. The Government of India has appointed the seal committee on
iv) Distinction between monetary items and non-monetary items:

GPP accounts categorise balance sheet items into monetary items and non-monetary items. Monetary items are those items whose amounts are fixed by contract or otherwise in terms of amount of currency regardless of change in the general price level. For example, cash, debtors, creditors, loans, deposit etc. Non-monetary items include all items other than monetary items. For example, Plant and machinery buildings, land etc. One may also incur liabilities in terms of non-monetary items, for example raw material taken on loan to be returned by an equivalent amount of raw material.

6. The committee has been asked to compile an index taking into consideration three essential requirements, namely (a) weighing diagram which is the relative percentage share of the total consumption expenditure as revealed by the basic family budget enquiry in respect of different items. (b) base prices of the different items which go in to the index basket and (c) current prices in respect of each one of the items featuring in the index basket.

Ramesh Gupta, "Inflation Accounting".
(v) **Gain or Loss on monetary items:**

Holder of monetary assets lose general purchasing power during a period of inflation while the holder of monetary liabilities gain in a period of inflation. Holders of non-monetary assets and liabilities are presumed neither to gain nor lose of purchasing power on account of inflation. It may however, be noted that there may be change in the price of non-monetary items at a rate different than the rate at which there is change in general price level. If the price of an asset rises more rapidly than the general level of prices in that case the company will lose its operating capability over a period.

The conversion process for presenting GPP accounts from Historical cost accounts is briefly as under:

The non monetary items are analysed to determine the date on which they were acquired. Based on the price index on the date of acquisition and index number on the date of balance sheet, the amounts at which the items are to be restated is arrived at. For example:

- **Date of acquisition** - 1st January 1980 **Price index as on date of acquisition** - 250.
- **Date of Balance Sheet** - 31st December 1990 **Price index on 31st December, 1990** - 450.
In such a case, cost of an asset, which was acquired for Rs.1000 will be restated in GPP accounts at Rs.1800 i.e.

\[
\frac{1000 \times 450}{250}
\]

Monetary items, by definition, do not change and they will be stated at the same amount. The amounts of various items in the profit and loss account will be restated in the new unit of account, i.e. purchasing power at the year end. This is done by converting the figures, taking into account price index on the date on which the transaction has taken place and price index on the balance sheet date.

However, if transactions are numerous but are evenly spread throughout the year, then the conversion factor can be arrived at on the basis of average date of occurrence of the events considered in the profit and loss account.

Under the process, an additional amount is charged to the profit and loss account on account of cost of goods sold and depreciation. If sales exceed various other items of expenditure there is a gain on restatement, when the monetary liabilities of a concern are higher than the monetary assets, there is a net gain in the purchasing power on account of holding of these items. Conversely, if monetary assets are more than monetary liabilities, there is a loss in the purchasing power. These items account for the difference between profit under Historical cost accounts and GPP accounts.
(vi) **Determination of profit:**

Under general purchasing power accounting two approaches are available, i.e.

a) **Net change method** and
b) **Conversion or restatement of income method.**

(a) **Net change method**: Under this method opening balance sheet based on historical cost method is converted into GPP balance sheet by using index numbers.

(b) **Income method**: Under this method profit and loss account based on historical cost system is taken into account and all the figures are restated.

**Analysis of General Purchasing Power Accounting (GPPA) or Current Purchasing Power Accounting (CPPA):**

General Purchasing Power method of accounting has been criticised on many counts. In order to evaluate GPP the following issues are considered.

GPP is an indexation of figures in historic cost accounts. The present researcher feels that general price index is a consumer price index or similar other index compiled on the basis of spending habits of ordinary consumers. Such index numbers are based on prices of goods, commodities and services consumed by consumers. There is no connection between these index
numbers and price increase experienced by a business entity. As a result, the figures at which assets are stated in GPP balance sheet are rather meaningless. They represent nothing, neither net present value nor replacement cost nor net realisable value. The Editorial in the Journal of Accountancy stated -

"It would hardly be helpful to adjust depreciation on steel mills according to index figures based on changes in prices of cost of living items, such as food clothing and rents." 7

However, we may argue that this criticism is not fully justified. GPP neither attempts nor claims to restate items in balance sheet in terms of current values but in current purchasing power. By expressing the items in common purchasing power, it tries to ensure that figures which are added to, subtracted from or compared with each other are expressed in the same unit of account, and one is not adding, so to say Rs.100 to Pounds 5 and subtracting from $50. Since this would be meaningless, CPP tries to express currencies having different values in amounts with a common denominator.

The figures in financial statements are expressed in "common purchasing power" as a new unit of measurement. Critics of GPP attack this on the ground that the unit is abstract and does not convey what it is supposed to mean. It is likely to mislead the users of the accounts.

Critics of GPP allege that financial analysts and management of business enterprises do not find GPP accounts useful. They believe that the information in units of General Purchasing power is not helpful for their purpose. This is one of the serious criticism because GPP accounts can not be a mere mathematical exercise of indexation. Unless these serves the users of the financial statements, at least a shade better than historic cost accounts, the whole purpose will be defeated. However, this comment about utility of GPP accounts is based only on limited surveys carried our. Before GPP can be said to be of no value empirical evidence must be gathered.

It is opined that in the process of search of appropriate system of inflation accounting, the expectations from financial statements have increased manifold. In order to objectively judge GPP method of accounting, one must compare it with historical cost accounts in a period of stable prices. One must answer the question - what was the role of historical cost accounts in a period of stable prices?

Even in a period of stable prices there were specific changes of prices which historical accounts by and large ignored. But historical cost accounts did serve the purpose. If GPP can serve the same purpose and nothing more, GPP method of accounting is worth pursuing. But in the recent years, with the increased numbers and types of users, the expectation from financial
statements has undergone a change. Financial statements are expected to be horoscopes and analysts astrologers. This is a very tall order which GPP certainly cannot be expected to meet.

The next argument may be that under the GPP method of accounting, 'operating capability' is not maintained. This is a valid criticism if one considers the maintenance of operating capability as the criteria for capital maintenance. Under GPP method of accounting, capital maintenance is in terms of General Purchasing power and not in terms of 'operating capability'. The rationale behind this is that proprietors/shareholders are human beings. They are interested in consumption goods, which they obtain through purchasing power commanded by money. Further, considering fast changing technology, emergence of new products and risk of obsolescence, 'operating capability' cannot be considered as the true measure of capital maintenance. Hence capital should be maintained through the maintenance of purchasing power and not 'operating capability'. The supporters of this approach of capital maintenance are sometimes referred to as belonging to the 'proprietorship school' as against the 'entity school'. While the 'proprietorship school', capital maintenance is viewed from the point of view of the owners who are consumers, under the 'entity school' capital maintenance is viewed in terms of "operating capability".

GPP method of accounting is criticised for taking in to account gains arising on account of monetary liabilities, although these are not realised. The supporters of GPP reacts
that when various items in financial statements are expressed in terms of purchasing power gains and losses on account of monetary liabilities and asset become evident. It is a normal experience that pensioners with substantial savings at the time of retirement invested in monetary assets find it difficult to make ends meet after a few years. This is because while their expenditure goes up with rising inflation, their capital gets eroded in terms of purchasing power. Conversely a young couple who buys a house taking substantial loans, finds it worth the risk. This is because the loan liability remains fixed, while income goes up due to inflation and other factors. In relative terms, with inflation, the couple gains by having financed an asset through monetary liability.

GPP method is also criticised for its concept of profit which is really corollary to the concept of capital.

GPP method of accounting is relatively a simple and objective method of accounting in an inflationary period. "It avoids subjective and possibly on that account, arbitrary concept of operating capacity".  

GPP method by permitting the retention of historical cost accounts meets a very important feature of an ideal accounting system that accounts should be based on the results of actual business transactions.

8. Ibid Page - 25.
The GPP method removes the shortcomings of money as a measuring rod during inflation. Thus, it is an accounting method which seeks to remove the bad effects of changes in the value of rupee (inflation/deflation). It does not consider changes in the specific prices.

Because, of the GPP method uses a uniform purchasing power as the measuring rod, the accounts under this method are free from the pitfalls common to different assets valuation techniques which discard transaction criterion and are subjected to varying degrees of individual judgement and opinion. The method can, therefore, lay claim, among others to such qualities as objectivity, comparability and uniformity which ordinarily lack in accounting methods based on property appraisals.

It is also considered as an advantage in the sense that the financial statements do not become valuation statement rather than accounting statements which are objective and verifiable.

In short the GPP method of accounting has a role to play. But it does not tackle the problem of inflation to a large extent. GPP statements are simple and far easier to compile. They are cost effective and must therefore be seen as a possible alternative to historical cost accounts.
Current Cost Accounting (C.C.A):

To maintain the operating capability of the enterprise, it is necessary to take into account the rising costs of assets consumed in generating revenues. The current cost accounting seeks to achieve this by substituting the current cost of assets consumed in place of the corresponding historical cost. The price changes that are considered in this method are changes in specific prices of assets as they affect the individual entity.

SSAP - 16 stated objectives of current cost accounting (CCA) as under:

"The basic objectives of current cost accounts is to provide more useful information than that available from historical cost accounts alone for the guidance of management of the business, the shareholders and others on such a matter as -

(a) the financial viability of the business
(b) return on investment
(c) pricing policy, cost control and distribution decisions; and
(d) gearing. 9

It tries to achieve this objective by maintaining capital in terms of 'operating capability'. CCA tries to distinguish between 'operating profit' and 'holding gains'. Within CCA there are wide variations in techniques, particularly those related to values of assets to be adopted in place of historical cost and 'gearing'.

In January, 1974 a committee of Enquiry into inflation, with F.E.P. Sandilands as the chairman was appointed by the Government of United Kingdom. The Sandilands committee submitted its Report in June 1975, and in September, 1975 Sandilands Report on "Inflation Accounting" was presented to U.K. Parliament. The major recommendations of the committee have been embodied in chapter four.
Definition of important terms used under Current Cost Accounting method:

Net operating Assets: The net operating assets comprise the fixed assets including trade investments, stock and monetary working capital dealt within an historical cost balance sheet.

The operating Capability: The operating capability of the business is the amount of goods and services which the business is able to supply with its existing resources in the relevant period. These resources are represented in accounting terms by the net operating assets at current cost.

The current cost operating Profit: The current cost operating profit is the surplus arising from the ordinary activities of the business in the period after allowing for the impact of price changes on the funds needed to continue the existing business and maintain its operating capability, whether financed by share capital or borrowing. It is calculated before interest on net borrowing and taxation.

The Current Cost Profit Attributable to Shareholders:

The current cost profit attributable to shareholders is the surplus for the period after allowing for the impact of price changes on the funds needed to maintain their proportion of the operating capability. It is calculated after interest, taxation and extraordinary items.
Value to the Business: The value to the business is -

(a) net current replacement cost or, if a permanent diminution to below net current replacement cost has been recognised.

(b) Recoverable amount.

Recoverable Amount: The recoverable amount is the greater of the net realisable value of an asset and, where applicable, the amount recoverable from its further use.

Monetary Working Capital: Monetary working capital is the aggregate of;

(a) trade debtors, prepayments and trade bills receivable, plus
(b) stocks not subject ot a cost of sales adjustment, less
(c) trade creditors, accruals and trade bills payable, insofar as they arise from the day to day operating activities of the business as distinct from transactions of a capital nature.

Net Borrowing: Net borrowing is the excess of

(a) the aggregate of all liabilities and provisions fixed in monetary terms including convertible debentures and deferred tax but excluding proposed dividends, other than those included within monetary working capital and other than those which are in substance equity capital. Over
(b) the aggregate of all current assets other than those subject to a cost of sales adjustment and those included within monetary working capital.

**Methodology under Current Cost Accounting (C.C.A):**

Current cost accounting tries to segregate between operating gains and holding gains. Operating gains are revenues less current costs of assets consumed to earn that revenue. This is one principal difference between historic cost accounts and CCA. In the balance sheet, the assets are expressed at their 'value to the business'. Value to the business would mean lower of net replacement cost or its recoverable amount. Recoverable amount is higher of realisable value and present value of benefits to be obtained from the use of assets. In CCA, costs are restated from historic figures to current cost figures. In the primary process of determining operating profit, the manner of financing is ignored. The process of arriving at the operating profit from historical profit consists of making some adjustments to the income statement. The main features of current cost Accounting are: -

i) Money will continue to remain the unit of measurement.

ii) Assets and liabilities are shown in the balance sheet at a valuation. The 'value to the business' criterion was supported by the sandilands committee for this purpose.
iii) Current cost accounts should, as soon as practicable, become the basic published accounts of companies. However, the net book value of assets on a historic cost basis and historic cost depreciation should continue to be shown in notes to the accounts.

iv) 'Operating profit' for the year is arrived at after charging the 'value to the business' of assets consumed during the period. Holding gains is excluded from operating profit and shown separately. During this process it requires carrying out the following adjustments:

(a) Depreciation adjustment.
(b) Cost of sales adjustment. (COSA)
(c) Monetary Working Capital Adjustment (MWCA)
(d) Gearing adjustment, is carried out to arrive at the current cost profit attributable to shareholders.

(a) **Depreciation adjustment**: The charge to the profit and loss account for depreciation should be equal to the value to the business of the fixed assets consumed during the period. The principle behind CCA is to match current costs with current revenues. In consonance with this, in CCA depreciation that is charged based on the net current cost of the fixed assets. This is meant to be a charge for the estimated consumption of the value of the assets to the business. Technically, value to the business should be that ruling on the date of consumption. In practice either the cost at the year end or the average cost is adopted to compute the depreciation.
Depreciation adjustment in CCA represents the difference between depreciation charged on the basis of current cost of the assets and depreciation charged in the historical cost accounts on the basis of historical cost.

It may be noted that the additional depreciation charged by way of depreciation adjustment does not result in the total accumulated depreciation equalising replacement cost of the asset at the end of its life.

This happens because the backlog-depreciation in respect of difference between the gross replacement value is not charged to the profit and loss account, but is charged to current cost Reserve created for restating the assets at the current values. The rationale for not charging the backlog depreciation to the income statement is that such depreciation is not the value of the asset consumed during the current period, and hence it is not rightly chargeable to the revenues of the current period.

(b) **Cost of sales adjustment**:

The second adjustment is known as 'cost of sales adjustments' (COSA). This represents difference between the value to the business of the stock consumed during the period and its historical cost.

The logic behind this adjustment is that when goods are sold, inventory has to be replaced. Replacement cost which will
be incurred to replenish the inventory must form the basis for computing the operating profit under CCA.

Thus the amount of adjustment is equivalent to the difference between the replacement cost of goods sold and the cost of goods sold charged in historical cost accounts. However if the net realisable value is lower than the replacement cost, then the 'cost of sales adjustment' (COSA) is calculated with reference to the net realisable value. The replacement cost or realisable value is as of the date of consumption of goods. However in practice, the balance sheet date or an average date of consumption may be adopted. This adjustment is done, irrespective of the fact whether, the goods will actually be replaced or not. If however it is not possible to estimate the replacement cost of identical goods, replacement of similar goods may be considered. Cost of sales adjustment is determined by application of the following formula :-

\[ \text{COSA} = (C - \hat{O}) - Ia \left( \frac{C}{Ic} - \frac{O}{Io} \right) \]

Where :

\( O \) = Historical cost of opening stock.
\( C \) = Historical cost of closing stock.
\( Ia \) = Average index number for the period.
\( Io \) = Index number appropriate to opening stock.
\( Ic \) = Index number appropriate to closing stock.
It is suggested that, unless a firm has developed appropriate methods of calculating cost of sales, it should use the 'average method'. If a firm has fairly regular sales pattern and if prices have increased steadily during the period, the use of average method of calculation of current cost of sales may be appropriate. Secondly, the current cost of sales should, theoretically, be determined on an item by item basis. But in a real world situation, it would be impragmatic to do so. Therefore, groups of similar items may be used instead.

(c) **Monetary Working Capital adjustment (MWCA)**:

Monetary working capital adjustment represents only that part of the changes in the amount of working capital which results from changes in prices. MWCA is a further application of COSA. "MWCA and COSA are really complementary to each other".10 Business needs working capital, apart from stock. Credit sales increase debtors, while credit purchases increase creditors. The former increases the working capital requirement, while the latter reduces the working capital. When cost of goods sold or purchased increases there is a change in debtors and creditors for the given volume of turnover. Consequently there is a change in the quantum of working capital required to support the business activity at the existing level. Other items which are necessary in day to day operations of the business are considered

as part of working capital. But term loans and creditors on account of fixed capital are not included in the working capital.

Change in the monetary working capital is worked out on the basis of indices for input prices and cost of goods sold or other appropriate index. The objective is to assess the effect of change in prices of inputs and outputs on monetary working capital. Depending on the pattern of purchases and sales, the period over which indices are to be applied is determined. The increase or decrease in monetary working capital worked out on the above basis forms MWCA. Formula for MWCA is:

\[ MWCA = (C - O) - Ia \left( \frac{C}{Ic} - \frac{O}{Io} \right) \]

Where,
- \( O \) = Opening Monetary Working Capital.
- \( C \) = Closing Monetary Working Capital.
- \( Ia \) = Average index number for the period.
- \( Io \) = Index number appropriate to opening MWC.
- \( Ic \) = Index number appropriate to closing MWC.

It may be stated that when debtors exceed credits, the adjustment would be a charge against profits. On the other hand, when creditors exceed debtors the adjustment will be a credit to profit, because under conditions of rising prices, it will always be profitable to take advantage of more trade credit rather than allowing credit to the customers.
(d) **Gearing adjustment**: Gearing is the ratio of borrowed capital and shareholders interest. Current cost profit arrived on the above basis denotes operating profit without considering the way in which the business is financed. Generally a part of the net operating assets of the business are financed by borrowings. Such borrowing being monetary liabilities, repayment rights are fixed, although values of assets which are financed by such liabilities change. In an inflationary period values of assets increase. When assets are sold, surplus cash is available after meeting liabilities incurred to finance these assets.

Gearing adjustment recognises this consideration. In order to arrive at the profit attributable to the shareholders, the effect of all the above described operating adjustments is toned down by 'gearing adjustment'. Gearing adjustment is measured by the proportion of net operating assets financed by borrowings. The result is current cost profit, after allowing for the impact of changes in prices in the proportion of net operating assets financed by shareholders funds.

Net operating assets would include fixed assets, trade investments, stock and monetary working capital. Alternatively, it would mean net borrowing plus shareholder's interest in CCA balance sheet. The figures are arrived at on an average basis. Formula for gearing adjustment is :-
Gearing adjustment = \( \frac{L}{L + S} \times A \)

Where, 
- \( L \) = Average net borrowing.
- \( S \) = Average shareholders interest.
- \( A \) = Total of current cost adjustment.

However, where monetary liabilities are lower than monetary assets, gearing adjustment is not required.

The CCA balance sheet is expressed in current values. Fixed assets are included at their value to the business. The change in the net book value of the fixed assets is taken to 'Current Cost Reserve'.

The valuation of fixed assets is done at replacement cost or where asset is going to be used or permanent devaluation is recognised, at its recoverable amount whichever is lower. Generally replacement cost is arrived at by applying specific indices applicable to the industry to which the enterprise belongs. More than one index may be used in case of multi product companies. The recoverable amount is arrived at on the basis of realisable amount or future benefits expected from the asset. Normally, the recoverable amount is considered when the asset has become obsolete or excess, and is expected to be retired before its normal working life.
Investments in associated companies are restated at the value of net assets of the investee company proportionate to the investment.

The value of the net assets is arrived at on the basis of CCA of that company. Other investments and intangible assets are also expressed at the value to the business estimated by the management. All liabilities are expressed at historical cost.

The CCA balance sheet includes a reserve to be called as Current Cost Reserve. This includes the effect of revaluation of fixed assets, effect of operating adjustments and gearing adjustments.

**Analysis of Current Cost Accounting:**

In the U.K CCA was first suggested by the sandilands committee in its report, submitted in September 1975. The report and the standard issued on the basis of the report created a heated debate. There has been strong support from some while equally vocal opposition from others.

The distinguishing feature of CCA is its concept of capital and resulting concept of profit. CCA tries to maintain capital in terms of 'operating capability'.
This concept has been a point of debate. The supporters of this concept of capital maintenance contend that profit can be reported only if a business concern maintains physical resources so as to provide/produce certain amount of services or goods. Increased asset requirement to maintain operating capability cannot be considered as a part of the profit of the enterprise but is a charge on the revenues before profit can be arrived at. Looked at from the other perspective, increased net assets which do not increase the operating capability are only part of the capital. They cannot be encashed without affecting the operating capacity. If operating capacity is not maintained, the very survival of the business enterprise may be endangered.

There are two schools of thought - 'Proprietorship' and 'entity' while supporters of 'proprietary' school of thought support CPP, they oppose the 'entity' concept on the ground that every business enterprise is a union of people who are ultimately interested in purchasing power, and not in operating capacity Per-Se.

Thus capital maintenance and profit should be determined from their point of view. They therefore oppose CCA.

CCA supporters maintain that, in the income statement prepared under CCA, 'matching concept' is followed in a more rational way by comparing current revenues with current costs to
arrive at the profit. On the other hand, those opposed to CCA attack this type of matching concept. According to them, CCA compares current revenues with hypothetical costs, which may never be incurred. The resultant profit figure is not 'real profit' but only hypothetical profit. Accounts are essentially historical in nature. Financial statement should record and present results of historical events. But under CCA, using 'hypothetical current costs' operating profit is arrived at and the difference between these 'current costs' and 'historical costs' is termed as holding gains.

The concept of separating operating profits from holding gains is not new. Edward & Bell in their treatise 'The Theory and Measurement of Business Income' had advocated separation of holding gains from operating profits. Holding gains are the difference between historical cost and current cost at the point of sale or on the balance sheet date.

Mention may be made that though this concept has some utility, in the context of business enterprises it loses much of significance. Profits in business accrue not only merely by production but also on account of purchases.

The CCA are not verifiable. They become one big maze of estimates and approximations, losing precision. These accounts leave too much to discretion and auditing such accounts would
become difficult. This is a very valid criticism. The CCA adopt figures of 'current costs' of various assets. There are various methods to arrive at these. Specific indexes are suggested for valuation, purposes. These indices can never be exact. Industry wise indices may also pose a problem in case of multiproduct companies. Further, companies can be classified only on a very broad basis, resulting in to erosion of the very concept that each enterprise experiences inflation or price changes in a unique way and this must be accounted for.

CCA accounts are in terms of currency itself. Its unit of account is variable, since CCA does not take in to account the changing value of money. It only considers specific price changes. Admittedly, the accounts of one year are not comparable with accounts of other years. CCA does not really bring out or eliminate the problem of inflation. By dealing with specific price changes, it is contended that it is not a method of inflation adjusted accounts at all. In the whole process even, if the operating capability is maintained, the company may lose general purchasing power, if the prices of assets used by the enterprise are rising at a speed lower than general prices.

CCA does not reflect monetary gains/losses arising on account of holding monetary liabilities and assets. These gains and losses are a result of general rise in the price level. In CCA, these gains and losses which are real, get ignored. On the other hand holding gains arising out of shrewd business policy
are not considered as operating profits. Though inflation is disadvantageous in the sense that it reduces purchasing power, increase in specific prices of non-monetary assets brings advantage to the business.

It is stated that balance sheet under CCA has become a valuation statement. The role of accountants will get diminished in preparing the balance sheet, although they will remain responsible for the same. Valuation itself is a subjective phenomenon. The accounts prepared on a subjective approach will lack comparability and precision. On the other hand, income statement under CCA tries to state income more in the sense of economist's concept of profit rather than accountant's concept of profit.

In the Sandilands committee report profit is of having varying concepts for the same at different places in the report. Sometimes profit was considered as an amount that can be prudently distributed. At other places, the committee stated that "there will be circumstances in which it would be imprudent to regard current cost profit as available in full for distribution". This made open to criticism.

Inspite of severe criticism the CCA is claimed to be a fully comprehensive method for inflation. It takes in to account the concept of capital maintenance which is more relevant to the operations of a firm than the general purchasing power concept.
In the context of the financial capital maintenance concept, the informational advantage of current cost accounting is that "it matches today's costs with today's revenues rather than yesterday's. Costs with today's revenues and in so doing may provide relevant information for users in making their predictions of future enterprise performance". By providing current costs it provides a relatively sound basis for managerial decisions.

The greatest merit of the CCA is its objective to maintain intact the operating capability of an enterprise. This objective is achieved because the method seeks to closely approximate the impact of inflation on the enterprise.

The theory underlying the system that earnings and assets of an enterprise should be measured by reference to the value to the business of the assets is quite logical, and useful for some group of users of financial statements.

The CCA recognises that it is only the current cost that should enter into the determination of income. In fact it is current cost of goods and services which affect the operating results of an enterprise. That is the reason why the CCA, by considering specific price changes in accounts, can lay claim on maintaining the operating capability of the enterprise during inflation.

11. Ibid. Page - 463.
The break up of the assets and liabilities as given by the CCA represents a more accurate and real financial picture of an enterprise than that given by the historical cost accounting. Since the CCA figures are with reference to the current prices.

**Replacement Cost Accounting (R.C.A)**

The replacement cost accounting method also called replacement value method is based on the principle that charges of depreciation and cost of inventories consumed to income statement should be sufficient to meet the cost of replacement of assets, i.e. Fixed assets and inventories as and when they wear out by use or consumption. Accordingly, under this method, the annual depreciation provision should be sufficient to provide for the replacement cost of the asset and the cost of inventories consumed should provide for the replacement of used up inventories. The main features of replacement cost accounting are as follows:

1. The accounts are presented in terms of monetary units.
2. Assets including some items of current assets are in general valued in the balance sheet by reference to the price that would have to be paid at the date of account to purchase another asset of the same type as the existing asset, i.e. the replacement cost of the asset.
So, far as the balance sheet is concerned, no adjustment is required to monetary assets since when the accounts are expressed in monetary units they are constant in 'value'. In case of depreciating assets, valuation is done with reference to written down current replacement cost.

iii) The concept of capital maintenance adopted in the profit and loss account by replacement cost accounting is invariably one which regards capital as the capital of the firm, rather than of the shareholders. No sums are regarded as profit until provision has been made to replace the firm's productive assets as they wear out, or to maintain the firm's assets at a constant physical level.

Meigs W.B. Johnson and Meigs R.F. have summed up the specific information to be disclosed on replacement costs under the following five heads :-

(a) **Inventories** : Each annual balance sheet must disclose the current replacement cost of inventories at the year end.

(b) **Plant and Equipment** :- The estimated current cost of replacing the productive facilities of the firm and also the depreciated cost of such facilities.

(c) **Cost of Goods Sold** :- The cost of goods sold for the current and the preceding year must be computed as the replacement cost of the goods and services sold at the dates sales were made.

(d) **Depreciation, depletion and amortization** :- Straight line depreciation, depletion and amortization must be computed on the basis of current replacement cost of plant and equipment.

(e) Description of the methods followed in developing the above estimates.

The replacement cost approach covers a number of variants, though, all of them have one thing in common. They specifically allow for the effects of changes in price and cost levels and relate depreciation, inventory valuations and other cost computations to current replacement costs. Brief examination of two main important variants are stated below :-

(i) **maintenance of Real Capital** :- This is an important and most frequently advocated approach of the replacement cost theory. It derives basically from the concept of income and capital defined by Professor Pigou.
"Capital consists at any given moment of a definite inventory of physical things ....... In order that capital may be kept intact, if any object embraced in this collection becomes worn out or is thrown out (Scrapped), it must be replaced by 'equivalent' objects. When we have got hold of this notion we are able to develop a correlative notion - net real income. From the joint work of the whole mass of productive factors there comes an (annual) inflowing stream of output. This is gross real income when that is required to maintain capital intact is subtracted from this, there is left net real income."\(^{13}\).

According to the maintenance of real capital approach the earnings of the firm would consist of the difference between the net operating revenue and the cost of maintaining in physical terms, the fixed and current assets of the business used up during operations. It is further clear from the theory that profit of a business enterprise consists of the residual after having made allowance for maintaining physical assets intact does not imply, when correctly applied, that such assets should actually be maintained intact. It only means that the cost of maintaining such assets intact must be recovered from the balance of operating revenue over the outlay.

Regarding treatment of depreciation provision in practice, there are differences of opinion. According to some, the depreciation provision should be computed solely with reference to the current cost of replacement of assets in use while others suggest that the depreciation provision should also allow for the deficiency arising on previous provisions owing to cost increases of the current period.

In reality, the latter approach, fulfils the requirements of Professor Pigou's concept of maintaining capital intact. However, this approach entails a number of practical difficulties and breaks down in regard to obsolescence. Further, it contains an element of uncertainty. "Maintenance of real capital is a phrase with several possible meanings: the thing that is to be maintained might be either firm's physical assets or its earning power in real terms, i.e. its owner's future standard of living. Presumably the latter concept of capital is what interests most shareholders, and what they want to measure".14

(ii) **Anticipated cost approach**: The anticipated cost approach derives basically from the nature of income and capital developed by professor Hayek and takes into account the industrial obsolescence which was ignored by Professor Pigou's approach. This approach suggests that the current income of an enterprise should be determined with reference to the requirements of maintaining an income prospect intact in real terms, that is in respect of its purchasing power and not with reference to that of maintaining its capital physically intact.\(^{15}\)

The replacement cost accounting rests on the concept that profit should be recognised only when real capital is kept intact. In other words, it does not recognise any gains as profit until provision has been made to replace assets consumed during the period under consideration.

It can therefore, be argued that where a firm wishes to replace its assets in the future with identical items the maintenance of physical assets will be a useful concept of capital maintenance since it ensures that sums are not distributed which are needed to finance this replacement. On the other hand, a firm which has no intention of replacing its existing assets in their present form may find this concept unsuitable.

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Analysis of Replacement Cost Accounting (R.C.A)

Replacement cost accounting is considered to be best known form of value accounting, although there is no general definition of it. The technique is reported to be in more widespread use in Holland, where it was developed for practical applications during the 1920's and where a number of large firms use it, the best known example being the Philips company of Eindhoven.

One of the common criticisms which is very often made against this method is that replacement cost accounting does not distinguish between changes in the value of money and changes in relative prices of specific items of goods and services and is therefore not a technique of accounting for inflation as such. This criticism was however, refuted by the Sandilands committee in the following words.

"This objection depends on the assumption that inflation is a definable, separate phenomenon from the specific price changes facing individuals or companies. Those who object that replacement cost accounting is not a technique of accounting for inflation must prove that inflation is independent of the changes in costs and prices of specific items of goods and services bought by individuals or companies. In our view, it is legitimate
to describe replacement cost accounting as a means of accounting for inflation as it affects individual companies".16

Another criticism is that, it is based on a valuation principle which is 'subjective' and not 'objective' and therefore results may vary when same set of data is handled by two individuals. The use of specific indices may also affect comparability of results.

Present Value Accounting (P.V.A)

Present value accounting is of having no generally accepted definition. However, it is possible to distinguish certain features which are normally associated with present value accounting and which distinguish it from replacement cost accounting. These are :-

i) Present value accounting is also based on the monetary unit as the unit of measurement.

ii) The assets and liabilities should be shown in the balance sheet at a valuation. The basis of valuation is economic value. As for example, in case of an asset the economic value represents the present value of the expected future cash flows to be derived from it.

iii) Present value accounting disregards the usual distinction between income and capital. It is based on the concept that the increase in the total net assets of a firm during the year is its profits which should be the figure shown in the profit and loss account. Accordingly all gains made in a year, including unrealised holding gains or losses, are taken to the profit and loss account.

iv) The present value accounting is normally associated with a concept of capital maintenance under which no amounts are regarded as distributable until a charge has been made equal to the value of the assets consumed during the year. The present value accounting will be useful to the firms belonging the financial sector, particularly insurance companies.

Analysis of Present Value Accounting (P.V.A)

Present value accounting may not be preferred because of difficulties in determining the future net cash flows with respect to an asset and the appropriate rate which may be applied for the purpose of discounting. It is obvious that application of different discount rates will lead to different asset values as on a particular point of time. This may vitiate the reliability of this method.
Secondly, the method of bringing all holding gains or losses into the profit and loss account may be objected to as the operating profit will be inclusive of all these holding gains or losses. In fact one of the purposes of inflation accounting is to show holding losses or gains and operating profit separately so as to help management in arriving at correct decision in the matter of distribution of surplus as well as maintenance of real capital in the business.

**Continuously Contemporary Accounting (COCOA)**

Continuously contemporary Accounting (COCOA) method has been suggested by R.J. Chambers. Really the method is a combination of current purchasing power (CPP) and Current value Accounting (CVA) method.17 This method intends to have the benefits of both the methods on the one hand and simultaneously to eliminate the drawbacks of the two methods on the other. The main features of the method can be stated as follows:

i) Money is the unit of measurement.

ii) Valuation criterion adopted for the valuation of assets is the 'dated money equivalents of the assets as they are on the date of balance sheet. Liabilities are valued at the nominal amounts representing outstanding balances. Dated money

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equivalence for monetary items does also mean the 
nominal amounts while it will mean resale prices in 

case of non-monetary items. Resale prices are more 
or less the same as the net realisable value (NRV). 

Here lies its basic departure from replacement cost 
accounting (RCA) which adopts current buying prices 
instead of current selling prices as used in the 

present method.

iii) The differences between the costs or book values of 
assets and the amounts of their valuations as above 
will be treated as price variation adjustment. The 
necessary entry will be made between the respective 
assets accounts and the profit and loss account.

iv) All transactions are to be accounted for in the 
amounts at which they occurred.

v) the net income will be calculated after charging 
the amount of capital maintenance adjustment. The 
amount of the adjustment will be the product of the 
opening balance of net assets and the proportionate 
rise in an index of the general level of prices. 
"The amount of the net assets is, of course equal 
to the amount of the aggregate owners equity".18

18. R.J. Chambers, Inflation Accounting - A critique of 
Comprising share capital and undistributed profits. Hence the amount of the adjustment, while being debited to the profit and loss account, should be credited proportionately to undistributed profits and a capital maintenance reserve. Certainly the portion of the amount of adjustment attributable to the share capital is to be credited to the capital maintenance reserve.

vi) The net income is the algebraic sum of the following three:

a) Net result of the transactions during the period
b) Amounts of price variation adjustments, and
c) Amount of the capital maintenance adjustment.

**Analysis of Continuously Contemporary Accounting method (COCOA):**

Chambers claims about the following merits of (COCOA):

Year end adjustment under this method viz, price variation adjustment and capital maintenance adjustment, are simpler than that compared to the closing adjustments under historic cost accounting (HCA). It is simpler in the sense that the method can avoid the complexities involved e.g. in the valuation of closing stock, calculation of depreciation etc. The only task under COCOA is to find the periodical difference between two observable resale prices (opening and closing). It provides homogeneity in the figures avoiding varied valuation basis used in HCA and CCA.
The application of accrual principle is rigorous in COCOA while it is partial in HCA or CCA.

Being based on observation the financial statement figures are independently testable.

It is completely historic unlike HCA which is partially historic, the later being involved in the past, present and future happenings. But COCOA takes account of all transactions and events as they occurred, right up to the stated balance date and no further, and the accounts are kept up to date by the same recording process, and the same adjustment on checking by observation indefinitely.

This method fulfils the aggregability criterion. Two or more measurements are aggregable if (a) they are measurements of the same property of different objects, (b) they are measurements taken at the same time or under the same conditions (c) they are measurements made according to the same rules and (d) the magnitude of the property of the combination of the objects is the sum of the magnitudes of the property of each of the objects.

This method is consistent because the valuation basis and the rules for price adjustments and the capital maintenance adjustments are the same over the years.

Being consistent, inter firm, intra firm and inter period comparisons become possible.
It serves more fully than others the administration of going concerns by providing sensitive indicators of the present, of the consequences of the past actions and of the financial feasibility of any contemplated change in its operations or investments.

Comparative evaluations of the systems - CPP, RCA (of which CCA is a variety) and COCOA - relating to the uses made of the information yielded have proved the COCOA to be superior to other systems.

Even if it were to cost more than CCA, its effects on various problem situations place it ahead of CCA. In fact, in numerous directions it is less costly than CCA.

Continuously contemporary accounting method is not free from limitations. The main criticism advanced against this method is:-

Objection can be raised on the method of valuation of assets at current sales value. It is based on the wrong notion that majority of the enterprises consider their assets as a means of 'buying other things' i.e. redeploy wealth by disposing off assets. In fact in normal circumstances, enterprises "expect to pay off debts and continue operation out of the earnings
generated by the assets, not from the assets themselves".  

One of the distinctive features of this method is that the capital maintenance concept adopted by it is the preservation of the purchasing power of the shareholder's equity in monetary unit, not in current purchasing power unit. Another concept of maintenance of the value of assets consumed during the period is disregarded. Consequently profit under COCOA may include large elements of unrealised holding gains particularly when the value of the assets (given by the increase in their sales value) rises at a faster rate than the index used to measure the change in the purchasing power of shareholder's equity.

It is a hybrid system. The use of net realisable value as the basis of asset valuation will be useful for particular users of accounts. But the system as a whole does not appear to meet the requirements of users of accounts.

Real Replacement Cost Accounting (R.R.C.A):

Real replacement cost accounting method which has recently been suggested in some quarters is essentially a compromise formula based on replacement cost accounting and general purchasing power accounting. 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. In the context of this arrangement, the adjustments of fixed assets and inventories are to be made with reference to specific indices. In addition, purchasing power gains and losses on monetary items are also to be considered. It is claimed that by combining general price level adjustments with the use of current prices of specific items all of the asserted advantages of both 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 price of specific items makes possible the measurement of holding gains.

The major incremental information supplied by combining these two methods is the disaggregation of holding gains and losses into real and nominal components.

Analysis of real replacement cost accounting:

However, the method is still in its evolutionary stage and a set of well defined procedures and guidelines is yet to be developed. The method naturally is subject to various criticisms of both RCA and GPPA. Although this method may on the face of it appear a satisfactory compromise formula, its acceptance for practical application may prove difficult because of theoretical objections against such a compromise. It is due to these reasons that this method cannot be recommended for practical application at the present moment.

Cash Flow Accounting (C.F.A):

Cash flow accounting (CFA) is not the 'cash basis' of accounting, one of the two systems that we have under Double Entry mechanism. Here the emphasis is on 'real' cash flow, i.e. not only on cash receipts and disbursements of the period, but also the accrual, i.e. future cash flows.

The justification for cash flow accounting can be understood in the following words of Ijiri:

"There has been a serious discrepancy between the way in which the investment decisions are made and the way in which the results of the decisions are evaluated. In investment decisions, the primary factor is cash flow ........ in the performance evaluation the emphasis shifts to earnings ........ the two are often not reconcilable. Therefore,
either investment decisions should be based on earnings or performance evaluation should be based on cash flow. The choice is rather obvious, because the primary objective of a business enterprise is cash flow. Earnings is only a surrogate to represent performance of the enterprise on this - cash flow objective. And if earnings do not tell how well a project or a division/corporation is doing in terms of cash flow, then the concept and measurement of earnings has to be changed".22

Hicks has stated that "the account that needed careful analysis for statement users is the cash account and not the retained earnings account since users are interested in the ability of an organisation to generate and use cash effectively and efficiently, and not 'income'......The market multiple reflects net free cash flow more closely than earnings".23

According to Lawson, "Cash flow accounting constitutes the analytical frame work for linking past, present and prospective financial performance. It is therefore, a vehicle which may be used to disclose the past development of the finances of business and, therefore the determinants of the true return

actually received by the proprietors or shareholders in the past. Alternatively, it may be used as a system for disclosing the determinants of the true return shareholders are likely to receive in the future. Cash flow accounting may therefore also be regarded as an aid to investor in decision making".  

The CPA method recommends a cash flow theory of accounting approach to the statement of financial position and the statement of changes in financial position, and the deletion of the income statement. Under the CFA, cash spent on acquisition of fixed assets would be charged in full to the year of acquisition and depreciation would be automatically abandoned for the purpose of published accounts. Then, the cash spent on acquisition of materials, fuel, inventories and all other factors would be charged in full at the point of outgoing.

The present system would also record directly an expense for all intangible expenditures. According to Hicks, CFA records, "not only the cash receipts and disbursements of the period but also the future cash flows owed to or by the firm as the result of selling and transferring title to certain goods (the accrual

basis of accounting). It goes beyond accrual accounting to recognise all other future 'real' cash flows, including the current value accounting concepts of 'future' exit value (cash inflow) for an asset and the 'future' replacement value (cash outflow) to replace an asset". 25

Some special use of cash flows accounting:

Information supplied by traditional accounting system is suited to 'stewardship function'. But accounting today is considered to uphold an information system which should serve the need of many user groups. The purpose of an 'accounting information system' is to help information users to make optimal decisions, that is to make the best allocation of the resources which they control. In addition to providing objective basis of business income, it is in these decision areas that the cash flow accounting has advantages over the traditional or historical cost system. It may be mentioned that in many decision areas the information obtained from traditional accounting need to be adjusted to suit the requirements of management. But CFA will be of great help in this context. The main decision areas are:

(a) **Determining dividend policy**: From the point of view of a financial manager, the management of cash dividends is most important as the amounts and times of their payments which lead to depletion of cash and hence working capital, are subject to decisions. The decision regarding payment of cash dividend has to be taken by considering both the ownership and firm oriented variables.\(^{26}\)

Maintenance of required liquidity, credit standing and working capital becomes one of the very important considerations in this respect. Dividend policy should consider cash availability and the effect of the dividend payment upon working capital and hence upon the liquidity of a firm. Cash flow accounting will provide information directly for this purpose.

(b) **Performance evaluation**: Among various pitfalls in the measures, particularly of earning per share (EPS), Return on capital employed (ROCE) and price earnings (P/E) ratios, that are often used to evaluate corporate performance largely due to subjectivity in the calculation of reported income which serve as the basis for these measures. For example, an examination of EPS as a measure of profitability would suggest that it ceases not

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only to be a valid indicator of corporate profitability but also a major determinant of the market price of a firm's shares. Accordingly, cash flow per share (CFPS) may appear to be a better measure than EPS. "The only alternative, therefore, lies in the adoption of a complete value-based-system of accounting which has the capability of producing measures concerning increases in the real value of the business per period of time". Cash flow accounting is, accordingly, likely to occupy a place that it really deserves in this context.

(c) Liquidity measurement: The degree of liquidity that a firm has is measured by its ability to meet its short-term maturing obligations. Cash flow is considered to be one of the best measures in this respect.

(d) Capital expenditure decisions: One of the steps involved in the decision-making process is to evaluate available alternatives by using accounting techniques for the purpose. Except accounting rate of return, all the other techniques viz, Pay back methods, NPV, PI, IRR, TV, etc are based on the consideration of future cash flows rather than future accounting profits from the project.

Analysis of cash flow accounting:

Some of the important points advanced in favour of cash flow accounting are.

Cash is more objective than income as determined under conventional accounting as it is free from subjective valuation and allocations. Because of a high degree of objectivity, it provides a better measure for inter period and inter firm comparison.

The cash basis of accounting is amenable to easy verification as receipts and disbursements are evidenced by means of source documents.

Under the system the problems associated with distinction between capital, revenue, income and expenditure or of allocation of costs between a series of arbitrary time periods, donot crop up.

CFA seeks to incorporate a measure of consistency between decision model and performance evaluation. Major business decisions are guided by the cash flows of the enterprise, and hence it is logical that the performance evaluation and its reporting is done in terms of cash flows.

Financial report users would be provided with a data base which could be used by them for purposes of short and long term decisions.
Managerial accountability would be improved by the reporting of actual and forecast data, coupled with explanations of material differences.

Under the traditional accounting system, there is scope for profit manipulation because of subjectivity involved in valuation, allocation etc. But in the CFA the scope for profit manipulation is greatly reduced.

Under CFA all receipts and payments are treated at their current value. Hence reports under CFA approximates more closely to current value accounting and can pull out the historic cost accounting from the evil effects of inflation at least partially.

Cash flow accounting is not free from limitations. Many academics have suggested many models on CFA. These models need some empirical experimentation designed to address the real world applicability of the suggested models. Secondly in view of the present legal provisions in the companies Act CFA cannot be used to replace the traditional accounts within the existing legal framework. Never the less, it does not contain any specific embargo as to following cash flow as the basis of accounting. In view of the above position cash flow accounts might appear as supplementary statements to the conventional accounts of an enterprise. As time passes the users of financial statements gain sufficient knowledge about the usefulness of cash flow
accounting information, the conventional profit and loss account can be dispensed with and replaced by a statement of cash flow. Some modifications to the historical cost balance sheet would also be necessary to introduce CFA. All these can be achieved with due changes in the Companies Act.

Justification for adoption of a particular method in a given circumstances.

We are at crossroads in the accounting profession and must initiate a move to make our accounting statements more relevant and useful, reflecting the changes in economic environment.

Several alternative methods of inflation accounting have been proposed, and there is a controversy over which proposal is the best. Two different approaches for adjusting inflation have been suggested in the ongoing debate on inflation accounting. One is to use current values instead of historical cost in preparing financial statements; and the second is to adjust historical cost data for changes in the purchasing power of the monetary unit. The former involves regular revaluation of assets and deals with specific price changes of the individual items held or dealt with by the firm; and the second is a pure scale adjustment for changes in the measuring unit, i.e. the purchasing power of the rupee.
Depending on the objectives to be served, there are primarily three ways to deal explicitly with changing prices.

1) Financial statements could be prepared on the basis of historical costs but with amounts stated in terms of general purchasing power. The method recognises inflation or deflation, but does not recognise changes in specific prices of assets while they are held. This method henceforth referred to as current purchasing power method (CPP).

2) Financial statements could be prepared in units of money using current values in place of historical costs. The method recognises changes in specific prices of assets while they are held but does not recognise change in general price level as such. This method would be referred to henceforth as current cost accounting (CCA).

3) Financial statements could be prepared by combining the features of both of these methods. The statements recognise both changes in specific prices and the influences of general price level changes. The values reflected in the statements are based on current costs and are measured in units of purchasing power. The method henceforth would be referred to as specific and general price level accounting. (SPLA).
Each alternate method involves a choice of

i) The measurement unit, nominal rupee or the purchasing power units; and

ii) The method of valuation, historical cost or current cost.