# CHAPTER 3

**PROBLEM OF EROSION OF CAPITAL**

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This chapter deals with the various aspects of the problem of capital erosion which owes its origin to the incorrect performance evaluation, particularly to the incorrect determination of profit in times of inflation when accounts are maintained under traditional or historic cost accounting. We have introduced this problem in the last chapter. But this being one of the crucial problems which hits the very viability of an enterprise, it requires some delineation. However, before we take up this issue for discussion, a few paragraphs on various concepts of 'capital' along with meaning of the term 'erosion' may not be out of context.

**Meanings of a Few Terms**

There are two approaches to the concept of capital—'fund' approach and 'asset' approach. According to the fund approach, the capital of an enterprise is the sum total of funds that have been employed for its running. It corresponds to the idea of total capital and may also be described as 'financial capital'. On the other hand, asset approach views the capital from the point of view of its employment in assets in an enterprise.

But the accountants and the economists differ on the composition of 'fund' or 'asset'. A reconciliation between accountants' and economists' concepts of capital both from...

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'fund' and 'asset' approach is possible and desirable. The accountants exclude loan capital from the composition of capital. That is, they take capital as synonym of proprietorship. It is similar to the definition of capital given by Kohler as "the amount invested in an enterprise ... by its owners." This is, however, a very general definition of the term 'capital.' Kohler also defined capital (5th definition) as "net-worth plus long-term liabilities; also, the equity of securityholders." "Net worth may be taken in the sense of what the business is, on the whole, worth for, or what are its net promises in favour of proprietors at any particular moment." This is no doubt a broad concept of capital. In effect, the latter definition connotes the meaning of total capital employed.

One of the points of distinction between the two definitions of Kohler is that while the former is narrow in its composition, the latter is, as already stated, used in the broader sense of the term inasmuch as the first one involves only owned capital but the latter includes both owned capital and long-term borrowed capital. The economists are a bit more liberal to include even the short-term loan capital over and above the ownership capital and long-term

loan capital. The objections raised by the accountants against the inclusion of loan capital are - (a) it involves external claim, (b) it represents priority over the ownership capital regarding return on and repayment of this capital, (c) short-term loan capital is of transitory character. These objections are not valid if we look at the purpose of raising capital. The purpose for which a business collects funds, both from its external and internal claimants, is identical, viz., the acquisition of assets for running the business. Moreover, a firm has a separate entity. Therefore, funds contributed by owners also represent claim. Hence, the discrimination between the capital contributed by the internal claimants and that contributed by the external claimants does not appear to be significant. Again, the reasoning of the transitory character of short-term loan capital will disappear by recognising the fact that the possibility of an amount going out of the business is also associated with the possibility of getting new credit. Thus, if the 'flow' is continued there will be a certain amount of 'stock' of this type of capital as well. In this sense, it also stands on the same footing with other long-term ownership or debt sources. Thus the difference in the definition of capital

from the fund approach, as suggested by the accountants and the economists, is marginal if the above points are considered.

In the asset approach to capital too, there are differences of opinion between the accountants and the economists on the includability or otherwise of the intangible assets. Interestingly enough, the economists here played a more conservative role than the accountants. According to the accountants, assets, whether tangible or intangible, having money value are to be included in the composition of capital. But the economists require two other characteristics of assets for inclusion, namely, 'materiality' and 'involvement in the operations for productive purposes', which are generally absent in intangible assets. Consequently, the economists exclude intangible assets from the composition of capital. This objection, according to some academics, is "superficial and not maintainable". Intangible assets like Goodwill, Patents, Copyrights, etc., may not possess the characteristics of materiality but the fact that they also contribute to the basic operation of the enterprise cannot be denied. In the asset approach to capital, one opinion is to take 'fixed assets' only; current assets to be excluded for the purpose. But inclusion of current assets in the

* It may include : (a) total assets; (b) that part of total assets representing investment made by the providers of long-term funds; and (c) net assets (i.e., assets less external debts).

8. For example, vide J.B. Sarkar, 'Concept of Capital - A Reconciliation', MD. SII, p. 51.
composition of capital is desirable on two grounds. First, the effective utilisation of fixed assets is not possible in isolation of current assets. Second, the total capital employed in a business finds its destiny by way of investment either in fixed assets or in current assets. So, the differential treatment of current assets in the composition of capital does not hold water. It may be mentioned that current assets are generally consumed within the accounting period or they change their forms whereas fixed assets are consumed or used over a period of time. Thus, the current assets like Bills Receivables, Sundry Debtors, etc., though they are intangibles, should also be included in the composition of capital. The objection as to the absence of materiality in the intangible assets, as above, does not hold good if one recognizes the characteristic of the convertibility of these assets into cash which has command over other material assets employed in the enterprise. J.B. Canning is of the opinion to merge the intangible nominal assets into current assets and consequently in the composition of capital on the ground that the balances of the nominal assets such as debit balance of Profit and Loss Account, Advertisement expenses, etc., may be taken to represent release of cash for services due to be received by the business. Another argument to include these

nominal or fictitious assets may be that they represent the costs of experience and impart an inspiration to work for their recovery.\footnote{S.K.R. Bhandari and H.S. Kulshrestha, op. cit., p. 121.}

To sum up, the capital under the fund approach should include both owned capital and loan capital, whether short-term or long-term and the asset approach requires inclusion of all kinds of assets, fixed, current and nominal assets, whether tangible or intangible. The amount that one will arrive at either on the basis of asset approach or that of fund approach will be the same in the above cases. It needs no mention that the fund approach measures capital from the liabilities side of the balance sheet while the asset approach measures capital from the asset side. Both the approaches have justification of their own. We shall, however, consider the fund approach here because it will facilitate source-wise analysis of capital erosion under inflationary condition. But if one wants to measure the maintenance of operating capability of an enterprise during inflation, the asset approach should be followed for the analysis.

After defining capital, we come to the term 'erosion'. It means the act of eroding i.e. 'to form by wearing away gradually' or 'to cause to deteriorate, decay or vanish'.\footnote{Webster's New World Dictionary, Oxford & IBH Publishing Co., New Delhi, Bombay, Calcutta, Second Indian Reprint, 1976, p. 563.}

Some authors have defined it as the process of withdrawing...
resources from an enterprise at a higher rate than is warranted by economic profit. This causes the enterprise's or investor's capital position to decline during a given period. This process is called 'capital erosion'.

**Maintenance of Capital**

Capital is the life-blood of a business enterprise. Any profit-seeking enterprise, be it a venture or an ongoing concern, must not only maintain its nominal capital but also 'real' one. Even a non-profit-seeking enterprise should also maintain capital for its survival and smooth running. 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. In fact, profit is generated by employing

13. Y. Goldschmidt and K. Admon, *Profit Measurement During Inflation - Accounting, Economic and Financial Aspects*, A. Wiley - Interscience Publication, John Wiley & Sons, New York/London/Sydney/Toronto, p. 193. They, however, classified capital erosion into three types - (a) asset erosion, (b) equity erosion, and (c) investor's capital erosion. The deterioration in the operating capability of the assets of an enterprise during inflation has been termed as 'asset erosion' while the 'equity erosion' has been defined as the decline in the purchasing power of the 'equity' of the enterprise. On the other hand, capital erosion from the investor's point of view has been termed as 'investor's capital erosion' and has been defined as the difference between the amount of inflow to the investor by way of dividend on fictitious profit and the amount of outflow from the investor by way of new subscription to maintain the real value of the 'equity' of the enterprise. The difference is obviously the net loss suffered by the investor.

capital. Absence of generation of profit or surplus may affect maintenance of capital. A mere generation of the same does not also lead to maintenance of capital. In order to maintain the capital at its original level, an enterprise has to ensure that distribution of profit does not take place in excess of what is otherwise permitted by the prevailing conditions. Rise in price level is one factor that should be taken into account, from the viewpoint of the enterprise, in making distribution of profit. "The measurement of capital maintenance is probably the key issue in deciding the most desirable system of accounting in periods of inflation." 15

The concept of the maintenance of capital may be grouped into:

(i) Maintenance of Nominal Capital, and
(ii) Maintenance of Real Capital.

'Nominal capital' may be defined as the money value of capital invested, measured at historic cost while the 'real capital' may be defined as the value of capital in terms of purchasing power at the beginning of the period. Therefore, nominal capital concept does not take into account the changes in the value of money, if any, over a period of time. Needless to mention that the value (i.e. purchasing power) of money, changes during a period of inflation or deflation. The conventional or historic cost accounting is based on the concept of nominal capital maintenance. Accordingly, the difference in the money value of the net wealth at the beginning and that at the end of an

accounting period is treated as profit or loss - the increase being treated as profit and the decrease as loss. The entire amount of increase in net wealth may be distributed "and the nominal capital of the business will still remain intact. But the maintenance of the nominal capital of the business may not, by itself, ensure the maintenance of its real capital." Because during inflation, prices of goods and services rise continuously and the same amount of nominal capital will be inadequate to maintain the same scale of operation. Now it will not be out of place to reiterate that ventures being of short duration are least affected by the inflation and very often the maintenance of nominal capital serves the purpose. But going concerns will have to face the problem of maintenance of real capital. A given scale of operation cannot be maintained over a period of time without introducing additional capital from outside. As an undesirable alternative, nominal capital remaining the same, the scale of operation is found to come down gradually. The process may end with even closure of activity.

So in relation to maintenance of capital what is relevant in this context is the maintenance of real capital. The problem of maintenance of capital may also be viewed from the asset side of the balance sheet of an enterprise. In other words, capital is said to be maintained if at least the same scale of operation is possible to be maintained.

maintained. That is, this concept requires maintenance of the purchasing power of the capital investment. Under historic cost accounting what happens during inflation is that only historic cost of goods sold or services rendered, is recovered out of revenues and the excess of revenues over this historic cost is treated as profit. But the recoveries may fall short to replace or replenish the same volume of inputs. The extent of shortfall to replacement or replenishment is the extent of capital erosion and to that extent capital is said to be not maintained. "In order to make up the deficiencies it may be necessary to set aside a portion of the reported profit of the period before any decision is taken about its disposal."¹⁸ Thus we can say that there is a cause and effect relationship between the capital erosion and profit inflation, later being the cause. Accordingly, maintenance of real capital hints at the modification in the process of profit determination.

Though maintenance of real capital is a necessity in order to maintain the operating capability of an enterprise, neither the professional bodies nor the accountants in many countries are willing to introduce any measure alternative to the historic cost accounting. The developments in different parts of the world in this respect will be discussed in Chapter 4. This will be followed by a discussion of Indian position in Chapter 5. We, however, delineate on the various aspects of capital erosion in the paragraphs that follow.

Process of Capital Erosion

It has been stated earlier that the real capital is not maintained during inflation when accounts are maintained under historic cost accounting. Capital erosion leads to the problem of maintenance of capital. But a distinction should be made between 'reduction' of capital and 'erosion' of the same. Repayment of, say, long-term or short-term loans, leads to reduction of capital on the one hand but it creates capability of getting new loan or credit to the business on the other. Therefore, on balance total capital remains more or less the same. This does not affect the operating capability of the enterprise. But in case of erosion, the operating capability cannot be maintained without introducing additional capital from outside. So when real capital is reduced, erosion takes place. Now, let us see how the erosion takes place and with this end in view let us examine the component-wise erosion of capital.

Short-term loans may be excluded from the scope of our analysis because these are "defined as debt originally scheduled for repayment within one year". Short-term loans may be excluded from the scope of our analysis because these are "defined as debt originally scheduled for repayment within one year". These are mostly contractual liabilities by which a fixed amount of money is to be paid within or after a given period of time which is generally not more than one operating cycle or one year. Repayment of this type of loan certainly reduces capital but it does not lead to capital erosion.

The position with respect to long-term and medium-term loan such as Debentures, Mortgage Loan, etc. is not also different although it has two aspects: payment of interest etc. periodically and repayment or liquidation of the principal. Loan capital generally bears a contractual fixed rate of interest to be applied on the nominal value of loan. If the amount of interest payable on such a loan capital is expressed in terms of purchasing power, we find that the amount actually paid as interest is less than the amount ought to have been paid to keep the purchasing power intact in the event of inflation. From the enterprise’s point of view it rather leads to purchasing power gain and is usually included in the profit figure. Payment of fixed charges for certain types of capital does not therefore lead to erosion of real capital. The other aspect of the matter, viz. redemption or repayment of loan, does not change the position as repayment takes place in terms of 'nominal value' and not in terms of 'real value'. In other words, if repayment is taken up by making yearly provision out of revenues or by making a sinking fund, the amount available will not be inadequate as the repayment will be in terms of nominal loan amount and not in terms of payment of the amount needed to maintain the purchasing power from the point of view of the investors.

So repayment of loan does not affect the operating capability of an enterprise. The problem of erosion of capital is not, therefore, relevant in case of either short-term or long-term loan capital. Hence, loan capital may be excluded from the scope of our study in this chapter.
The other component of capital employed is the 'owned capital'. This capital may be supplied by the (i) Equity or ordinary shareholders, and (ii) Preference shareholders. Preference shareholders enjoy some preferential rights to the ordinary shareholders with respect to payment of both the dividend and the capital. However, we are interested in the payment of dividend since it reduces the amount of retention. But whether the payment of dividend to preference shareholders will be based on the availability of profit is dependent on the category of preference shares. For the purpose, preference shares may be divided into two categories - (a) Cumulative, and (b) Non-cumulative.

(a) Cumulative Preference Shares

In the case of cumulative preference shares the rate of dividend payable is pre-fixed. Of course, this is subject to the availability of divisible profits. That is, it is based on the principle of 'no-profit, no-dividend'. This category of preference shares enjoy a special claim as to dividend even in the absence of profit. The dividend claims of the cumulative preference shareholders at the predetermined rate accumulate during the years of loss or inadequate profit and this accumulated dividend claim gets top priority when sufficient profit is available for distribution of dividend. But when the accumulated amount is paid in a later

20. (Indian) Companies Act, 1956, Sec. 86 states that the share capital of company limited by shares formed after the commencement of this Act, or issued after such commencement, shall be of two kinds only, namely: (a) equity share capital; and (b) preference share capital.

* Preference shares issued by Companies in India are mostly of cumulative category.
period, it represents less amount of purchasing power than that ought to have been paid as dividend in different years of loss. Consequently, it will create a purchasing power gain to the enterprise. But whether it involves any capital erosion is dependent on whether the profit figure is arrived at after making necessary provision for maintenance of operating capability of the enterprise or not. But we have explained earlier that this is unlikely to happen under historic cost accounting which tends to overstate profit. That is, to the extent preference dividend is paid out of inflated profit, there is erosion of capital. The extent of erosion is, however, a matter of calculation and it should also take into consideration the purchasing power gain for deferred payment of dividend. Current year's dividend of cumulative preference shares will rank pari passu to the non-cumulative preference shares.

(b) **Non-cumulative Preference Shares**

The claims for dividend for this category of preference shares remain valid only in years showing profit and they are to forego their claims in years showing losses. But because of historic cost accounting, profits are likely to be overstated or losses are likely to be shown as profits so that payment of non-cumulative preference dividend may amount to payment out of capital. This may lead to erosion of capital.

**Equity Shares**

The remainder of divisible profit, if any, after payment of both arrear and current preference dividend as
explained above is available to the equity shareholders. It needs no mention that payment of equity dividend may also lead to erosion of capital. They are paid more than what ought to have been justifiably payable in terms of real profits. Erosion of capital does not take place so long as the amount of dividend does not exceed the real profit available. In other words, erosion occurs whenever the amount of dividend involves even a portion of inflated or fictitious profit. It is based on the concept of 'maintenance of equity' that the enterprise possessed at the beginning of the accounting period. Let us now make a scrutiny of legal position in India relating to payment of dividend on equity share capital. Sub-section (1) of Sec. 205 of the Companies Act, 1956, lays down that "no dividend shall be declared or paid by a company for any financial year except out of the profits of the company for that year ... or out of the profits of the company for any previous financial year or years ... and remaining undistributed or out of both ..." So, by permitting payment of dividend out of undistributed profits of earlier years, the Companies Act permits payment of dividend in excess of real profit of the current year. This, however, is likely to involve erosion of 'equity' albeit the erosion of equity capital may not take place. In the absence of any undistributed earlier profits the payment of dividend based on reported profit so much so that it exceeds real profit is in fact a 'return of capital'.

* It does not appear to be concerned with the question of 'real profit'.

return on capital. This is, however, in contravention of the provisions of sub-section (1) of Sec. 205 of the Companies Act of India as mentioned above. From the legal point of view, the position can be reconciled only if 'capital' is conceived to be something equivalent to 'nominal capital'.

Perhaps with the intention of ensuring that the amount of dividend does not exceed the real profit of the current year, the provisions of Sec. 205 have been amended by the Companies (Amendment) Act, 1974, by insertion of sub-section (2-A) which lays down that "notwithstanding anything contained in sub-section (1), ... no dividend shall be declared or paid by a company for any financial year out of the profits of the company for the year ..., except after the transfer to the reserves of the company of such percentage of its profits for that year, not exceeding ten per cent, as may be prescribed." No doubt it conforms to the idea of providing, at least in part, protection to 'equity erosion' by resorting to the method of restrictive dividend policy by transferring certain portion of available profit to reserve. But this alone cannot prevent erosion of capital for reasons already stated.

Effects of Capital Erosion

While the process of capital erosion has been briefly explained earlier, the effects of the same require a special mention. These include the following:

(a) Loss of Earning Power

It needs no mention that earning power is the vitality of an enterprise. Any loss of earning power is akin to 22. K.C. Paul, op. cit., p. 90.
marching forward to starvation. It hits the very survival of
the enterprise. An enterprise earns by effecting proper util-
isation of its capital. So capital is one of the factors of
earning power. Since payment of dividend, tax, etc., on the
basis of profit computed under historic cost accounting, leads
to erosion of capital as pointed out earlier, they will certain-
ly affect the earning power of an enterprise.

(b) Deterioration of the Solvency and Liquidity Position

The factors which cause capital erosion also lead to
reduction in the value of real assets. Thus, the enterprise
may not be in a position to pay-off its creditors. Unless
additional fund is injected into operation, there will be
shortage of resources to meet day-to-day commitments. Suppli-
ers of secured loan may feel unsecured. This feeling of
'insecurity' will have an adverse impact on the future debt
financing of the firm. One consequence would be increase in
the cost of debt. Increase in cost of debt will increase the
risk profile of the firm.

(c) Rights of Shareholders Without Capital

In times of continuous inflation, gradual erosion or
return of capital reaches a situation when a significant part
or the entire real capital may be paid out as dividend conscien-
tously or unconsciously. But still shareholders continue to
enjoy the same rights since their nominal capital has been
kept intact. In other words, taking a practical view of the
situation, it can be said that thenceforward they get divi-
dend even when their investment in the form of share capital
gets eroded significantly. This happens simply because divi-
dend is paid on nominal value of share capital. Thus, because
of excess payment of dividend based on inflated profit, a part of capital or the whole amount of it may be returned to the shareholders. In such a case, further payment of dividend may be tantamount to payment without investment. We shall deal with this point at length in Chapter 6.

(d) Outflow of Foreign Capital

Enterprises whose shares are partly subscribed by citizens of countries other than India face another problem. Apparently, foreign shareholders create inflow of foreign capital. Initially, it may be welcome from the point of view of inflow of foreign capital. But it creates problem subsequently arising out of payment of dividend. During inflation, distribution of dividend may amount to payment out of capital or even payment without investment. The reasons for this have already been hinted under (c) above. But foreign participation in share capital creates more problems. An in-depth analysis of the effect of inflation on foreign participation in share capital has been taken up in Chapters 6 and 7.

Remedies of Capital Erosion

As stated in Chapter 2, the 'inflated profit' is the result of historic cost accounting. Depreciation and cost of goods sold calculated on the basis of historic cost are the crucial factors giving rise to such inflated profit figure which in turn causes, inter alia, the problem of capital erosion. Various remedial measures have been suggested by various professional bodies and academics in different parts of the world over the years. We have referred to them in Chapter 4 that follows.
Inflation Accounting Measures 55-116.
Accounting Research Bulletin No.33 57; Recommendation No.12 57; Recommendation 35 58; Valuation of Inventories at LIFO 61; Stabilized Accounting 63; The Current Purchasing Power Method 70; Value Accounting 79; Replacement Cost Accounting 79; Present (or Economic or Current) Value Accounting 81; Continuously Contemporary Accounting 84; Cash Flow Accounting 85; Current Cost Accounting 95; Concepts of Capital and Earnings Profit 105; Classification of Gains 105; Current Cost Operating Profit 106; Depreciation Adjustment 106; Cost of Sales Adjustment 106; Monetary Working Capital Adjustment 109; Shareholders' Profit 110; Reserves 111; Use of Index 112; Merits of CCA 113; Shortcomings of CCA 114.

Countrywise Developments 117-142.
Developments in U.K. 118; Developments in U.S.A. 125; Comparison between SSAP 16 and FASB 33 130; Developments in India 133; Developments in other countries 133; Developments in Australia 134; Recent Developments in Canada 137; Developments in New Zealand 139; Developments in France, Argentina and Brazil 140; International Accounting Standards Committee 141.
Developments in Overseas - A Comparative Study 143.
It has been described in the second chapter that the accounting system based on historic cost fails to achieve in times of changing price levels both the immediate objectives of correct measurement of operational results and the ascertainment of true financial position of an enterprise. It, therefore, necessitates replacement of historic cost accounting by some other alternative method. These methods are popularly known as 'Inflation Accounting' or 'Accounting for price-level changes'. Conceptually, these two terms, though often used interchangeably, are not synonymous. The first one is meant for accounting in times of inflation only while the latter considers both the circumstances of inflation and deflation, as and when the price level changes in either direction. But since inflation is a continuous process now-a-days resulting in a constant rise in price level, barring one or two exceptions during a pretty long period of the current century, the two terms - Inflation Accounting and Accounting for price level changes do not, in effect, signify any material difference. It should be emphasised that inflation accounting does not, ipso facto, imply rectifying the adverse impact of inflation. It only highlights the effects. The impact of inflation is being attempted to incorporate into accounting. But inflation accounting should be carefully

designated. Otherwise it may frustrate the basic objectives.
Inaccurate inflation-accounting is as dangerous as non-
inflation accounting.2

We now go into the details of alternative measures
suggested by various professional institutions and academics
in different parts of the world to replace historic cost
accounting. It is needless to reiterate that, in times of
inflation, historic cost accounting suffers from many
problems. These we have discussed in brief in Chapters 2
and 3 and need not be repeated here.

INFLATION ACCOUNTING MEASURES

We may divide them into the following two groups:

A) Those suggesting partial adjustments, and
B) Those representing overall inflation accounting
methods.

When accounts are maintained under historic cost accounting
in times of inflation, sporadic attempts may be made to
introduce some of the measures to account to combat the
effects of inflation. Two practices on the point were
recommended. These were:

2. H.C. Krishnan, 'Inflation Accounting', The Chartered
Accountant, May 1976, ICAI, New Delhi, p. 519.

* The various approaches to inflation accounting may also
be divided into two groups based on the use of price
index viz. (i) the general price-level approach; and (ii)
the specific price (replacement cost) approach. Vide L.D.
Porwal and N. Mishra, 'Industry Practice in Accounting and
Reporting for Changing Prices in a Developing Economy
(An Empirical Study of India)', The Chartered Accountant,
June 1984, ICAI, New Delhi, p. 811-7
(i) providing additional depreciation on the basis of replacement cost of fixed assets (with or without writing up the value of these assets in the balance sheet), and

(ii) valuing inventories at LIFO method in order to ascertain profit more realistically by taking into account the most recent prices for items used during the period.

The examples on the point are the recommendation of the Institute of Chartered Accountants of England and Wales in 1952 (Recommendation No. 15) and the practice followed in the U.S.A. in using LIFO for valuing inventories. These are discussed in brief later on.

There are many measures, suggested either by individual academics or by professional accounting bodies in different countries from time to time, which are regarded as overall inflation accounting methods. For the sake of volume, we refer to only a few important ones. These are:

a. Stabilized Accounting (suggested by Sweeney in 1936);
b. The Current Purchasing Power (CPP) Method (issued by the Institute of Chartered Accountants of England and Wales in 1974);
c. Value Accounting that includes a number of varieties as explained later on (mainly developed

We now go in for some details so far as partial measures and overall inflation accounting measures, as above, are concerned. This discussion is followed by:

1) an account of chronological developments in the countries like U.K., U.S.A., Australia, Canada, India, New Zealand, etc., and
2) the response from the point of view of International Standard Accounting Committee.

The present chapter ends with a comparative study on overseas developments in Inflation Accounting.

1) Accounting Research Bulletin No. 33
   This bulletin entitled "Depreciation and High Costs" was issued in America in 1947. The main recommendation was the creation of surplus reserves to provide for replacement. Charging accelerated depreciation started to be the practice of the United States Companies during that time. The practice was more or less similar to the recommendation of the bulletin.

2) Recommendation No. K-12
   This was, perhaps, the first measure recommended by

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the Institute of Chartered Accountants in England and Wales in January 1949, recognising the effect of inflation on accounts. The only recommendation was to treat the amount of so-called depreciation to meet the cost of replacement of assets as a specific capital reserve. Though the measure was akin to the measure suggested in the above bulletin, all its importance lies in the U.K. recognition of the inflationary effects on accounts.

3) Recommendation 15

The said Institute of U.K. reviewed the issue in 1952 and made a further recommendation entitled "Accounting in relation to changes in the purchasing power of Money". The basic characteristics of Recommendation 15 have been embodied in Paragraph 30 of the said recommendation as follows:

(i) traditional accounting based on historic cost should continue;
(ii) additional depreciation for fixed assets, being the difference between the depreciation on the basis of replacement cost and that on the basis of historic cost should be treated as an appropriation of profit and not as a charge in arriving at profits;
(iii) the appropriated amount of this additional depreciation should be treated as a capital reserve so that it cannot be available for distribution;

(iv) for balance sheet purposes fixed assets should not be written up especially in the absence of monetary stability.

Arguments in favour

The following arguments were generally advanced in favour of Recommendation 15:

a) It attempts to maintain the real capital and the operating capability of an enterprise.

b) It helps to determine the operational results correctly by matching current cost of assets consumed with the current revenues.

c) Financial problems for replacement of fixed assets can be solved.

Limitations

Recommendation 15 suffered from a number of criticisms. The following are some of them:

a) Determination of replacement cost of fixed assets creates a problem. It may be determined by using index numbers. There may again be two alternatives: (i) using general price index, and (ii) using specific price index. Both the alternatives have their respective merits and demerits.

b) Since the system is applicable only to fixed assets and the operating capability is dependent on both the fixed assets and the current assets, how far the system will be able to maintain the operating capability is questionable.
c) Replacement of current assets, particularly inventories which are major components of operating capital, is not ensured by the system. So the claim of maintenance of real capital is also not tenable.

d) Matching process still remains defective in the determination of operational result. Because historic cost of goods sold is being matched against historic revenues of later periods. That is costs and revenues which are matched are not of the same price level.

e) The process of writing up the values of fixed assets will simultaneously increase the nominal capital of the enterprise. But the benefit of this increment is not endorsed to the shareholders. It may be argued that they have already enjoyed the benefit by receiving higher rate of dividend consequent to the overstatement of profit for charging depreciation earlier on historic cost basis. On this argument it is worth noting that it is extremely difficult to maintain a balance between the two situations. Moreover, preference shareholders have certainly been fully deprived of the above benefit, if any.

f) Since the additional depreciation should be treated as an appropriation item as per recommendation, the method fails to relieve the enterprise of the overburden of tax due to overstatement of profit.*

The Sandilands Committee** in its report criticised

* In India, charging depreciation on replacement cost basis is also not permitted by the tax laws.

** The U.K. Government set up a Committee in January 1974 to consider whether, and if so how, company accounts
the method in the following language. "... the piecemeal way in which revaluations have been carried out has created considerable confusion and difficulty. ... present-day balance sheets in this country consist of a mixture of entries at historic cost and valuations prepared on different bases."\(^7\)

4) **Valuation of Inventories at LIFO**

Another major component, more sensitive to the price level changes, is cost of goods sold comprising inventories consumed. The amount to be charged in respect of consumption of a given quantity of inventories will depend upon the pricing method. In times of rising prices, valuation of inventories at Last-in-first-out (LIFO) acts as a double-edged weapon in reducing, if not removing, at least partially, the problem of replacement of inventories and the problem arising out of overstatement of profit. The method assumes that the units of inventory consumed during the year are those which were most recently purchased. Thus, although it does not necessarily correspond with replacement cost valuation, it approximates the replacement cost basis of valuation as regards the input of resources to the profit measurement process. It permits a more realistic calculation of profit by taking into account the most recent cost prices.\(^8\) On the

should allow for changes in costs and prices'. The Committee, headed by Mr. F.E.P. Sandilands as its Chairman, submitted its report in June, 1975. It suggested 'Current Cost Accounting' which is discussed later on.

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other hand, valuation of closing stock at earlier purchase prices, which are generally lower than the current purchase prices during inflation, helps to reduce the overstatement of profit.

The method was "introduced first in the U.S.A. during the last war" and has been popularly used. It does not involve a departure from the historic cost basis of accounting. As a consequence, the tax authorities do not object to accept it. Further, it ensures better matching process.

Objections

(a) Valuation of unsold stock under LIFO method does not represent current market conditions. Rather, this under-valuation during times of rising prices distorts the balance sheet. Though it is claimed by the proponents that "achieving a more appropriate matching of costs against revenues is such an important objective that it offsets the 'incorrect' balance sheet results, the fact remains that, conceivably, inventory quantities might eventually be priced at such 'old' costs as to produce a misstatement of working capital position that would be seriously misleading." To avoid such an anomaly, parenthetical disclosure of estimated current cost of inventory, actual computation of current cost involving more clerical work, is often suggested.

(b) In some situations, e.g., when there is a significant change in the market price after last purchase or when the previous lot of consumption has fully consumed the latest lot of receipt, the cost of sales will not represent the current market price. Thus it fails to maintain the operating capability of the enterprise.

(c) The method is suitable, if at all so, only in case of continuous rise in price level. During frequently fluctuating market conditions, the method may not justify its merits.

(d) The method may be applicable as a supplementary measure only and not an alternative to the earlier method of revaluation of fixed assets.

Considering the merits and demerits of both the methods of revaluation of fixed assets and the adoption of LIFO method of inventory valuation, it may be concluded that "the approach" of simultaneous application of both the methods as supplementary to each other, "has significance only till such time that a comprehensive and widely acceptable method of accounting for price changes is adopted." It also needs to be mentioned that simultaneous application of these methods are only partial adjustment of the inflationary effects.

5) Stabilized Accounting

This method was introduced by H.W. Sweeney as early as 1936. But its origin, as acknowledged by Sweeney

himself, is traced to the inflationary periods in Germany during the First World War. Some additions and alterations were made by various authors like L.A. Wilk, W.A. Paton, B.J. Davis, etc., to the original method as introduced by Sweeney. Stabilization procedure was summarised by Wilk as follows:

"The balance sheet is re-stated in 'current' dollars.  

(i) Fixed assets are converted by reference to the index figures applicable to the dates of purchase.  

(ii) Stocks are converted according to the index at the average date of acquisition (e.g. the average index number of the last three months of the year).  

(iii) Other current assets and all liabilities are already stated in "current" dollars and need no conversion.  

(iv) Issued capital is converted according to the index number at the date of the original issue.  

(v) Retained profit is calculated by the short-cut method of deducting issued capital from net assets ....

For the profit and loss account, the following adjustments are made:

(i) Depreciation is restated according to the index applicable to the date of purchase of the assets concerned.  

(ii) Stocks, both opening and closing, are re-stated according to the index of the average date of acquisition of such stocks.  

(iii) The remaining items - sales; purchases; other expenses; interest; taxes; dividends - are converted by the average index for the year, subject to the use of
actual indices for exceptional large identifiable items, according to the dates of the transactions concerned.\textsuperscript{13}

The above procedure of stabilization or conversion, if followed, will reveal the following:

1) Retained profit, being the balancing figure of the restated capital and net assets, available from the stabilized balance sheet. This may be termed as 'Final net profit'.

2) Stabilized business profit for the current period available from the stabilized profit and loss statement.

It needs be mentioned that the retained profit as per stabilized balance sheet will be inclusive of the loss on change in the value of money for the current year as well as of the balance of such loss, if any, brought forward from the previous year or years as stabilized upto date. Now, "the loss due to change in the value of purchasing power of money in the current period is calculated by deducting the difference ... of assets and liabilities in the stabilized balance sheet from the excess of the sum of the stabilized measures of the current year's profit and last year's undistributed profit over the restated measure of last year's loss due to change in value of purchasing power of money as recorded in last year's stabilized accounts."\textsuperscript{14} The above relation may be stated with the help of notations as

\textsuperscript{13} L.A. Wilk, \textit{Accounting for Inflation}, pp. 29-30 (Quoted from G.D. Roy, \textit{A Survey of Accounting Ideas}, Alpha Publishing Concern, Calcutta, p. 387).

\textsuperscript{14} G.D. Roy, \textit{op. cit.}, p. 384.
The values of all the above notations on the right hand side of the relation are known from the stabilized balance sheets and profit and loss accounts of the current year and the previous year. So, we can easily calculate the current year's loss of change in the value of purchasing power of money.

The process of stabilization is a lengthy one. Because "every item of ledger balances has to be restated in terms of the final index at its own specific ratio which may even differ for different parts of the same balance." Clerical error may also be involved in the process. Considering this possibility, Sweeney introduced a mechanism to test the accuracy of the process of stabilization. It is known as the 'Stabilization Adjustments'. In this mechanism, differences between the stabilized and unstabilized figures are aggregated separately for debit items and credit items and thus a statement is prepared. The aggregate of debit differences should tally with that of credit differences.

15. Ibid., p. 389.
The mechanism is akin to that of a trial balance.

The above mechanism, though helps to test the accuracy of the process, is of no avail to cut short the lengthy process itself. B.J. Davis suggested "currency control" method as a remedy.* According to this method, the following steps should be followed:

(i) To pass a closing entry to close all the Ledger accounts.

(ii) All the items should be grouped on the basis of the conversion factor. That is, all items requiring conversion at the same ratio should be included in the same group.

(iii) Account balances of each such group should be transferred to separate ledgers or separate divisions of a ledger.

(iv) Each such ledger or division should contain one 'Currency Control Account'.

(v) Difference, if any, between the aggregate debit and credit balances transferred to the same ledger should be counter-balanced by a 'suspense balance'.

(vi) All revenue account balances of the same group as above including depreciation, bad debts, etc., and the suspense balance should be transferred to respective "Currency Control Accounts".

(vii) The balance of each Currency Control Account should be restated by the respective conversion factor.

(viii) All the restated balances of the Currency Control accounts should be transferred to a single revenue account.

The balance of this account will represent the stabilized profit.

This method though does not require conversion of each item, involves much extra labour for opening additional ledgers, making transfer entries, adjustments, etc. But one most important favourable point is that the creation of a reserve of an amount equal to the difference between the stabilized profit and the traditional profit, within the framework of the traditional accounting, will at least help maintenance of real capital since, after all, the stabilized balance sheets and profit and loss accounts are acceptable only as supplementary statements to the traditional financial statements.

It needs be mentioned that the total gain or loss in the current year due to change in the purchasing power of money \( (L_n) \) comprise two elements - (a) realised, and (b) unrealised. Business profit/loss as evident from the profit and loss account is also considered to be realised. Unrealised gains or losses arise due to holding of monetary assets and liabilities as on the balance sheet date. Such holding gains or losses may also arise for temporary holding of monetary assets and liabilities during the year, which have changed their forms before the balance sheet date. These past holding gains or losses are considered to be realised. So, the sources of all realised and unrealised gains or losses may be diagramatically represented as follows:
'Final net profit', being excess of stabilized assets over stabilized liabilities, is easily ascertainable from the stabilized balance sheet. Present-holding gains or losses can also be ascertained by restatement of the monetary items of the balance sheet. But past-holding gains or losses cannot be so directly ascertained because "the magnitude and duration of the holdings of net monetary assets in the past ... cannot precisely be known from the present holdings of the mass of diverse real value assets acquired at different points of time, though the latter appear to be the source of the said loss." 16 So, it is to be ascertained by deducting the unrealised portion from the total loss of the year due to change in the purchasing power of money (i.e. \( L_n \)). Thus, all unrecorded unrealised gains or losses are brought into account under stabilization process unlike the traditional system where these are accounted for only in some specific cases like accrued interest.

Another defect of the stabilization is that comparison of an item over the years becomes impossible. As a

16. Ibid., p. 391.
remedy, comparative stabilization i.e. re-stabilization has been suggested by many authors. It is also not free from defect in the sense that the stabilized balance sheet of a particular year has to be re-stabilized again and again. The suggestion of the Institute of Cost and Works Accountants, London, to this effect, is the conversion of the stabilized balance sheets into money values of a common previous point of time, preferably for simplicity, the date of original or major portion of capital investment. Though this suggestion permits intra-firm comparison, the inter-firm comparison still remains difficult.

Sweeney's Stabilized Accounting was the first systematic approach of inflation accounting. The method was revised by many authors as stated earlier. But at that time it failed to draw attention. The cause of such apathy might perhaps be traced to the lesser magnitude of inflation which failed to create urgency to introduce inflation accounting. Accounting Research Study No. 6, "Reporting the Financial Effects of Price level changes" published by the American Institute of Certified Public Accountants (AICPA) in 1965 and Accounting Principles Board (APB) Statement No. 3, "Financial Statements Restated for General Price-level changes" in 1969 were drawn up following the basic principles of Stabilized Accounting.

6) The Current Purchasing Power (CPP) Method

The concept of this method is similar to that of the 'Stabilized Accounting' as stated earlier. In May 1974, the Institute of Chartered Accountants in England and Wales issued a Provisional Statement of Standard Accounting
Practice (S.S.A.P.) No. 7 to be followed by all listed companies, and others where possible. Though the statement was provisional in nature, the need and importance of such inflation adjusted accounting were recognised by all interested parties e.g., managerial personnel, shareholders, investors, creditors, etc.

The main features of the standard are:

"(i) companies will continue to keep their records and present their basic annual accounts in historical pounds, i.e., in terms of the value of the pound at the time of each transaction or revaluation;

(ii) in addition, all listed companies should present to their shareholders a supplementary statement in terms of the value of the pound at the end of the period to which the accounts relate;

(iii) the conversion of the figures in the basic accounts into the figures in the supplementary statement should be by means of a general index of the purchasing power of the pound;

(iv) the standard requires the directors to provide in a note to the supplementary statement an explanation of the basis on which it has been prepared and it is desirable that directors should comment on the significance of the figures."

The first part of the recommendation i.e. presentation of financial statements on the basis of historic

17. The Institute of Chartered Accountants in England and Wales, Provisional Statement of Standard Accounting Practice No. 7 (PSSAP 7), 1974, para. 12.
costs, poses no problem since it is only the continuation of the existing system.

The second part dictates preparation of supplementary statement on the basis of current purchasing power i.e. purchasing power of the balance sheet date. For the purpose of this conversion general index of the purchasing power of the pound should be used as indicated in the third part. It requires segregation of those items of the conventional financial statements, which are already expressed in terms of current purchasing power and so do not require any conversion.

The last part requires the directors to explain the basis of preparation of the supplementary statement and also to interpret the figures of the supplementary statement so as to be easily understandable to the users of the statement.

The most interesting feature of the method is adoption of a change in the unit of measurement - 'unit of purchasing power' in place of 'monetary unit'. It needs no reiteration that the monetary unit lacks stability during changing price levels. Unit of purchasing power of the balance sheet date, alternatively known as 'Current purchasing power Unit', has been defined by the Sandilands Committee "as entity which could at all times purchase the same amount of goods and services, covered by the RPI", meaning the general index of retail prices, "as it would purchase at the point of time to which it relates."\(^{18}\)

Another notable feature of the method is to use general index of retail prices despite the other alternative of using specific indices for the relevant commodities and services. It has also been mentioned earlier that both the alternatives have got their merits and demerits. The need and rationale of an approach of price-level accounting based on the general purchasing power of money has been emphasized time and again by a large number of thinkers on this problem. The base date of the general purchasing power of the currency has been recommended to be the balance sheet date. That explains the genesis of the term 'CPP Accounting' which really means 'inflation accounting in units of general purchasing power, using the current G.P.P. (i.e. G.P.P. as on the balance sheet date) as the unit.'

It has been stated earlier that all items of the conventional financial statements do not require conversion for preparing supplementary statement. In order to determine competence of assets and liabilities to undergo conversion they have to be classified into (a) monetary items, and (b) non-monetary items. "The assets and liabilities which are not subject to reassessment of their recorded values owing to change of purchasing power of money have been called money value items", representing either cash

or claims to cash by the enterprise or against the enter-
prise. The amounts of the monetary items in monetary unit
remain unchanged as per the terms of any contracts or the
provisions of any law, irrespective of price level changes.
A few examples of monetary items are cash, debtors, credit­
or, loan capital, etc. So, the monetary items appear in
the supplementary statement as they are.

The items which are not monetary items are known as
'non-monetary items', excepting a few border-line cases
such as participating preference shares, convertible loan
stock, etc., which have characteristics of both the groups.
The examples of non-monetary items are inventories, fixed
assets, accumulated depreciation, etc. These items require
conversion into current purchasing power. It should be
noted that while the border-line cases may be arbitrarily
classified into either of the two groups, the equity share
capital is neither monetary nor non-monetary in nature. 22
Hence, it is treated as a residual or balancing item. Of
course, there is a controversy on the classification of
this item and Baxter treats Shareholders' equity as a non-
monetary item. 23

Supplementary Statement - Procedure for Preparation

There are two approaches to the ascertainment of
CPP Profit -

22. S.S.A.P. No. 7, para. 10.
23. W.T. Baxter, Accounting Values and Inflation, McGraw-
(i) Direct itemwise conversion of Revenue Statement

Under this method each and every item of revenues and expenses is converted in terms of CPP units by using suitable index. The difference between the adjusted figures of the revenue items and expense items indicates the CPP profit or loss.

(ii) Balance Sheet Method

This method involves the following steps:24

\textbf{Step I}

Items in the opening balance sheet of the basic accounts are converted into current purchasing power units relating to the beginning of the year by:

(a) adjusting all amounts representing non-monetary items by the change in the RPI between the time of acquisition or most recent valuation and the beginning of the year; and

(b) making no adjustment to the amounts representing monetary items because these are already in terms of both monetary units and current purchasing power units relating to the beginning of the year:

provided that in the case of non-monetary items where the value to the business of fixed assets or the net realizable value of current assets is less than the adjusted figures after conversion, these items should be written down accordingly in the supplementary statement.

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* RPI was suggested in the recommendation; it is "found that the consumer price index (CPI) is most suitable for the purpose, under the circumstances prevailing in India". Vide Asim Kumar Banerjia, \textit{op. cit.}, p. 90.

The above step of conversion will be necessary only during the first year of introduction of the C.P.P. method. When non-monetary assets are purchased at the beginning of the year, no adjustment is necessary and accordingly step no. 1 becomes redundant. In the second and subsequent years, the closing C.P.P. balance sheet of the previous year will be taken as the opening balance sheet of the year of account without further adjustment.

Step 2

All items (both monetary and non-monetary) in the converted opening balance sheet for the year are adjusted by the change in the RPI between the beginning and end of the year in order to express the items in the opening balance sheet in terms of current purchasing power units relating to the balance sheet date at the end of the year. This process is known as 'updating'. The updated balance sheet is different from C.P.P. adjusted balance sheet which is to be prepared following the third step. The updated balance sheet may be used for determining the C.P.P. profit which is taken to be the difference between 'equity interest' at the end of the period as per C.P.P. adjusted balance sheet and that as per updated balance sheet. Such C.P.P. profit will be inclusive of loss or gain on purchasing power units and therefore in order to insulate them it is necessary to prepare a subsidiary statement to ascertain the amount of purchasing power loss or gain. If, however, one ascertains the C.P.P. profit through conversion process, step no. 2 also becomes redundant.
Step 3

Items in the closing balance sheet of the basic accounts are converted into current purchasing power units relating to the end of the year by:

(a) adjusting all amounts representing non-monetary items by the change in the RPI between the time of acquisition or most recent revaluation and the end of the year; and

(b) making no adjustment to the amounts representing monetary items because these are already in terms of both monetary units and current purchasing power relating to the end of the year;

subject to the same proviso in respect of non-monetary items as was applied in step 1.

Merits

It is flexible "in the sense that individual enterprises may, if they so wish, use average price levels (monthly, quarterly, annual, etc.) to groups of transactions or go into more detailed analysis".\textsuperscript{25} The method provides capital maintenance in terms of purchasing power. Similar to conventional accounting it preserves the basic accounting principles of realisation and cost basis.\textsuperscript{26} Objection of unstable unit of measurement against historic cost accounting is obviated. Unlike historic cost accounting, the method recognises purchasing power gains or losses arising out of holding monetary liabilities and assets respectively.

\textsuperscript{25} Asim Kumar Sengupta, \textit{op. cit.}, p. 102.
\textsuperscript{26} Ramesh Gupta, \textit{op. cit.}, p. 57.
Objections

The main objection against the method is that it retains the conventional financial statement as the basic statement. Preparation of two sets of financial statements may be confusing to the users. This objection can, however, be overcome by having a composite historic cost and C.P.P. accounting, having separate column for each in the final statements. Purchasing power gains or losses may also be confused with operating profit and the idea, if any, to distribute such purchasing power gains is quite misleading. Moreover, the suggested use of general index does not really signify any meaning since holding of general purchasing power cannot command over any combination of goods and services needed. Hence the purchasing power of money should be related to those items on which money is intended to be spent. The use of RPI as a measure of the change in the 'purchasing power' of money gives a poor indication of the effects of inflation on companies.

7) Value Accounting

In order to redress some of the weaknesses of CPP method, a few other alternative accounting systems have been suggested. The common name of such systems is 'value accounting'. The main idea of the value accounting is that the 'values' of assets rather than 'costs' can provide more

realistic information. But there may be more than one meaning of 'values of assets to the business', namely,

(a) Replacement Value, (b) Economic Value or Present Value or Current Value, (c) Realisable Value. Each such meaning has given rise to separate accounting systems. They are:

(A) Replacement Cost Accounting,
(B) Present or Current Value Accounting, and
(C) Continuously Contemporary Accounting.

The common feature of these systems is that all of them use monetary unit. But each of them has got some special characteristics which may be mentioned separately as follows:

(A) Replacement Cost Accounting (RCA) :- The method was very popular in Holland during 1920s. The technique was developed with the idea that the recovery of the consumption of assets during an accounting period should be made on the basis of the costs required to replace the consumption instead of recovery of the historic cost of consumption as is made in conventional historic cost accounting. The basic features of the method are:

(i) It maintains money as the unit of measurement.
(ii) Valuation of assets, including some items of current assets, is made in the balance sheet at a price at which an identical asset can be purchased on date. This price is known as replacement cost. But determination of replacement cost is fraught with many difficulties.
Depreciable assets are valued at written down current (and not future) replacement cost.

(iii) Monetary assets need no adjustment since when the accounts are expressed in monetary units they are constant in value.

(iv) Physical capital maintenance principle is adopted. According to RCA method, profit is recognised only after appropriate provision being made in the profit and loss account for replacing the assets consumed. In other words, it regards capital as the capital of the company, rather than of the shareholders. 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. Straight-line depreciation, depletion and amortization must be computed on the basis of the current replacement cost of plant and equipment.

Criticism:

(i) This method safeguards the maintenance of physical capital in its existing form only. But the enterprises which do not require identical replacement may not be able to fully protect their capital. Obsolescence may be another problem which can not be taken care of even if RCA method is followed.

(ii) The process of replacement cost determination is fraught with difficulties. As stated earlier, it may be done by applying specific price indices relevant to each item.

But there is no institutional machinery, particularly in India, to calculate and supply such specific price indices to each enterprise while the requirements are so wide and varied. Again, even the use of specific indices may also affect the inter-firm or intra-firm comparison.

(iii) Another oft-quoted criticism is that the method fails to distinguish between the changes in the value of money and the changes in the relative prices of specific items and hence it cannot be recognised as an inflation accounting technique. However, the Sandilands Committee in reply to this objection reported that the objection is based on a vague assumption that "inflation is independent of the changes in costs and prices of specific items of goods and services bought by individuals or companies."

(iv) 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.32

(b) Present (or Economic or Current) Value Accounting:
Current Value Accounting (CVA) was another measure suggested for the purpose. Economic value is the present value of the expected future cash flows which may be derived from an asset. Similarly, current cost may be used adequately for assets of recent origin while replacement price may be used for older assets. Opportunity cost (i.e. value in the best alternative use) and deprival value (i.e. economic value

or value to the business) may as well be the valuation criteria. The common name of all the above criteria may be the 'current value'.

The distinguished features of Current Value Accounting Method which is yet in the process of development, are enumerated below:

(i) This method also adopts monetary unit.

(ii) The 'Current Value' method is adopted as the valuation criterion of assets and liabilities.

(iii) The increase or decrease in the value of total net assets, following the valuation method as above, during an accounting period is treated as the profit or loss respectively for the period and is shown in the profit and loss account. Any such increase or decrease in the value of total net assets is analysed as follows:

(a) contribution or withdrawal of capital;
(b) withdrawal of income through dividend;
(c) gains or losses, resulting from changes in the general price level, foreign exchange adjustment and so on;
(d) ordinary income and expenditure;
(e) extraordinary items of profit and loss; and
(f) adjustment of income for previous periods.

(iv) The capital maintenance concept adopted here represents that "no amounts are regarded as distributable"

33. For example, "economic value of an asset would be equal to the loss that a company would suffer if it were to lose that asset". (V.K. Saxena, 'Inflation accounting', The Management Accountant, Oct., 1977, ICWAI, Calcutta, p. 864.)

34. R.S. Nigam, op. cit., p. 126.
Criticism

Despite all the points claimed in its favour, the CVA method suffers from the following drawbacks:

(i) Determination of the future cash flows which may be derived during the residual life of an asset is based on a mere expectation which may not come true or which may be severely affected due to uncertainty. Moreover, the adoption of an appropriate rate for the purpose of discounting presents difficulty. Needless to mention that different rates of discounting will indicate different values for the same asset at a particular point of time i.e. for a given future cash flows. It reduces the reliability of the method.

(ii) Separation of holding gains and losses from operating profit is one of the essential objects of inflation accounting. But the profit figure indicated by the Current or present value accounting method is inclusive of holding gains and losses. It, thus, brings the maintenance of real capital into question.

(iii) The method is still in the developing stage and lacks a self-contained and comprehensive body of procedures. Though the basic principles underlying the method are clearly laid down, lack of comprehensive procedures stands on the way of its wide application.

(iv) It fails to recognise purchasing power gains or losses. Thus, the current value accounting is "ignoring one

of the most important effects of inflation on financial statements and therefore ... to that extent, unsuccessful in eliminating the distorting effects of inflation on financial statements."

(v) Another drawback, which is common to all other inflation accounting methods also, is the failure to represent the final settled position of balance sheet. For example, continuous adjustment is necessary to take care of backlog depreciation due to any subsequent change in inflationary position.

(vi) "It is easy to explain and meaningful, but hard to audit .... More often than not, prices for 'used' assets are hard to get. Auditors would be required to make substantial judgemental decisions in implementing current value accounting. But we live in a litigious age, and auditors are reluctant to exercise judgement in such situations because, occasionally, subsequent events might not bear out these judgements, and costly and embarrassing lawsuits may result."

(C) **Continuously Contemporary Accounting (COCA)**:

This method has been suggested by R.J. Chambers. In fact, the method is a combination of C.P.P. and C.V.A. methods, discussed above, with the intention to have the benefits of both the methods on the one hand and simul-

36. Asim Kumar Sengupta, *op. cit.*, p. 120.


taneously to eliminate the drawbacks of the two methods on the other. However, the main features of the method may be summed up 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 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). Herein 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 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:

1. the net result of the transactions during the period,
2. the amounts of price variation adjustments, and
3. the amount of the capital maintenance adjustment.

Chambers claims the following merits of his method (COCOA):

1. **Simplicity** - The year-end adjustments 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


40. Ibid., pp. 64-69. It may be mentioned that Chambers mentions some of the points in favour of his suggested method COCOA in comparison with Current Cost Accounting (CCA) which is discussed later on in this chapter.
stocks, 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 bases used in HCA and CCA (Current Cost Accounting discussed later).

(ii) **Rigour** - The application of accrual principle is rigorous in COCOA while it is partial in HCA or CCA.

(iii) **Objectivity** - Being based on observation the financial statement figures are independently testable.

(iv) **Historicity** - 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.

(v) **Aggregability** - The 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."

(vi) **Consistency** - It is consistent because the valuation basis and the rules for price adjustments and the capital maintenance adjustments are the same over the years.

(vii) **Comparability** - Being consistent, inter-firm, intra-firm and inter-period comparisons become possible.

(viii) **Better service to the going concerns** - 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.

(ix) **Evaluation** - 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.

(x) **Costs** - 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.

**Criticism**

(i) Objection may 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

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42. R.J. Chambers, *Accounting for Inflation - Methods and Problems* (referred to in para 8.01, p. 60 of his *Inflation Accounting, op. cit.*).
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." 43

(ii) 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 shareholders' equity in monetary unit, not in current purchasing power unit. 44 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 shareholders' equity.

(iii) 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. 45

(b) Cash Flow Accounting

Justification

In all the earlier methods so far discussed, the common defect of separation of profitability from liquidity has not been duly adhered to. Accounts are maintained on

45. Ibid., p. 155.
accrual basis in each method. That is transactions are recognised as and when the amount of the transaction falls due, not when the cash is involved. Consequently, the profit figure as revealed by the profit and loss account does not represent the cash generation of the period. As a consequence, very often than not the enterprises have to face acute financial crisis. Again, all enterprises, ventures being of a short duration have been excluded from our present study, must have to survive and continue in their operation. This survival and continuity require capability of the enterprises to meet their financial obligations. Moreover, the traditional accounting depends too much on subjective judgments for allocation and valuation purposes for determining business income. The impact of subjectivity on business income is considerable and not negligible so that it can be ignored. Shareholders on the other hand are interested to know the value of their holdings. This is, however, dependent on the present value of the expected future dividends and the capital repayments, if any. So, the accounts of the on-going concerns should be so prepared as to furnish these information. Keeping in view the inflationary effects and the limitations of the conventional accounting, many academics, T.A. Lee, G.H. Lawson, R. Heller, to name a few, have suggested Cash Flow Accounting (CFA).


* He is of the opinion that cash flow profit is far less subjective than the traditional profit. (Vide T.A. Lee, A Cash Flow Reporting, Journal of Business Finance, Vol. 4, No. 8, Summer, 1972).
The Sandilands Committee was of the view that "there is no objective correct measure of 'income'. There is arbitrary and subjective judgment .... Liquidity crisis merits development of cash flow accounting." 47

The Statement of Financial Accounting Concepts (SFAC) No. 1 on "Objectives of Financial Reporting by Business Enterprises", issued by the Financial Accounting Standards Board (FASB) of U.S.A. in November 1978, has laid down, inter alia, the following objectives:

1. to provide information which is useful to investors, creditors and others in making rational decisions;
2. to assist investors and creditors in assessing future net cash flows to the enterprise in respect of amount, timing and uncertainty.

The justification for cash flow accounting can better 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 is ...."

47. Report of the Sandilands Committee, 1975, Chapter XI.
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.48

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."49

According to Lawson, "cash flow accounting constitutes the analytical framework 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 decision making."50

The above discussion clearly highlights the need for a greater cash flow orientation in financial reporting. In fact, CFA will be of great help to uphold an information system which will serve the information users to make optimal decisions in many decision areas, particularly in the field of dividend policy, performance evaluation, liquidity measurement, capital expenditure decisions, etc. We now discuss below some basics of cash flow accounting.

**What is Cash Flow Accounting?**

Cash flow accounting 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 accruals i.e. future cash flows. The CFA 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.

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54. Net Operating Profit after taxes minus net new capital investment is termed as 'Free Cash Flow' by some authors (vide M.J. Stern, *Free Cash Flow as a measure of Corporate Performance*, *The Modern Accountants Hand Book*, Ed.
the cash spent on acquisitions 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, CPA 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 recognize 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."

**Merits**

The method is more objective than any other method and so it may be considered better for the purpose of inter-period and inter-firm comparisons. It will also reduce the scope for profit manipulation which may arise under the traditional accounting system out of subjectivity involved in valuation, allocation, etc. Verification of the transactions with the help of source documents becomes easier under this method. All transactions are automatically recorded at current value since they involve either cash inflows or cash outflows which are always at current values.

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Consequently, 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. Additionally, the method is free from the problem of making distinction between capital and revenue items, allocation of costs between a series of arbitrary time periods, providing adequate depreciation, and holding gains or losses arising out of holding monetary liabilities or assets respectively. CFA seeks to incorporate a measure of consistency between decision model and performance evaluation and hence it is logical that the performance evaluation and its reporting is done in terms of cash flows.

Objections

The method is not in conformity with the present legal provisions of Sec. 210 and Sec. 211 of the Companies Act (India), which deal with the maintenance of the profit and loss account and balance sheet. Secondly, though there can be no such system of measuring profitability as is appropriate for all the enterprises, the users of accounts of an enterprise still expect a useful measure of profitability for practical purposes. This method fails to "fully meet the requirements for informations of users of accounts".

Current Cost Accounting (CCA)

The standard setting bodies of different countries

58. Porwal and Misra, op. cit., p. 89.
were in favour of a GPL (general price-level) solution (known as CPP) till mid-1970s. But this enthusiasm declined precipitately in 1975-76, which may be evidenced in the United Kingdom and Ireland when the Sandilands Committee's recommendation was published in September 1975, in the United States when SEC (Security Exchange Commission) declared their preference for a relative price solution and when FASB (Financial Accounting Standards Board) shelved its 1974 exposure draft in support of GPL accounting and also in the Australia when its standard setting body publicly proposed a current value solution.

Following the recommendation of the Sandilands Committee, the chronological developments that took place in U.K. have been included in Table 1 in the next section of this chapter dealing with 'countrywise developments'. It appears that ultimately a Guidance Note has been issued on SSAP 16: Current Cost Accounting by ASC. This statement (SSAP 16) is also under review after a voting by the members of the Institute of Chartered accountants in England and Wales in July 1982, in which SSAP 16 barely survived. Similarly, developments in U.S.A. have been shown in Table 2. Shifting attention from GPL/CPP accounting to CCA is noticed in Accounting Series Release (ASR) No. 100 of SEC in March 1976. That action by the SEC and the decidedly adverse

reaction to the earlier exposure draft of FASB on General Purchasing Power by preparers and auditors served to pave the way for FASB Statement No. 33, "Financial Reporting and Changing Prices", in 1979. Similar other proposals which are considered in various countries are:


**New Zealand** - CCA-1 Information Reflecting the Effects of Changing Prices issued in April 1982 by the New Zealand Society of Accountants.

**Canada** - Section 4610 of the CICA handbook, Reporting the Effects of Price Changes issued in December 1982 by the Canadian Institute of Chartered Accountants.

In India, however, a Guidance Note: Accounting for Changing Prices has been issued by the Research Committee of the Institute of Chartered Accountants of India recommending CCA.

The basic features of CCA as recommended by the Sandilands Committee may now be summarised as follows:

1. Money should remain the unit of measurement.
2. Assets and liabilities should be shown in the

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balance sheet at a valuation, criterion being the 'value to the business', discussed later.

(iii) Operating profit is determined after charging the 'value to the business' of assets consumed during the period, thus excluding holding gains and extra-ordinary gains from operating profit, which should be shown separately.

(iv) Current cost accounts should, as soon as practicable, become the basic published accounts of companies and C.P.F. supplementary statements should not be attached to current cost accounts. 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.

(v) Published accounts should include (a) a fund flow statement of the year, and (b) a statement from the Directors in their report on the adequacy of the cash resources likely to become available to meet the company’s requirements in the ensuing year.

We now deal with some of the important aspects of 'Current Cost Accounting'.

(1) CCA is not a system of accounting for general inflation - it reflects the impact of specific price changes on the business through profit and loss account and balance sheet.

(2) SSAP 16 calls for a complete profit and loss account and complete balance sheet on a current cost basis that may be presented as:
(a) supplementary information,

(b) as the main accounts with supplementary historic cost accounts, or

(c) as the only accounts accompanied by adequate historic cost information.

Thus, it provides for current cost information to be included in annual financial statements in addition to historic cost information.

(3) The standard is applicable to all the listed and unlisted companies except those small non-listed companies which satisfy at least two of the following three criteria, namely,-

(a) turnover is less than £5 million per annum;

(b) balance sheet total in the historic cost accounts at the beginning of the period is less than £3,50,000, and

(c) average number of employees is less than 250.

It also exempts authorised insurers, property investment and dealing entities, investment trust companies and non-profit entities such as charities, friendly societies, trade unions and pension funds.

(4) Its objective is to provide more useful information than that available from historic cost accounts alone for guidance of the management, the shareholders and others on such matters as:
(a) financial viability of the business;
(b) return on investment;
(c) pricing policy, cost control and distribution decisions, and
(d) gearing.

It may be stated that the information to be provided for the above purposes would be available from the current cost profit and loss account and the balance sheet. Therefore, from the point of profit and loss account, the objective is achieved in two stages - in the first stage, by calculating current cost operating profit (before interest on net borrowing and taxation) and, in the second stage, by determining the current cost profit attributable to shareholders (calculated after interest, taxation and extraordinary items). In the balance sheet, the objective is met by including, where practicable, the assets at their 'value to the business' based on current price levels.

(6) The CCA provides a more realistic concept of profit in current cost operating profit. It 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 but without taking into account the way in which it is financed". It also provides a realistic statement of the assets employed in the business and enables a relationship to be established between the current cost profit and the net assets employed.

64. SSAP 16, para. 6.
The current cost balance sheet includes a reserve in addition to those included in historic cost accounts. This is discussed later.

We shall now clarify certain terms and explain in short the concept of current cost profit.

Valuation Criterion

'Value to the business' is the recommended criterion. There may be three alternative bases for such valuation criterion. They are - (a) replacement cost (RC); (b) net realisable value (NRV); and (c) present value of the expected future earnings from the asset or 'economic value' (PV). Selecting a suitable base should be a managerial decision. But Parker and Harcourt have made a guideline for such a selection out of the six hypothetical relationships of these bases as follows:

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<td>3. PV &gt; RC &gt; NRV</td>
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<td>4. PV &gt; NRV &gt; RC</td>
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<td>5. RC &gt; PV &gt; NRV</td>
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<tr>
<td>6. RC &gt; NRV &gt; PV</td>
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It is to be mentioned that the replacement cost will mean the current purchase price of the asset. This concept is analogous to the going-concern concept of the conventional
accounting in the sense that going concerns will be required to replace their assets if they have to continue in their businesses. Naturally, the depreciation provision of an asset till the valuation date would form a part of the replacement cost. That is, total amount of replacement cost would be equal to the replacement cost of the existing asset in its then state and condition plus the depreciation provision of that asset till the valuation date.

Now, the basis of valuation suggested in the Guidance Notes on SSAP 16: Current Cost Accounting, issued by the Accounting Standards Committee (ASC), in relation to different items of assets and liabilities may be stated in a nutshell.

(i) Physical assets other than land and buildings

It should be valued at lower of the two - (a) net current replacement cost, and (b) recoverable amount. The net current replacement cost will be calculated from gross current replacement cost by reference to the proportion of the total working life that remains and the depreciation policy. However, the gross current replacement cost may be determined by applying the relevant indices to their gross book values. But in cases of non-availability of relevant indices or if it is considered that the use of indices may not represent realistic current replacement cost, the other bases for determination of current replacement cost are

expert opinions, other evidence of the current cost of assets, or groups of assets, having a similar service potential, actual purchase price and suppliers' price lists. Recoverable amount will mean the net realisable value in case of assets which are put out of use while it will mean the net present value of the expected future cash flows from the assets in case of assets which continue in use.

(ii) Land and Buildings: For valuation purposes land and buildings are divided into two categories: (a) Specialised, and (b) Non-specialised.

(a) Specialised Buildings - Buildings which are specialised because of their location, arrangement, form of construction and size, are to be valued according to the same principle as applicable to other physical assets, described in (i) above. The underlying land should be valued on the basis applicable to non-specialised buildings, described below, unless it is immaterial in relation to the total assets of the business.

(b) Non-specialised Buildings - All such buildings like offices, shops and general purpose industrial units should be valued at net current replacement cost which should be ascertained by individual valuation at their open market value for the existing use (including incidental acquisition costs where material). Land and buildings are valued together. But for depreciation purposes an estimate is made to segregate the value of the building element since land is not subject to depreciation. Surplus land and buildings should,
however, be valued at net realisable value, i.e. open market value less cost of disposal.

(iii) Wasting Assets: Where acquisition costs of these assets have been capitalised, current replacement costs should, where possible, be based on the best evidence available as for other fixed assets. Where capitalisation of acquisition costs is not the practice under historic cost convention, violation of this convention is not intended.

(iv) Intangible Assets: Intangible assets like patents and copyrights (excluding goodwill) which have service potential consumable by the business should be restated at their value to the business. Where estimation of the current replacement cost of such assets is impracticable, the application of a general index or the continuing use of the existing historic cost carrying values is necessary.

(v) Goodwill: Goodwill arising on the acquisition of a company should be offset against revaluation surpluses resulting from the current cost revaluation of the relevant assets to the extent that such surpluses existed at the time of acquisition. Thus, the value of goodwill should be the difference between the purchase price and the value to the business of the net assets acquired at the date of acquisition, less the amounts written off, if any. In case of the impracticability of estimating the value to the business of the acquired assets at the date of acquisition which took place some time ago, goodwill should be offset against the current cost reserve.
(vi) **Stock**: Its value to the business is the lower of its current replacement cost and the net realisable value on the date of consumption or the balance sheet date as may be appropriate. If identical replacement of stock consumed does not take place, the cost of the net stock if it is substantially similar to that consumed or a price index relating to a class of goods which is similar to that consumed or a general price index should be used for valuation purposes.

(vii) **Marketable Securities**: These are to be shown at their market values.

(viii) **Monetary Assets**: Assets like receivables, advances, pre-received incomes and cash and bank balances are to be valued at their historic costs.

(ix) **Liabilities**: Liabilities of all types - short-term and long-term - are also recommended to be shown at their historic costs.

**Concepts of Capital and Profit**

The Sandilands Committee considered the following five sets of concepts of profit and capital. Considering the various aspects of the alternative concepts mentioned below, the Committee ultimately accepted the last one. "The main ground why the committee accepted the 'value to the business' concept of capital and the related concept of profit is that this concept gives a figure of profit equivalent to the operating gains made during the year." 67 The 67. Asim Kumar Sengupta, *op. cit.*, pp. 106-107.

SI. Ho, Capital
1. It is the amount of the shareholders' interest at the beginning of the year.
2. It is the amount of purchasing power at the end of the year, which is equivalent to the monetary amount of the shareholders' interest at the beginning.
3. It is the productive capacity of the assets held by the company.
4. It is the amount of assets at the beginning of the year adjusted to their equivalent in terms of purchasing power at the end of the year.
5. It is the 'value to the business' of the company's assets.

Profit
1. It is the gain arising after maintaining the shareholders' interest at the beginning.
2. It is the gain arising after maintaining the purchasing power of the shareholders' interest at the beginning.
3. It is the gain after maintaining that productive capacity.
4. It is the gain arising after maintaining the purchasing power of the assets at the beginning of the year.
5. It is the gain calculated by charging for assets consumed on the basis of their 'value to the business'.

Committee, however, is clear that none of the above five concepts is appropriate for all circumstances. The appropriateness or suitability of the concepts in a particular situation depends, however, on the needs of the users of accounts.

Classification of Gains

There are three types of gains in the recommendation of the Sandilands Committee. They are (i) operating gains, (ii) holding gains, and (iii) extra-ordinary gains. These concepts are discussed below:

(i) Operating Gain - This is, in fact, the 'current
cost profit' as described in CCA. The process of determining this profit, according to the recommendation of the Sandilands Committee, will be discussed later. Presently, it can be defined as the difference between the amount of revenue of the company's output and 'the value to the business' of the input consumed for generating this revenue. The underlying idea is to relate profit exclusively with the trading activities. It will help measure the effectiveness of the trading activities, as well as demonstrate the "true and fair view" of the state of affairs. Gains other than operating gains should not be disregarded and even they may be considered distributable in some cases. But they are desired to be shown conspicuously in separate categories. "The job of inflation accounting will be a lot over if profit for operating activities and profit for other reasons are shown separately in accounts. Main concern in inflation remains to demonstrate conspicuously the impact of inflation on the operations of a company during a particular accounting year."\(^69\)

(ii) **Holding Gain** - It is the difference between the value to the company of an asset at any point of time and the historic cost of that asset.

(iii) **Extra-ordinary Gain** - It is defined as the difference between the amount derived on disposal of any item other than the trading product and their 'value to the business' at that time. Profit on sale of fixed assets and non-trading investments may be cited as examples.

According to the principle of realisation, total gains may be divided into two: (a) Realised, and (b) Unrealised.

(a) Realised Gain - It is the gain which is realised on sale or disposal of any asset, liability, goods or services.

(b) Unrealised Gain - It is the gain which is not realised. It arises when the asset is still held by the company but the valuation reveals gains. It is not suggested "that 'unrealised gains' should be used to inflate the figure of profit".70

Current Cost Operating Profit

In determining operating profit under CCA, three adjustments71 are to be made to the historic cost operating profit before interest. They are -

(a) Depreciation Adjustment - The amount of such adjustment is the difference between the value to the business of the part of fixed assets consumed during the accounting period and the amount of depreciation charged on the basis of historic costs.

(b) Cost of Sales Adjustment (COSA) - It is the difference between the value to the business of stock consumed and the cost of stock charged on an historic cost basis. The value to the business of stock consumed will

70. Ibid.
71. SSAP 16, paras. 9-11.
generally be the replacement cost of the stock on the date of consumption. For the purpose, 'averaging method' may be applied to convert the historic costs of both the opening and closing stocks to an average replacement or current cost for the year using appropriate index. These converted figures are then used to compute the replacement or current cost of sales.

The method of computing COSA may be represented by the following formula:

\[
\text{COSA} = (C - O) - I_a \left( \frac{C}{I_c} - \frac{O}{I_o} \right)
\]

where,
- \(O\) = Historic cost of opening stock
- \(C\) = Historic cost of closing stock
- \(I_a\) = Average index number for the period
- \(I_c\) = Index number appropriate to closing stock
- \(I_o\) = Index number appropriate to opening stock

Determination of current cost of sales on an item by item basis being impracticable in the real world situation, similar items may be grouped together for the purpose. Further, a company having fairly regular sales pattern in a situation of steady increase in prices may use average method of calculation of current cost of sales.

(c) **Monetary Working Capital Adjustment (MWCA)** -

Monetary working capital is generally the working capital besides stock and usually represented by the difference between the trade debtors and trade creditors. Naturally, it is an integral part of the net operating assets of the business. But it is to be mentioned that it should include
stocks which are not subject to a cost of sales adjustment.
The amount of this adjustment should represent the amount of additional (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.

For computing MWCA a formula identical to that used for computing the COSA may be used:

\[ MWCA = (C - O) - I_a \left( \frac{C}{I_c} - \frac{O}{I_o} \right) \]

Where,
- \( C \) = Opening MWCA
- \( O \) = Closing MWCA
- \( I_a \) = Average index number for the period
- \( I_c \) = Index number appropriate to opening MWCA
- \( I_o \) = Index number appropriate to closing MWCA.

In a business which holds stocks, the MWCA complements the COSA and together they allow for the impact of price changes on the total amount of working capital used by the business in its day-to-day operations.\(^72\)

Shareholders' Profit

A fourth adjustment, namely gearing adjustment,\(^73\) is needed to the current cost operating profit as above to determine the portion of it attributable to shareholders. It is so needed where the net operating assets are financed partly by the lenders' capital. So this adjustment abates the operating adjustments in the gearing proportion.

\(^{72}\) SSAP 16, para. 12.
\(^{73}\) SSAP 16, paras. 16-18.
Shareholders' share of the current cost profit is the surplus after making allowance for the impact of price changes on the shareholders' interest in the net operating assets, having provided for the maintenance of lenders' capital in accordance with their repayments rights. "While the depreciation adjustment, cost of sales adjustment and monetary working capital adjustments reduce the historical cost income, gearing adjustments partly offset it. The higher the proportion of the long term borrowing to operating assets, the higher would be the offsetting effect as a substantial part of the effect of inflation would be borne by lenders." 74

The full amount attributable to the shareholders, as above, should not be distributed. The distributable profit should be determined after considering the "capital expenditure plans, changes in the volume of working capital, the effect of funding requirements of changes in production methods and efficiency, liquidity and new financing arrangements" 75 and the possibility of erosion of the operating capability of the business.

Reserves

In addition to the traditional reserves those may appear in the historic cost balance sheets, the following two additional amounts should be included in the current cost balance sheet under the heading "current cost reserve".

75. Ramesh Gupta, op. cit., p. 125.
(i) Unrealised revaluation surpluses on fixed assets, stock and investments.

(ii) Realised amounts equal to the cumulative net total of the current cost adjustment, i.e. depreciation adjustment, COBA, MWCA and gearing adjustments.

It is to be mentioned here that the backlog depreciation, being the difference between the gross current replacement cost and the accumulated depreciation, is to be transferred to the current cost reserve. It is not charged against revenue because it represents the effect of current price changes on past consumption and not the present consumption. Naturally, the aggregate of current cost depreciation charge over the life of the asset will fall short of the ultimate replacement cost of the asset consumed. This shortfall is brought into the price level adjustment process each year by reinvesting the funds created by annual depreciation charges, in other fixed or current assets (which is normally done) which are then generally subject to adjustments to allow for price changes. However, the problem of providing cash for replacement remains with the financial management.

Use of Index

It has been suggested in the Guidance Notes on SSAP No. 16 that in determining the current value of plant and machinery indices prepared by government and private agencies should be used. Again, for determining current cost of sales
and inventories the Notes have suggested a method based on the use of indices. It appears, then, that specific prices appropriate to the industry should be used.

Merits of CCA

(i) It is a rational and comprehensive system of accounting for changing prices.

(ii) By using specific indices the method attempts to maintain the operating capability of the enterprise during inflation. This concept of capital maintenance is more realistic than the general purchasing power concept.

(iii) By adopting the 'value to the business' criterion of valuation, it can provide "more realistic information on the costs, profits, the value of assets, and the return on capital and on assets." It thus provides a relatively sound basis for managerial decisions.

(iv) By differentiating between the operating gains, holding gains and extra-ordinary gains, the method enables better performance evaluation.

(v) By introducing cash flow statements the method provides a basis for providing information as to the liquidity position in a more meaningful way.

(vi) It is evolutionary and not revolutionary in nature. Because, instead of introducing new principles it involves only the extension and development of established

78. R.S. Misra, on. cit., p. 127.
Shortcomings of CCA: The CCA is not a flawless method of inflation accounting. The Sandilands Committee itself made a reference to various problems to be faced while implementing CCA. It has been officially criticised as unacceptable in the recommended form by Mr. Douglas Morpeth as the Chairman of the Consultative Committee of the Accountancy Bodies (C.C.A.B.) appointed in U.K. by the Institute of Chartered Accountants of England and Ireland. R.J. Chambers made an in-depth criticism of the Sandilands Report. John Fisher admitted that while conducting a case study of five companies he came across a number of difficulties relating to the practical aspect of accounting. However, the main shortcomings of CCA may be summed up in the following paragraphs:

(i) It does not take into account all aspects of the changes in the value of money.

(ii) Sandilands Committee "focused on adjustments to physical assets and ignored the effects of inflation on monetary assets and liabilities", namely, purchasing power gains or losses.

(iii) Problems of inter-temporal comparisons at the

81. Ramesh Gupta, op. cit., p. 91.
instance of unstable measuring unit is not dealt with at all in the Sandilands Report.

(iv) It is too much subjective e.g., regarding valuation process, choice of index, etc.

(v) It provides for piecemeal treatment of items while the claim is for a full fledged consideration. For example, only the cost of inventories consumed and the depreciation of fixed assets are considered in the profit and loss account while the valuation of fixed assets and inventories are considered in balance sheet.

(vi) It adopts the concept of maintenance of physical productive capacity and thus fails to "provide the owners of an enterprise information relating to the impact of general inflation on the enterprise's assets and income".83

(vii) To consider the difference between the historic cost and value to the business of an asset as holding gain is fallacious because it does not represent any increase in asset itself but merely represents decrease in the value of money.

(viii) Valuation technique is ill-defined. "It is a / family of techniques rather than a single technique capable of Application by all companies."84 Determination of economic value involving estimation of future services of an asset, which is uncertain and subjective, and selection of an appropriate rate of discounting which is also subjective.

82. Ibid., p. 88.
84. N. Mishra, op. cit., p. 34.
creates difficulty.

(ix) Additional advantage claimed by proponents of CCA from inclusion of cash flow statement to CCA should not be recognised as an advantage of CCA method itself because the same advantage may be derived from any other method (historic cost, CPP, etc.) if cash flow statement is annexed to those methods.

(x) A number of problems may arise from its implementation. For example:

(a) Applicability criteria as recommended by the Sandilands Committee are - it is applicable to (i) the companies listed on a recognised stock exchange, (ii) the companies having either a turnover or total assets in excess of £ 10 million in the previous year, and (iii) the nationalised industries. The criteria have, however, been revised in the SSAP 16 as mentioned earlier. So a company satisfying the applicability criteria in one year may be exempted in another year. It will result in a frequent change in the adoption of accounting system leading to inconsistency. Moreover, simultaneous application of different accounting methods by different companies will lack in uniformity and conformity. Again, even after satisfying the applicability criteria an enterprise will have to face three alternative ways of adopting CCA method. They are - (i) adoption of CCA as the main accounts supplemented by historic cost accounts, (ii) adoption of historic cost accounts as the main accounts supplemented by CCA accounts, and (iii) CCA as the ONLY accounts accompanied by adequate historic cost
INFORMATION. It may also lead to lack of uniformity.

(b) Adoption of CCA as the main or only accounts will require necessary amendments in the Companies Act.

(c) "The adjustment of accounts of foreign subsidiaries and associates would involve many difficulties if the parent company adopts the CCA while the subsidiaries and associates do not. Whether the latter would go for the CCA depends on so many factors such as availability of suitable indices, economic environment, accounting conventions, attitude of the government and so on."85

(xi) By providing for the use of specific indices it fails to reflect the effects of general inflation.

COUNTRYWISE DEVELOPMENTS

After discussing the principal measures of inflation accounting suggested by various professional institutes and academics from different corners of the world, we may now have an attempt to summarize the countrywise developments.

* In India, the forms and contents of financial statements are governed by Sec. 211 of the Companies Act. The section provides that every balance sheet of a company shall "be in the form set out in Part I of Schedule VI, or as near thereto as circumstances admit or in such other form as may be approved by the Central Government either generally or in any particular case; and in preparing the balance sheet due regard shall be had, as far as may be, to the general instructions for preparation of balance sheet under the heading 'Notes' at the end of that part". Similarly, every profit and loss account of a company should comply with the requirements of Part II of Schedule VI.

85 Ibid., p. 35.
But it will not be out of place to mention that inflation is a world-wide phenomenon and the need for incorporating adverse effects of inflation in accounting has been realised by many countries of the world. But of them, only a few developed countries like U.K., U.S.A., Australia, New Zealand, Canada, etc., have suggested some measures and they are still making endeavour in search of better measures. We give below an account of developments that took place in this respect in a few leading countries.

Developments in U.K.

Table 1 is an abridged list of chronological developments in U.K.

<table>
<thead>
<tr>
<th>Time</th>
<th>Nature of Development</th>
<th>Title</th>
<th>Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan., 1949</td>
<td>Accounting Principle No. N-12</td>
<td>&quot;Rising Prices Level in Relation to the Accounts&quot;</td>
<td>The Institute of Chartered Accountants in England and Wales</td>
</tr>
<tr>
<td>May, 1952</td>
<td>Recommendation</td>
<td>&quot;Accounting in Relation to Changes in the Purchasing Power of Money&quot;</td>
<td>Same as above</td>
</tr>
<tr>
<td>Before 1970</td>
<td>Booklet</td>
<td>&quot;Accounting for Stewardship in a Period of Inflation&quot;</td>
<td>Research Foundation of the above Institute</td>
</tr>
<tr>
<td>Jan., 1973</td>
<td>Exposure Draft (ED) - 8</td>
<td>&quot;Accounting for the Changes in the Purchasing Power of Money&quot;</td>
<td>Accounting Standards Steering Committee (ASSC)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time</th>
<th>Nature of Development</th>
<th>Title</th>
<th>Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>May, 1974</td>
<td>Provisional Statement of the Standard Accounting Practice (PSSAP) - 7</td>
<td>&quot;Accounting for Changes in the Purchasing Power of Money&quot;</td>
<td>ASC</td>
</tr>
<tr>
<td>Nov., 1975</td>
<td>Comments</td>
<td>&quot;Initial Reactions&quot; to the Sandilands Report</td>
<td>Consultative Committee of Accountancy Bodies (CCAB)</td>
</tr>
<tr>
<td>Nov., 1976</td>
<td>ED - 18</td>
<td>Current Cost Accounting</td>
<td>Accounting Standards Committee (ASC)</td>
</tr>
<tr>
<td>Nov., 1977</td>
<td>Hyde Guidelines</td>
<td>&quot;Inflation Accounting: An Interim Recommendation&quot;</td>
<td>ASC</td>
</tr>
<tr>
<td>April, 1979</td>
<td>ED - 24</td>
<td>&quot;Current Cost Accounting&quot;</td>
<td>ASC</td>
</tr>
<tr>
<td>March, 1980</td>
<td>SSAP - 16</td>
<td>&quot;Current Cost Accounting&quot;</td>
<td>ASC</td>
</tr>
<tr>
<td>Guidance Notes</td>
<td>SSAP No. 16</td>
<td>Current Cost Accounting</td>
<td>ASC</td>
</tr>
<tr>
<td>July, 1984</td>
<td>ED - 35</td>
<td>&quot;Accounting for the Effects of Changing Prices&quot;</td>
<td>ASC</td>
</tr>
<tr>
<td>1986</td>
<td>Technical Release (TR) 604</td>
<td>TR 604</td>
<td>ASC</td>
</tr>
</tbody>
</table>
It transpires from Table 1 above that developments started in U.K. as early as in 1949 when it experienced a high rate of inflation resulting from the Second World War. The Institute of Chartered Accountants in England and Wales (ICAEW) took the pioneering role. Devaluation in 1966 made the subject of inflation accounting more important. ASSC was established in 1970 by various professional bodies, which published the method of inflation accounting suggested by the research foundation of the ICAEW, in ED-8. At the same time, i.e. in January 1973, the ICAEW issued working guide for adopting ED-8. After a considerable debate on ED-8, ASSC issued PSSAP-7 in May 1974. PSSAP-7 recommended CPP method which has been discussed earlier. The most important feature of CPP method is the replacement of monetary unit by purchasing power unit.

During the discussion period of ED-8, an independent committee of Inquiry into Inflation Accounting, popularly known as Sandilands Committee, was set up by the Government, which submitted its wide-versed 'Sandilands Report' in September, 1975. The report went in for 'Current Cost Accounting' (CCA) as opposed to CPP. Initial reactions to the Sandilands Report have been highlighted by CCAB in November, 1975. British Government accepted the Sandilands Report in principle; but it appointed the Inflation Accounting Steering Group (IASG), headed by Mr. D. Morpeth, to convert the Sandilands Report into an exposure draft after due consideration of the comments of the CCAB and others. In September 1976, IASG submitted the exposure draft to the ASC which published it in November 1976 as ED-18.
"To the surprise of most, ED-18 was rejected by a majority vote of the British Chartered Accountants on July 6, 1977. It was said that the Morpeth Committee in its rejection of ED-18 recommended too much too soon. However, with the rejection of ED-18, CCAB appointed the Hyde Committee which submitted in November, 1977 'An Interim Recommendation', popularly known as Hyde Guidelines. It recommended three adjustments to income only leaving the balance sheet values untouched. The recommended adjustments were (i) depreciation, (ii) cost of goods sold, and (iii) gearing adjustment. Hyde guidelines were of a temporary nature and IASB was still continuing its endeavour for a better version of ED-18. Ultimately, in April 1979, ASC published ED-24 which introduced one more adjustment known as Monetary Working Capital Adjustment.

ED-24 was also debated at length. In March, 1980, ASC issued SSAP-16 incorporating some of the debate on ED-24. The Guidance Notes have also been issued by ASC for implementing SSAP-16. CCA system proposed by SSAP-16 has been discussed earlier in detail. Significant responses were noticed in following the standard by the enterprises falling within the applicability criteria. "It was reported ... that a stock exchange survey has revealed an early compliance rate of more than 90 per cent of the entities affected; most are producing supplementary CCA statements."

87. Ranash Gupta, "., p. 81.
But within a very short period the dissatisfaction with SSAP-16 was so widespread and strong that it had to face comments from the Hewden-Stuart Plant in saying that "in the opinion of your Board the accounts are certainly meaningless, possibly misleading and probably nonsense. They are of no practical value to the directors or the management of your company." Consequently to this type of dissatisfaction the ASC had to reconsider SSAP-16 and ultimately it came out with ED-35 which came into effect from January 1, 1985. The main departures of ED-35 from SSAP-16 lie in the applicability criteria and the disclosure requirements. The revised Exposure Draft applies to all companies other than value based companies (e.g. insurance, investment, property dealing) and wholly owned subsidiary companies. Regarding disclosure requirements, the current cost information is to be given in a note to the main accounts rather than in supplementary current cost accounts. The information includes showing the effect of current cost adjustments namely, depreciation, COSA, MWCA and gearing adjustment. Separate disclosures of gross current cost of fixed assets and inventory, and the accumulated current cost depreciation are also required.

"In many ways, ED-35 is a damp squib. The disclosure requirements are reduced and the status of the current cost information is downgraded from a separate set of accounts to a note. However, the problem of finding reliable and

It would be of great interest to note that the proposed standard was vehemently criticised by the professional bodies. The ASC has, therefore, boxed to the unrelenting criticism of ED-35 which was considered to be the proposed successor of SSAP-16 and it has abandoned the idea of a standard based on ED-35, which has been withdrawn. It is now considering fresh proposals put forward by Peat's Michael Hanahall. In the meantime, despite widespread non-compliance SSAP-16 is to remain in force. 91

In a recent statement, the Accounting Standards Committee (ASC) in U.K. has proposed to the six major accountancy bodies of the country that SSAP-16, "Current Cost Accounting", should be withdrawn. 92 Technical Release (TR) 604 issued by the ASC sets out its policy on accounting for the effects of changing prices. These are quoted below.

(1) The Accounting Standards Committee reaffirms its view that where historic cost accounts are materially affected by changing prices, information about the effects of changing prices is necessary for an appreciation of a company's results and financial position. ASC also remains

90. Ibid., p. 14.
of the view that current cost accounting is the most appropriate way of measuring the effect of changing price levels on the great majority of economic entities. It, therefore, urges listed companies and large enterprises generally to keep in mind the long-term persistence of inflationary effects on their capital and where these are judged material, to disclose information about them by reference to current costs.

(2) In order to free the way for innovation and development of appropriate disclosures, ASC proposes that SSAP 16 should be withdrawn. ASC considers that its general principles and methodology remain sound and commends them as the preferred model of current cost accounting. In order to preserve the experience gained over the last 10 years, ASC plans to make use of the standard, with supplementary material, as the official Handbook of Accounting for Changing Prices.

(3) In the light of experience gained so far, ASC is convinced that if a general practice of even modest minimum disclosure is to be established, it is presently beyond the accounting profession alone. ASC intends to consult with the CCAB about how such a minimum disclosure requirement might be developed and discuss with them whether statutory support should be sought.

(4) In recognition of the fundamental importance of understanding how changing prices affect company accounts, ASC urges CCAB to continue to encourage such understanding by retaining the subject in examination syllabuses. It
also intends to keep under active development and review means of improving cost-effective calculation and effectual disclosure of information about changing price levels, to encourage companies to work to the same end, and to ensure that there is a wide understanding of the effects of inflation on company financing and how to account for it.

**Developments in U.S.A.**

Table 2 summarizes the major developments that have taken place in U.S.A., arranged in order of their occurrences.

<table>
<thead>
<tr>
<th>Time</th>
<th>Nature of Development</th>
<th>Title</th>
<th>Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec., 1947</td>
<td>Accounting Research Bulletin (ARB) No. 33</td>
<td>&quot;Depreciation and High Costs&quot;</td>
<td>The Committee on Accounting Procedure</td>
</tr>
<tr>
<td>1951</td>
<td>Supplementary Statement No.2</td>
<td>&quot;Price Level Changes and Financial Statements&quot;</td>
<td>Committee of the American Accounting Association</td>
</tr>
<tr>
<td>1958</td>
<td>Publication</td>
<td>&quot;Survey on Price-Level Adjustment of Depreciation&quot;</td>
<td>American Institute of Certified Public Accountants (AICPA)</td>
</tr>
<tr>
<td>1963</td>
<td>Accounting Research Study (ARS) No. 6</td>
<td>&quot;Reporting the Financial Effects of Price-Level Changes&quot;</td>
<td>AICPA</td>
</tr>
<tr>
<td>June, 1969</td>
<td>Accounting Principles Board (APB) Statement No. 3</td>
<td>&quot;Financial Statements Restated for General Price Level Changes&quot;</td>
<td>Accounting Principles Board (APB)</td>
</tr>
<tr>
<td>Time</td>
<td>Nature of Development</td>
<td>Title</td>
<td>Authority</td>
</tr>
<tr>
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<td>----------------------------------------------------------------------</td>
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</tr>
<tr>
<td>March, 1976</td>
<td>Notice of Adoption of Amendments to Regulations S-X</td>
<td>The Securities and Exchange Commission (SEC)</td>
<td></td>
</tr>
<tr>
<td>No. 190</td>
<td>Require Disclosure of Certain Replacement Cost Data</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec., 1978</td>
<td>E.D.</td>
<td>&quot;Financial Reporting and Changing Prices&quot;</td>
<td>FASB</td>
</tr>
<tr>
<td>March, 1979</td>
<td>E.D.</td>
<td>&quot;Constant Dollar Accounting&quot; as a Supplement to the 1974 proposed statement on general purchasing power adjustments</td>
<td>FASB</td>
</tr>
<tr>
<td>Sept., 1979</td>
<td>Statement of</td>
<td>&quot;Financial Reporting and Changing Prices&quot;</td>
<td>FASB</td>
</tr>
<tr>
<td>No. 33</td>
<td>Financial Accounting and Changing Standard Prices</td>
<td></td>
<td></td>
</tr>
<tr>
<td>etc.</td>
<td>e.g.</td>
<td></td>
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</tbody>
</table>
Table 2 reveals one common feature, that is, U.S.A. also started thinking on the matter after the Second World War, perhaps being badly affected by the adversities of the Great War. The Committee on Accounting Procedure was the predecessor of the Accounting Principles Board (APB) of the AICPA, which was vested with the responsibility of setting accounting standards. After facing some criticisms on the APB during 1960s, AICPA set up two study groups in 1971. One group, known as the Wheat study group, was headed by the former commissioner Wheat of the SEC, an arm of the U.S. Congress. On its recommendation FASB was established, which took over the charge from APB in June 1973. ARS-6 of AICPA and APB-3 suggested more or less the same principles of Stabilized Accounting. FASB after proper discussion memorandum in early 1974 published the Exposure Draft in December of the same year requiring supplementary disclosure of specified financial information in units of general purchasing power. Before finalising the standard by the Board, SEC released ASR 190 requiring disclosure of replacement cost data on inventories and on the 'equivalent capacity' of the fixed assets and also its effect on cost of goods sold and depreciation. The difference between the replacement cost of fixed assets as indicated in the Sandilands Report and the SEC is noteworthy. The former meant for the replacement cost of the fixed assets actually owned while the latter dealt with the replacement cost of the equivalent productive capacity of the fixed assets.\(^\text{127}\)

\(^{127}\) Ramesh Gupta, op. cit., p. 205.
After a discussion memorandum in December 1976 as mentioned in Table 2 and a Research Report on "Field Tests of Financial Reporting in Units of General Purchasing Power" in May 1977, the FASB issued in December 1978 an ED requiring supplemental information on the current year income from continuing operations and a five-year summary of key financial data after selecting the current cost basis or the historic cost/constant dollar basis (price level accounting). In March 1979, another ED on "Constant Dollar Accounting" was issued by FASB. Finally, in September 1979, the FASB issued its latest standard, FASB-33. The features of FASB-33 are discussed below.

(i) Applicability criteria - It is applicable to all public companies which will satisfy any of the following two criteria:

(a) Gross historic cost of inventories and fixed assets exceeds $125 million;

(b) net historic cost (i.e., after depreciation) of total assets exceeds $1 billion.

(ii) Effective date - The statement has been made effective for the fiscal years ended on or after 25th December, 1979. However, implementation of the provisions relating to current cost information could be delayed by one year.

(iii) Basis of information - It requires disclosure of both of the following:
(a) Constant dollar information computed by using consumer price index for all urban consumers, reflecting changes in the general price level;

(b) Current cost information computed by using specific price indices, reflecting changes in the prices of specific assets.

(iv) Mode of presentation - The required information should be presented as supplementary to the annual reports and may be presented in any of the following ways: (a) supplementary statement, (b) schedules, and (c) supplementary notes outside the basic financial statements.

(v) Contents - One set of information is required for the current year while other set will relate to the last five years in addition to the special narrative notes.

(A) Current year's information:

(i) Income from continuing operations with:

(a) revenues and expenses measured on the same historic cost basis as in the primary financial statements but in units of general purchasing power;

(b) cost of goods sold and depreciation expense measured at current cost.

(ii) The gain or loss on holding net monetary items;

(iii) The current cost amounts of inventory and fixed assets at the end of the current fiscal year:
(iv) The increases or decreases in current cost amounts of the inventory and fixed assets, net of general inflation.

(B) Last five years' information:

All financial enterprises are required to present a five-year summary of selected financial data stated in units of general purchasing power with the object to focus on trends in 'real' terms.

The FASB No. 33 was an experimental measure with an assurance that the situation will be reviewed within a period not exceeding five years. Accordingly, the FASB issued Statement No. 33 in November 1984. By the issuance of this statement the board agreed to do away with the dual aspect of reporting and retained only current cost information. In December 1984, the board again brought out an exposure draft which says that if an enterprise presents the minimum information as per the proposed statement, the five year summary of selected financial data would be stated in average of the current year units of purchasing power. The option to use the base year for the U.S. consumer price index stands eliminated, thus improving the comparison of disclosures across enterprises.94

Comparison between SSAP 16 and FASB 33

(1) FASB 33 requires supplementary disclosure of

94 B.M. Lall Nigam, Paper presented at the XII All-India Accounting Conference of the Indian Accounting Association held at Jaipur on 5 and 6 October, 1985.
information on income from continuing operations on both a constant dollar and a current cost basis and consequently does not tamper with the primary financial statements. Supplemen tary statement is, moreover, on an experimental basis for comprehensive review within a period of five years. But SSAP 16, on the other hand, calls for a complete set of profit and loss account and balance sheet on a current cost basis only, which may be presented as supplementary information or as the 'main accounts with supplementary historic cost accounts' or as the 'only accounts accompanied by adequate historic cost information'.

(2) FASB-33 requires that only the cost of sales and depreciation should be presented both in terms of units of general purchasing power and in terms of current cost in determining supplemental measures of income or loss from continuing operations but the inventory and property, plant and equipment only should be presented separately in terms of current cost. In contrast, SSAP-16 calls for a comprehensive measure.

(3) Current cost information required under FASB-33 should be measured in terms of general purchasing power while SSAP-16 uses specific price indices for preparation of CCA accounts.

(4) FASB-33 differs from SSAP-16 in that the latter calls for a monetary working capital adjustment and a gearing

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adjustment whereas the former does not. However, under FASB approach, the monetary working capital items are included with other monetary items in a calculation of the "purchasing power gains or loss on net monetary items" since FASB does not distinguish between short-term and long-term monetary items.

(5) Under SSAP-16 nominal increases in current cost amounts of inventories and property, plant and equipment and monetary working capital adjustments are reflected initially in a "current cost reserve" which is a component of shareholders' equity. A distinction is also maintained with the current cost reserve between those amounts that have been realised and those amounts that are unrealised. In contrast, FASB-33 highlights a separate measure of the periodic increases or decreases in the current cost amounts of inventory and property, plant and equipment, net of inflation - that is, a separate measure of the 'real holding gains' during the current period. No distinction is required to be made between real holding gains that have been 'realised' by consuming assets in operations during the period and real holding gains that remain 'unrealised' in the sense that they relate to assets still on hand at the end of the period.

(6) The fundamental difference arises, however, from two different concepts of capital maintenance. SSAP-16 incorporates a physical capacity (operating capability) main-

Developments in India

The developments in India in this respect are very slow, unsatisfactory and an overview will reveal the belated emphasis on the subject by our professional and accounting institutions, namely, the Institute of Chartered Accountants of India (ICAI) and the Institute of Cost and Works Accountants of India (ICWAI). A detailed discussion on the subject in Indian context is made in Chapter 5. However, it may be mentioned briefly that the ICAI issued a guidance note on "Accounting for Changing Prices" in December 1982 recommending CCA. The ICAI seems to favour the U.K. approach of SSAP-16. But owing to present implementational problems of CCA, the adoption of periodic revaluation of fixed assets together with LIFO method of inventory valuation has been suggested for the transitional period. This is required as voluntary supplemental information in continuation with the primary financial statements, at least by the large enterprises.

Developments in Other Countries

Discussions on the developments in U.K. and U.S.A., as above, though in brief, are comprehensive in the sense that the inclusion of all the major developments that have taken place from the beginning, has been made possible. But for the sake of volume, only the developments that have taken place over the recent past in Australia and Canada are
presented. This is followed by a brief reference to latest developments in countries like New Zealand, France, Argentina and Brazil.

Table 3
(a) Developments in Australia

<table>
<thead>
<tr>
<th>Time</th>
<th>Nature of Development</th>
<th>Title/subject</th>
<th>Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>May, 1975</td>
<td>Recommendation</td>
<td>&quot;Effects of Inflation upon Taxation Primarily&quot;</td>
<td>Mathews Committee</td>
</tr>
<tr>
<td>June, 1975</td>
<td>Preliminary ED</td>
<td>&quot;A Method of Current Value Accounting&quot;</td>
<td>AARF</td>
</tr>
<tr>
<td>Oct., 1976</td>
<td>Statement of Provisional Accounting Standards</td>
<td>&quot;Current Cost Accounting&quot;</td>
<td>AARF</td>
</tr>
<tr>
<td>1977</td>
<td>Recommendation</td>
<td>Supplemental Notes disclosing current costs of fixed assets, depreciation, inventories, cost of sales</td>
<td>Current Cost Accounting Steering Group (CCASG)</td>
</tr>
<tr>
<td>August, Amendments 1978</td>
<td>Amended Versions of both the statements issued in October, 1976</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 3 (Contd.)

<table>
<thead>
<tr>
<th>Time</th>
<th>Nature of Development</th>
<th>Title/subject</th>
<th>Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>August, 1979</td>
<td>Revised Exposure Draft</td>
<td>Revision of Exposure Draft issued in July, 1979</td>
<td></td>
</tr>
<tr>
<td>March, 1980</td>
<td>Omnibus Exposure Draft</td>
<td>Miscellaneous matters not specifically referred to in the previous statements and exposure drafts</td>
<td></td>
</tr>
<tr>
<td>Early in 1981</td>
<td>Pre-exposure</td>
<td>Proposed Standard and Guidance Notes</td>
<td>Current Cost Accounting Standards Committee (CCASC)</td>
</tr>
<tr>
<td>Jan., 1983</td>
<td>Finalisation</td>
<td>Same as above</td>
<td>Same as above</td>
</tr>
</tbody>
</table>

Way back to 1974, it is found that the ED issued in December 1974 was patterned after SSAP-7 of the U.K. Mathews Committee appointed by Government in the same month submitted its recommendation in May, 1975. Though the Committee studied the effects of inflation upon taxation primarily, CCA was the conceptual base of the recommendations. 97 Another Preliminary ED was issued by AARF in May 1975, on the Current Value Accounting, which was on issue at the same time.

time with its earlier ED issued in December, 1974.\(^9\) After an evaluation paper in September, 1975, on the two methods proposed in EDs, the AARF issued in October, 1976 the Statement of Provisional Accounting standard on "Current Cost Accounting" together with an explanatory statement on the 'basis of Current Cost Accounting'. Paying due heed to the comments received, these statements were amended in August, 1978. "These statements all focused their attention on fixed assets, depreciation, inventories and cost of goods sold; they made it clear that the treatment of monetary items would be the subject of separate Statements."\(^9\)

Accordingly, an ED relating to the treatment of monetary items was issued in July, 1978, followed by a subsequent revision in August, 1979. An Omnibus ED for residuary matters not specifically referred to in the previous statements and EDs was issued in March, 1980. CCASC after considering all the comments and recommendations including the points raised by the GCA Technical Applications Review Committee set up by Joint Standing Committee, as well as the developments in other countries of the world, prepared the pre-exposure in early 1981 on the Proposed Statement and Guidance Notes which after revision has been finalised in January, 1982. The Joint Standing Committee is comprised of the executive committees of the Institute and the Society. CCA Technical Applications

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Review Committee had "to consider the political and commercial acceptability of the Proposed Standard and Guidance. Notes, and to examine the technical aspects of the documents". In July, 1982, the AARF issued selective exposure on the "Proposed Statement of Accounting Standard: Current Cost Accounting".

Table 4
(b) Recent Developments in Canada

<table>
<thead>
<tr>
<th>Time</th>
<th>Nature of Development</th>
<th>Title/subject</th>
<th>Authority</th>
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<tbody>
<tr>
<td>1971</td>
<td>Discussion Paper</td>
<td>Retention of Historical Cost : attached little value to general price level adjustment (GPLA) preferring specific price-level adjustment (SPLA)</td>
<td>The Canadian Institute of Chartered Accountants (CICA)</td>
</tr>
<tr>
<td>1973 Anti-inflationary Board</td>
<td>Nov., Guidelines</td>
<td>Index of personal income tax and controls on prices and incomes</td>
<td></td>
</tr>
<tr>
<td>1974 July, Exposure Draft</td>
<td>Encouraged the Voluntary Reporting of Supplemental General Price-Level Data</td>
<td>&quot;Accounting for Changes in the General Purchasing Power of Money&quot;</td>
<td>CICA</td>
</tr>
<tr>
<td>1977 June, Ontario Committee on Distribution</td>
<td>&quot;Funds Available for Distribution or Expansion&quot;</td>
<td>Ontario Committee</td>
<td></td>
</tr>
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</table>

100. Ibid., p. 471.
Table 4 (Contd.)

<table>
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<tr>
<th>Time</th>
<th>Nature of Development</th>
<th>Title/ Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec. 1979</td>
<td>Exposure Draft</td>
<td>Almost Identical to U.K.'s SSAP 16</td>
</tr>
<tr>
<td>Dec. 1982</td>
<td>Section 4610 of the CICA Handbook</td>
<td>&quot;Reporting the Effects of Changing Prices&quot;</td>
</tr>
</tbody>
</table>

The preliminary position suggested in the discussion paper issued in July, 1976 indicates that the shareholders' equity should be restated based on general purchasing power changes. It was suggested that the assets and liabilities, other than short term monetary items, should be adjusted on the basis of specific purchasing power changes. The main feature of the Ontario Committee Report is the voluntary supplemental funds statement disclosing impacts of inflation pending development of current value system. The Re-Exposure Draft issued in December, 1981 departed from the earlier ED in the treatment of monetary items. It eliminated the loss on holding monetary working capital and instead provided for inclusion of monetary working capital in the calculation of gearing adjustment. The net result is only a partial recognition of the loss on monetary working capital, and the non-recognition of a loss on total net monetary items when an overall net monetary asset situation exists. The changes appear to be theoretically inconsistent.

and capable of being misleading from a GCA viewpoint.¹⁰³

The reporting requirements of the standard (Section 4510) are similar to those of FASB-33, except that a financing adjustment would also be computed which would allow readers to arrive at the current cost income attributable to shareholders on both concepts of capital maintenance: the operating capability concept and the financial capital concept. It also requires the management to explicitly provide an explanation and a description of the bases and the methods of calculation and a narrative discussion of its significance for readers' benefit. The first year's experience is the unwillingness of many companies to accept the CICA's recommendations for voluntary disclosure.¹⁰⁴

(c) New Zealand

New Zealand Society of Accountants issued Current Cost Accounting Standard No. 1 (CCA-1) on "Information Reflecting the Effects of Changing Prices" in April, 1982. It closely resembles U.K.'s SSAP 16 excepting the calculations of gains on loan capital. A sample survey report (of 961 companies) published by the Reserve Bank of New Zealand in its Bulletin (May, 1983) revealed that 26 per cent of the companies covered by the survey prepared accounts under the CCA standards.¹⁰⁵

(d) France

France does not appear to have any accounting guidelines regarding inflation accounting. The Government did not accept the recommendations of the Government committee which recommended supplementary financial statements based on CPP principles and instead made legislations for revaluation of long-term assets at their use value to the enterprise at the end of 1976. Such revaluation surplus is taxable.

(e) Argentina

In September, 1980 the Argentina Professional Council of Economic Sciences of the Federal District which regulates the public accounting profession declared that in future the basic financial statements should disclose historic cost-constant dollar figures in one column and historic cost in another.

(f) Brazil

In Brazil the inflation adjusted statements constitute the basic as opposed to supplementary financial statements. The amended Brazilian Corporation Law requires companies to adjust both permanent assets and equity accounts for changes in general price level using ORTN (A Brazilian government treasury bond index) as deflator. Depreciation is also restated and netted against the asset adjustment. This price level adjusted depreciation is permitted as a deduction for tax purposes.
International Accounting Standards Committee

This Committee was founded on 29th June, 1973. The business of the Committee is to formulate and publish and thereafter improve and harmonise the regulations, accounting standards and procedures relating to the presentation of financial statements. The business of the Committee is conducted by a Board comprising representatives of accounting bodies of the selected countries.

The Committee issued the International Accounting Standard No. 6 (IAS No. 6) which summarised the main inflation accounting alternatives in the preface. The standard simply requires the enterprises to "present in their financial statements information that describes the procedure adopted to reflect the impact on the financial statements of specific price changes, changes in the general level of prices or both. If no such procedure has been adopted that fact should be disclosed."

The Committee published the International Accounting Standard (IAS) 15, titled "Information Reflecting the Effects of Changing Prices" in November, 1981 which superseded the earlier standard (No. 6). This is applicable to large public enterprises in respect of financial statements covering periods beginning on or after January 1, 1983. It recommends that such enterprises should disclose the following information using any method (to be disclosed) that adjusts for the effects of changing prices.

106. S. Rathore, op. cit.
(a) The amount of the adjustment to, or the adjusted amount of, depreciation of property, plant and equipment.

(b) The amount of the adjustment to, or the adjusted amount of, cost of sales.

(c) A financing adjustment(s), if such adjustment(s) is generally part of the method adopted for reporting information on changing prices.

(d) The enterprise results recomputed to reflect the effects of the item described in (a) and (b) and, where appropriate, (c) and any other items separately disclosed that the method adopted requires.¹⁰⁷

Where the current cost method is adopted, the current cost of inventories and of property, plant, equipment should be disclosed. These information are required to be disclosed on a supplementary basis unless inflation adjusted accounts constitute the basic financial statements. Both GPPA and CCA have been discussed in detail and IASC believes that there is not yet an international consensus on the subject and further experimentation is necessary before asking the enterprises to prepare primary financial statements using a comprehensive and uniform system for reflecting changing prices. Meanwhile, evaluation of the subject would be assisted if the enterprises provide supplementary information incorporating the effect of changing prices in

¹⁰⁷ IAS No. 15, IASC.
Two points need to be stressed here. First, the standards issued by the IASC are recommendatory and not obligatory. Rather, the member bodies are obliged to work toward implementation when and to the extent practicable under local circumstances. Second, the IASC has not entered into any controversy in mentioning its preference in favour of a particular method to others. As a result, the issues at controversy do not change their nature and magnitude.

Developments in Overseas - A Comparative Study

It is interesting to note that, rightly or wrongly, some version of current cost accounting (CCA) is favoured in a majority of the various pronouncements, and that the main differences between the various CCA models tend to be confined to the ways in which gains and losses on holding loan capital are treated. Another common feature suggested in almost each country which submits to inflation accounting method is to require only supplementary information on the technique adopted retaining historic cost basis of accounting as the basic accounts. The only exception is the SSAP 16 in U.K. which provides that CCA may also be the basic accounts. The position is summarized in Table 6. This brings the reliability of any inflation accounting method into question and perhaps supports the view that

109. Ibid.
a suitable method is yet in the evolutionary stage. Table 5 also highlights the differential treatment of monetary working capital and loan capital in different countries. But depreciation adjustment and cost of goods sold adjustment, being the common features of each of the suggested methods in different countries, have not been shown in the table.

As to the recognition of gains or losses on monetary working capital, most of the countries like U.K., Australia, New Zealand, India and the International Accounting Standards Committee are on the same footing. They suggested full recognition of gains or losses and inclusion of the same in the profit figure. But FASB-33 of U.S.A. requires disclosure of gains or losses on holding net monetary items as a separate figure 'below the line', which is not to be merged with the profit figure and not to be segregated for holding monetary working capital and loan capital. Canada, however,

Table 5

<table>
<thead>
<tr>
<th>Country/ Latest Basis Committee</th>
<th>Vital</th>
<th>Whether recognises the gains/losses on Monetary Loan Working Capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom (March, 1980)</td>
<td>SSAP 16 CCA</td>
<td>Basic or Supp- ment</td>
</tr>
<tr>
<td>USA (Sent., and Ge-Project state- 1979)</td>
<td>FASB 33 CCA</td>
<td>Supplementary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Price Level formation on fixed assets and inventories</td>
</tr>
</tbody>
</table>

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proposes in its Re-Exposure Draft a peculiar treatment of monetary items by elimination of the loss on holding monetary working capital from the profit statement and inclusion of monetary working capital in the calculation of the
gearing adjustment. "The net result is only a partial recognition of the loss on monetary working capital, and the non-recognition of a loss on total net monetary items when an overall net monetary asset situation exists."\textsuperscript{110}

Regarding the composition of the net monetary working capital figure, a minor difference may be traced between the U.K. and New Zealand, on the one hand, and the Australia, on the other. But it will not result in any significant difference in profit figures.

What have been stated above are the qualitative aspects of the different approaches to recognizing gains or losses on monetary working capital. Quantitative difference also arises between the U.S.A. and other countries, the root cause being the difference in the choice of price movement to employ in making calculation. FASB-33 suggests the use of general price level movement; but the other countries prefer to use movement in the relevant current costs (usually those for inventories) to the general price level movement.

Regarding the treatment of gains on loan capital, New Zealand calculates full gains on loan capital (vide Table 5 ante). U.S.A. also calculates full gains but it is done in conjunction with the gains or losses on holding net monetary working capital. It is not included in the profit figure just like Australia which also calculates full gains on loan capital. U.K. and India partially recognize the gains on loan capital by introducing gearing

\textsuperscript{110} Ibid., p. 476.
adjustment. Canada also gives partial recognition.

Difference also arises on the capital maintenance concept adopted. Australia adopts the operating capability of the entity. But, by segregating the capital maintenance adjustment reserves into the Gain on Loan Capital Reserve Account and the Current Cost Reserve Account, the Australian model satisfies both the proprietary-viewpoint and the entity-viewpoint respectively. New Zealand model is adopting a concept of maintaining only the operating capability of shareholders' funds - and not the operating capability of the total entity - before allowing profit to emerge.¹¹¹

"FASB-53 uses a financial capital maintenance concept ... and ... the deduction of interest on long-term borrowings to compute historical cost income from continuing operations indicate a propriety view of the business enterprise - a view which is consistent with the financial concept of capital maintenance."¹¹² U.K.'s "SSAP-16 incorporates a physical capacity (operating capability) maintenance assumption"¹¹³ but "not based on either entity or proprietary capital maintenance methods. It is a hybrid, pragmatic compromise designed to get a maximum acceptance for CCA in the UK - and it seems that it might have succeeded in doing this."¹¹⁴

¹¹¹ Ibid., p. 472.
¹¹² Ramesh Gupta, 'Inflation Accounting', op. cit., p. 209.
¹¹³ Ibid., pp. 208-209.