

## DEPRECIATION AND CAPITAL MAINTENANCE

**A**N important object of providing depreciation is to prevent the owner of the asset from consuming his capital. It means that during the life time of the asset the owner should provide a sum by way of depreciation which is equal to the amount originally paid for the asset. The law, in various countries, imposes this requirement upon the joint-stock companies—public and private—that ‘dividends must not be paid out of capital’. And sound business practice also requires that the owner of a business provides sufficient sums out of the profits to maintain the capital intact before declaring any dividends or appropriating the profits in any other manner. Section 205 of the Companies Act, 1956, states 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 arrived at after providing for depreciation in accordance with the provisions of sub-section (2) or out of the profits of the company for any previous financial year or years arrived at after providing for depreciation in accordance with those provisions and remaining undistributed or out of both. . . .”

In the current accounting practice, it implies that the original money value of the investment is to be maintained and this is in line with the provision stated above. As already stated above, we have to provide out of the gross profits a sum equal to the original cost of the asset spread over the life span of the asset. Here, we are not concerned as to the way in which the total sum is to be spread over the asset's life but the relevant question is how much depreciation is to be set aside in total during the life-time of the asset.

### PRICE-LEVEL CHANGES

If there is no change either in the price of the particular asset or even in the general price-level then there does not seem to be any prob-

lem. But a problem will arise in the above case when we find that a new model of the asset has come into the market which, even when, costs the same, yields a larger output. In this case, if the asset is replaced by the new model, the original capital investment remains unchanged in terms of general purchasing power, but it results in an increase in the real productive capacity of the firm. 'Here we meet the distinction between maintaining real capital intact in terms of general purchasing power, and maintaining real capital constant in terms of the real productive capacity of a particular firm'.[1] It is so in case we assume that the price-level remains constant. But the situation becomes complex when there is a change in the price-level and more so when the price of an asset changes in different proportions from the general price-level.

Let us visualise the different possible situations of the changes in the price level. To begin with, if we find that the price of the particular asset moves in the same ratio as the general price level, it will result in increasing the price of the product manufactured with the help of the asset, and the gross profits too. So in such a situation if depreciation is provided at the replacement cost basis not only shall we have an adequate amount to replace the asset at the end of its life but the real consumption also is likely to be maintained nearly intact. Here again, there is no problem if the price of the asset starts increasing or decreasing immediately after it is purchased. But a problem will arise if there is no change in the price of the asset during a major part of its life and it is only before it is to be replaced, its price shoots up. Thus, replacement of the asset will require additional funds larger than provided for out of the profits (unless the fund was invested in outside securities the value of which might have gone up correspondingly).

Proceeding further, if we find that the price of the asset has gone up at the time of replacement without any change in the general level of prices, the depreciation fund based on the original cost basis will not be adequate to replace the asset. Under conditions of competition, it is natural that the price of the product (produced with the help of that particular fixed asset) will go up, and the owners who purchased the assets at the old prices, will be making higher gross profits out of which it is possible for them to provide a larger amount of depreciation than based on the original cost basis and even in maintaining their consumption as well as capital intact.

Whenever there is any change in the price of the asset, the relevant asset-cost which enters into competitive pricing is the cost of replacing the asset, whereas the relevant-asset cost for maintaining an individual's capital intact is the original cost of the asset after the necessary adjustments for the general price-level changes. As the objective here is not to discuss the role of depreciation cost in the pricing of products but to maintain the capital intact we shall like to examine the controversy between maintaining the capital intact in terms of the original investment or the present replacement cost of the asset or the original cost adjusted for the changes in the general price-level. It is because 'the distinction between depreciation to maintain general command over goods and services intact, and depreciation to maintain productive capacity of the firm intact, is important whenever the price of the asset moves differently from the general price level.'<sup>[2]</sup>

The owner of the asset makes an unforeseen profit when the prices of the fixed assets and of the products produced with their help rise. One possibility is that the owner may consume such extra profits if he wants to maintain the capital intact at the original cost. But in order to replace the asset at a higher price in future, it is necessary that he must set aside a part of such extra profits due to rise in prices so as to maintain his capital intact in real terms. In times of rising prices, maintaining original capital intact means that the real capital in course of time is being eroded. Applying similar logic, if the price of the asset falls and if it also results into lowering the prices of the products, it will result into reduced profits or even losses to the owner. In such a case, even reduced depreciation may mean maintaining his consumption and productive capacity of the firm intact but his capital in terms of the general purchasing power may go down. But lowering depreciation in this case cannot be permitted because ultimately it will result into paying dividends out of capital. Therefore, the sound business practice will be to write up depreciation in times of rising prices but not to write it down when the price of the asset falls.

Whereas the asset price is relevant for price-determination, for purposes of maintaining the capital intact it is the general price level which is pertinent. Thus the concept of capital maintenance may be used in two senses, one, maintaining the capital intact in terms of original cost which is at present the basis adopted by various countries and second, in real terms, so that the original cost is multiplied by a

relevant index number of prices. In the latter sense, it may imply maintaining the capital intact in terms of the real output capacity of the asset or in terms of general purchasing power of goods and services. In the former, we need the relevant price index of the particular asset whereas in the latter case, it should be the index of the general price-level changes. The writer here is of the opinion that the concept of capital maintenance should imply the maintenance of capital in real terms while making use of the relevant price index numbers of the particular assets.

Since it is difficult on the part of the management to forecast the exact time and the pattern of the changes in the prices of the particular assets and the general price-level, we cannot be accurate in knowing as to what shall be the cost of the asset at the time of replacement. Further, the longer the life of an asset, the greater is the difficulty. Moreover, income-tax authorities also are reluctant to shift from the original cost basis of providing depreciation. Therefore, what is practicable for the management is that they may provide depreciation even though on original cost basis but they must create a special reserve to be called 'Depreciation' or 'Replacement Reserve' out of the net profits of the company in addition to what they normally provide as depreciation on original cost basis. This extra provision will be made according to the trend of the changing prices of the particular assets. This will enable management not only to follow the so-called principle of 'consistency' in accounting while providing depreciation on the original cost basis but also in following a wise policy of creating replacement reserve for incorporating the changes in the prices of assets to be replaced in future: It is suggested here that if the Government starts compiling and publishing a separate series of the index number of prices of the various types of plant and machinery and other fixed assets used in various manufacturing enterprises, it will provide a basis for the management on which to base their additional provisions for replacement in times of changing prices.

#### REFERENCES

[1] W. Arthur Lewis : '*Depreciation and Obsolescence as factors in Costing*'—taken from *Depreciation and Replacement Policy*, Edited by Prof. J. L. Meij.

[2] *Op. cit.*, p. 22.