CHAPTER-III

DEPRECIATION ALLOWANCE AND ITS LIMITATIONS
DIFFERENT VIEWS AND SUGGESTED ALTERNATIVES
From the foregoing discussion, it can be seen that, Chapter-I deals with the background in which the Development Rebate system was introduced in India in 1955 and Chapter-II deals with similar measures taken in other countries of the world under the circumstances which were almost similar. It was pointed out in both the chapters that the purpose of introduction of such measures, both in India and other countries of the world, was two-fold. One purpose was to arrange for adequate incentive, by tax relief, for industrial expansion and the other to create a replacement reserve for replacing retired assets at higher costs resulting from continuously rising prices because charging depreciation on the basis of higher replacement costs was not possible for want of tax allowances. The objective of this chapter is to develop this second objective and study the problem in depth. The problem, in a nutshell, has already been pointed out in Chapter-I.

**Depreciation Allowance and its limitations**

The usual principle of the tax-laws of almost all the countries is to permit deduction by way of depreciation allowance for computation of taxable business profits. This enables a trader to generate funds necessary for replacement of an asset at the moment it goes out of use, provided the fund is not otherwise diverted. Depreciation charges help reduce the net
income of a firm and thereby ensure retention of profits. Thus a part of net income can be set aside as a fund for replacement purposes instead of paying it out as dividends.

But depreciation based on original cost was found to be of diminishing usefulness particularly in an inflationary period. As stated earlier (in Chapter-I), when the costs including depreciation are charged to revenue at the historical cost rate during rising prices, profits are overstated and losses understated. A part of the overstated profit is lost by way of taxation. What remains, if at all, is paid by way of dividend. Thus there is practically no extra retention of revenue that may be necessary to replace capital because of the rising prices. In other words, the taxes and dividends when paid on the basis of overstated profits, actually lead to erosion of capital. Costs, including depreciation, arise out of consumption of capital. If the recovery of these costs out of revenue is made at the historical cost rate, and not at the current cost rate, capital is bound to be eroded.

The inherent weakness of historical cost accounting has, therefore, prompted the accountants to find out tools and techniques to frame a system of inflation accounting that may be acceptable to all concerned.

**Accounting for Inflation**

After the World War-II, debates and discussions on the subject were almost limited to depreciation insofar as the diminishing usefulness of historical cost depreciation primarily engaged the attention of the accountants and managers. Subsequently,
however, the debates and discussions shifted to inflation accounting. In fact, the recent interest in inflation accounting "springs from concern over the finance of plant replacement". Many suggestions from different quarters have been advanced for framing a suitable system of accounting for inflation. Some of these suggestions may be considered here.

Institute of Cost and Works Accountants (London): Replacement Cost Accounting:

Appreciating the need for inflation accounting, the Institute published "Accounting of Changing Price Levels" in 1952. The Institute has suggested the techniques to allow for changes in costs and prices. It has been suggested that for a correct reflection of economic facts of business, during rising prices, the problem of financing or reproduction of certain assets are to be reconsidered. These assets are:

(i) tangible fixed assets, i.e., plant, fittings etc., and
(ii) tangible current assets i.e., raw materials, bought-out components and consumable stores.

The excess cost of replacement or reproduction of assets may be made by a charge included in the costs of sale of goods. The amount so charged should be based on current cost of replacement or reproduction and shown as a reserve till the replacement or reproduction of assets concerned is carried out.

The Institute has also provided the principles relating to accounting in terms of comparable values. To provide accounting information on the basis of which future course of action may be determined, the historical figures are to be converted into money values of the latest date relating to which such accounting information is to be prepared. Further, to measure the efficiency of stewardship in real values and to make available the maximum comparability of accounting data, the historical figures are to be converted into money values of a previous point of time. The previous point of time should be one at which the original capital or bulk of the capital was contributed. The converted values would now represent the real values of the interests of the contributors of capital and also the real values of the assets in which the capital remains invested as on a given date in the past. It is, however, necessary to choose a common date for such conversion of historical figures into the money values of a previous point of time. The money values so converted should be shown in a memorandum statement in addition to historical statements. Indices to be utilised for this purpose may be individual item indices or group indices as issued by the Government or different private organisations.

**Stabilized Accounting**

The system of stabilized accounts has been considered by some writers as an ideal tool to reflect in accounts the effects of the changes in the purchasing power of money. The need for stabilized accounting was appreciated by H.W. Sweeney as far back
as in 1936\textsuperscript{3}. Subsequently, certain additions and alterations were sought by different writers and Prof. W.T. Baxter, amongst others, studied the concept in depth\textsuperscript{4}.

Prof. Baxter discovers three flaws in the accounts based on historical costs. Firstly, different accounts based on historical costs are not comparable and consequently, the trends as presented by the accounts might be misleading. Secondly, balance sheet figures are not comparable and these may hide gains and losses arising from the impact of rising prices. Thirdly, the figures given in income statement are also not comparable. The combined results of the three flaws are understated assets and overstated profits.

According to Prof. Baxter, 'time lag error' creeps into the income statement to a significant extent as it contains unlike units based on historical costs. Thus, profits determined by finding the difference between old costs and current revenue are bound to be overstated.

Prof. Baxter seeks to employ price indices to adjust crude costs and revenues to correct time lag error. He suggests that a general price index may be utilised to adjust abstract items i.e. costs, revenues, reserves and equity capital, while special

indices may be used for physical items like stock and plant. No general or special indices may, however, be applied to money including all claims whether debit or credit. This will always remain at the index figure of one hundred. Stabilized accounts would not, therefore, balance and a loss on holding money and a gain on money owned will emerge and should be accounted for.

*English Institute*

The suggestions of English Institute⁵ are primarily based on the discussions made by the Accounting Standards Steering Committee and by a number of non-accounting institutions.

The solution to the problem of inflation, as suggested by the Institute, involves two stages. Firstly, the business units should continue to maintain their records on historical cost basis and present their financial accounts accordingly. Secondly, a supplementary set of accounts or a reconciliation statement relating to business results should be prepared by 'translating' historical figures into the money units of a uniform purchasing power. In the process of conversion, all the items or at least the principal items of the historical cost accounts should be considered.

*Exposure Draft 8 and SSAP 7*

The Accounting Standards Steering Committee published Exposure Draft 8 in January 1973 under the title "Accounting for...

changes in the Purchasing Power of Money. This was sought to be the proposed statement of Standard Accounting Practice. On the basis of Exposure Draft 8, SSAP 7 was published in May 1974 under the same title. The process, as suggested in ED 8 and SSAP 7 to allow for changes in costs and prices, is known as Current Purchasing Power (CPP) method. According to this method, the companies should continue to prepare and publish their accounts on historical cost basis, but in addition, all quoted companies should present to their shareholders supplementary statements showing the conversion of conventional accounts in terms of current purchasing power at the closing balance sheet date. For the purpose of conversion of the figures of basic historical cost accounts into those in supplementary statements, a line of distinction has been drawn between monetary and non-monetary items. The monetary items include cash, debtors, creditors and loan capital, while non-monetary items include, assets like stock, plant and buildings. In the process of converting the figures of basic historical cost accounts into those in current purchasing power statements for a particular period, monetary items in the balance sheet are to remain the same, while non-monetary items are to be increased in proportion to the inflation. Capital is, however, neither a monetary item


nor a non-monetary item. In ED 8 it has been recommended that
the consumer price index is to be used for the purpose of
conversion. In SSAP 7, however, retail price index (RPI) is
recommended to carry out conversion. Accounts drawn up in terms
of current purchasing power units will, therefore, give rise to
holding gains and also gains or losses on monetary items.

The Institute of Cost and Works
Accountants of India

I.C.W.A. of India published "Inflation Accounting-Tools
and Techniques" in 1975. Dr. P. Chatterjee, Director of Research
of the Institute has presented two case studies which relate
to the process of conversion of historical accounting figures
of Madras Fertilizers Limited and Coromandal Fertilizers Limited.
Dr. Chatterjee has employed three index series, i.e. G.N.P. implicit
deflator, wholesale price index and consumer price index for the
purpose of conversion. The objective of using three indices is
to demonstrate how the impacts of inflation become different
when the figures of basic accounts are converted on the basis of
different indices. Adjustments in proportion to the inflation
are done in respect of the following items:

i) Fixed Assets;
ii) Capital work-in-progress;
iii) Expenditure directly incidental to construction
    subsequently capitalised;

8. The Institute of Cost and Works Accountants of India:
    Inflation Accounting - Tools and Techniques; Calcutta,
    1975; Chapters-III and IV; pp. 103-176.
iv) technical know-how relating to engineering and manufacturing services subsequently capitalised; and
v) stores and spare parts.

Accounts drawn up in terms of current prices have given rise to loss on monetary working capital and gain on loan capital and there occurs overdistribution of dividends after profits are adjusted.

Criticisms advanced against replacement cost accounting

The critics of the replacement cost accounting point out a number of limitations of the principle. It has been argued that although the money unit which an accountant employs as a measure may not remain a fixed economic quantum during rising prices, it is "a dollar and must be recorded as such." If bank accounts are to be kept on the basis of the purchasing power of money, it will create much confusion and difficulty.

It has been pointed out that if accounts are kept on replacement cost basis, it will create accounting problems. Sidney Davidson has considered three suggestions on accounting for replacement cost depreciation. Under the first suggestion, depreciation is based on current cost and this entire current cost depreciation is credited to the capital asset which is

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recorded on historical cost basis. It has been pointed out that the proponents of such a plan have not offered any suggestion as to what account is to be credited when depreciation on a capital equipment is allowed to continue even after the asset is fully depreciated. Under the second suggestion, both capital asset and depreciation are recorded on the basis of historical cost, while the difference between current cost depreciation and historical cost depreciation is credited to a reserve for replacement or realised capital gain. In this case, total depreciation charges remain unrelated to book figures. Obviously, this procedure goes against an integrated and consistent system of records as preferred by an accountant in describing a firm's affairs. Under the third suggestion, the original costs of plants may be substituted by their current costs. This would require adjustments in supplementary plant and capital asset accounts. In this case, the procedure would make the balance sheet a 'jumping jack' insofar as the constantly changing present values are to be accounted for.

One major practical problem that irritates the mind of management is the choice of price index with a view to adjusting historical cost depreciation to replacement cost depreciation. Management becomes seriously confronted with the problem of adjusting price changes of a particular machine on the basis of general price index. Moreover, the index numbers which are expected to be the source of replacement cost figures are seldom found to be appropriate or satisfactory. Again, if

technological changes are taken into account, it would be unrealistic to assume that a firm would replace a fixed asset by an identical one 12.

It, therefore, follows that the principle of basing depreciation charges on replacement cost is speculative insofar as it cannot be objectively verified 13.

It has been pointed out that under replacement cost system, the total accumulated provision for depreciation will be less than the gross or undepreciated value of the asset at the end of the last year of its life 14. Consequently a provision for backlog depreciation becomes necessary to make the total depreciation provision equal to the gross value of the asset. But if this backlog depreciation is charged against profit and loss account, the reported profit will fail to represent operating profit 15.

Another point that deserves attention is that under the replacement cost system the interests of the contributors of capital remain uncared for. For the same amount of capital, shareholders would receive less in terms of commodities in rising

12. Ibid., p.169.
15. Ibid., p.143.
prices when the question of repayment is considered. So far as the preference shareholders are concerned, they become worst sufferers during rising prices insofar as their loss is never compensated in any way.  

It has also been objected that the replacement cost system, as applied to fixed assets and stock-in-trade only, would fail to present the real picture of maintenance of capital in full.

A pertinent question may, however, arise as to how replacement cost system will work in falling prices. It has been pointed out that the system would be less stimulus to investment during falling prices insofar as the firms will be required to pay more taxes under the replacement cost system than under the historical cost system. But it appears that, for several reasons, a continued rise in the price level will persist. The strongest reason, among others, is related to the full employment policy adopted by different countries. Anti-inflationary measures have the effect of restricting employment to a great extent. Thus, inflation to some extent may be considered a "lesser evil". In this context it would be pertinent to quote Harold Berger who

20. Ibid., p.5.
asks: "Which horn of the dilemma should public policy embrace: unemployment or inflation?" Consequently, it would not perhaps be unrealistic to assume that periods of falling prices might be rare in future.

The Royal Commission on replacement Cost accounting

The Royal Commission, on the basis of First Tucker Committee Report and other available evidences, rejected the proposal of any departure from the historical cost system. The First Tucker Committee submitted to the Royal Commission certain recommendations relating to propriety or otherwise of switching over to the replacement cost system.

While pointing out the major problem in this context, the Tucker Committee observes that "it will be convenient to mention one objection common to all schemes, namely, that they involve giving preferential treatment to the owners of business as against other classes of taxpayer." For example, it would not be fair to base depreciation on replacement cost unless debenture interest is also written up during rising prices.

23. The Report of the Committee (First Tucker Committee) on the Taxation of Trading Profits; Cmd 8189, 1951; His Majesty's Stationary Office, London; pp.36-42.
24. Ibid., p,37.
Criticisms advanced against Current Purchasing Power (CPP) Method

The critics of the Current Purchasing Power method point out a number of its limitations. Considering the treatment of borrowings as set out in ED 8, Prof. R. S. Gynther points out that if gains on long-term borrowings in terms of rising prices are considered, this would cause overstatement of profits of many entities. If such holding gains are distributed, this would lead even to "selling a part of the property or raising additional capital funds." Moreover, holding gains, according to Prof. Gynther, would allow the shareholders to gain at the cost of debenture-holders and many preference shareholders, while the taxation authorities might include holding gains in the profits for the purpose of taxation.

Almost similar criticisms have been advanced by J. Vos who argues that the concept of profit in ED 8 cannot be relied upon as it is "based on historical costs, just the arithmetical difference between a number of parameters." He also expresses doubt about the propriety of treating the increase of equity, caused by the price increase of non-monetary assets, as a profit when a part of the non-monetary assets is financed by borrowed capital.

27. Ibid., p. 49.
29. Ibid., p. 299.
The Sandilands Committee does not find the CPP method suitable for the purposes of inflation accounting. The Committee feels that if a statement becomes only supplementary in character, the users will not attach much importance to it. According to the Committee, accounting for inflation will be meaningful only when conventions used in the accounts themselves are changed. Secondly, the retail price index (RPI), as has been recommended in SSAP-7, does not cover most of the items of purchases normally made by the companies. Consequently, the retail price index cannot be considered an appropriate index to indicate the changing purchasing power of money the companies have spent. Thirdly, the Committee views the CPP method of accounting as conceptually the most difficult one insofar as the published accounts of the companies will be based on a unit of measurement other than the monetary unit. The current purchasing power units based on the RPI do not satisfy the criteria for a unit of measurement underlying the accounting system. This may lead the users to confusion. For example, the CPP unit of measurement in the supplementary statement will change from year to year. Again, the unit will not be the same for all companies presenting the supplementary statements if such companies have different accounting dates because they will prepare their statements in terms of different units. Moreover, the CPP unit is not a physical object but an abstract concept and so it cannot be exchanged. Thus, the supplementary statements will not be equally useful to...

all users of accounts. Fourthly, the CPP supplementary profit does not represent operating profit insofar as it includes holding gains. Finally, the Committee holds the view that a supplementary statement would not serve a very useful purpose for a shareholder because it is a restatement of assets and liabilities of a company in terms of current purchasing power units based on the retail price index. The Committee points out that "once it has been spent, a sum of money cannot be looked upon as available for alternative purposes".

The Recommendations of the Sandilands Committee

The Sandilands Committee was appointed on 21st January, 1974 by Mr. Anthony Barber and Mr. Peter Walker, respectively the then Chancellor of the Exchequer and Secretary of State for Trade and Industry, to enquire into inflation accounting and report on it. The report of the Committee was published in 1975.

The Committee after considering the propriety or otherwise of different methods of inflation accounting, finds that they do not fully meet the requirements of the users of accounts. The Committee, however, recognises that the dominant requirements of the users of accounts can largely be met only by some form of replacement cost accounting having certain element of objectivity. The Committee has recommended 'Current Cost Accounting' to be adopted by all companies. In practice, Current Cost Accounting is a further development along the lines of replacement cost system. According to the Committee, specific effect of inflation on individual companies can be ascertained by applying this

31. Ibid., p.126.
32. Ibid., pp.159-177.
method to companies in the preparation of their accounts. The principal features of Current Cost Accounting are as follows:

i) The unit of measurement should be money;

ii) the balance sheet should show the assets at a valuation;

iii) the current cost profit during a period should represent operating profit which can be achieved by charging against the profit and loss account each year an appropriate proportion of the value of assets consumed after it is determined on the basis on current replacement cost;

iv) the net book value of assets and depreciation on a historic cost basis should, however, be shown in notes to the accounts;

v) the companies, in addition, should prepare funds statements and the directors of all companies should include, in their annual reports, statements as to the adequacy of cash resources that may be made available for the purpose of meeting the requirements of the companies in the following year.

The Committee, however, admits the disadvantage of preparing accounts in terms of monetary unit during price changes because with the change in prices of goods and services on which money is spent, the purchasing power of money also changes. But as discussed earlier, the Committee feels that there are more disadvantages of using a unit of measurement other than money.

The Committee recommends that the balance sheet should show the assets and liabilities at their 'value to the business' which is considered a dominant requirement of users of accounts.
It would be convenient for a shareholder to make an assessment of the return in real terms on the assets of the company during a period when he knows the value of the assets to the company. But the value of an asset to the company is written down current replacement cost. The Committee, however, admits that a precise figure cannot be achieved from any method of valuation of an asset. The figure obtained after valuation may even be subject to a margin of uncertainty. But the Committee maintains that the "issue is not which basis of comparison is more 'correct' but which is more useful."33.

As regards monetary and intangible assets, the Committee does not recommend any change from the historic cost basis of measurement.

Although according to the principle of current cost accounting, liabilities are to be shown in the balance sheet at their 'value to the business', the Committee does not propose any immediate change in the manner in which they are usually shown in the balance sheet. The Committee feels that further study is needed to give effect to the principle of showing liabilities at their 'value to the business'.

So far as current cost profit is concerned, it has been said that only two adjustments to historical cost accounts, namely, depreciation and cost of sales will present a comprehensive system of inflation accounting.

33. Ibid., p.149.
The Committee lays stress on the fact that the measurement of net assets to ascertain their 'value to the business' must contain an acceptable element of objectivity. The Committee, therefore, recommends that the valuation of non-current assets like land, buildings, ships, aircrafts etc should be carried out by independent valuers. For the rest, however, a 'standard reference basis' of valuation independent of companies should be accepted. It has been admitted by the Committee that the quantity and diversity of fixed assets held by companies and the changing technology of industrial assets make it difficult to estimate their current replacement costs. To ameliorate this difficulty the Committee recommends that the Government statistical service must publish a new series of price indices so that industries can estimate current replacement cost of specific or particular assets on an individual basis. The series of indices should be so designed that it can be accepted as a 'standard reference basis'.

So far as stock on hand at the balance sheet date is concerned, the Committee recommends the normal FIFO convention which will serve as the basis of current replacement cost in the companies where turnover of stock is fairly quick. But the principle of FIFO cannot be applied to all companies under all circumstances. In this case, 'value to the business' of the company's stock may be shown in a note. In addition, the committee recommends that the Government statistical service must publish a series of indices for specific or particular stocks held by the industries.
CONCLUSION

The need for a system of inflation accounting is felt by all accountants in all countries. The accountants agree that inflation seriously affects accounting information, but there is practically no unanimity in the methods of inflation accounting suggested so far to achieve the end. While it has been admitted that accounts kept on historical cost basis ignore price changes and provide poor information in several ways, alternatives to historical cost basis of accounting as suggested by many appear to have serious defects. Even the Sandilands Committee, while recommending 'current cost accounting' as the most suitable method of inflation accounting admits that it has not had the "the time or resources to research into all the practical implications of introducing such a system". The Committee does not want all the principles of current cost accounting to be applied to the companies immediately and recommends "further study" along this line.

Considering the propriety or otherwise of inflation accounting, Robert Mazars concludes that "No exclusive conclusion can be reached and discussion will never come to an end (a fact which will give new opportunities for articles and books)."

An important point to note here is that application of the principles of any method of inflation accounting to companies would

34. Ibid., p.3.
35. Ibid., p.162.
create confusion insofar as the inland revenue authorities in almost all countries have refused to recognise as expense items additional costs or depreciation ascertained on the basis of revaluation for the purpose of neutralising the effects of inflation. Inflation accounting will not, therefore, enable a company to earn any tax concession. The Sandilands Committee also has pointed out this difficulty in its report. For all these reasons the traditional system of accounting is allowed to live even in this difficult time of inflation although all the accountants and Governments of different countries are unanimous regarding the shortcomings of the system and insufficient capital retention that follows. Faced with this dilemma the Governments in different countries thought it appropriate to provide tax relief to industry in one form or another to mitigate the tax liability on overstated profits.

It is in this context that India also preferred to adopt the policy of providing tax relief to industry to neutralise the effects of inflation. In addition to ordinary depreciation allowances, Development Rebate, based broadly on the lines of Investment Allowance which was once found to operate in the U.K., was introduced in India in 1955. The objective of the incentive was to facilitate a rapid rate of industrial growth and development in the country. Development Rebate was, however, discontinued in India in 1974, but was re-introduced in 1976 in the form of Investment Allowance. A preliminary discussion

37. Report of the Inflation Accounting Committee - Inflation Accounting (Chairman: F.E.P. Sandilands) ; Cmnd, 6225 - op.cit., pp.4-5.
on Development Rebate has, however, been made in Chapter-I. In the following Chapter, an attempt is, therefore, made to study the nature of Development Rebate in detail and its application to different types of industries at different times.