
ANALYSIS OF PRICE LEVEL CHANGES IN EVALUATION & ACCOUNTING

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ABSTRACT:

"Devaluation means decreasing the external value of a country's currency and not its natural/internal value. Decreasing its external value by any given extent may eventually mean a corresponding and even greater decrease in its internal value if domestic inflation in terms of costs, prices and incomes in general is not only held in check, but actually gets worse. by – *B.N. Gangugi*

Accounting is an information system and its ultimate objective is to report such information to the users which may be helpful to them in their relevant decisions. The basic objective of accounting in the preparation of financial statements is a way that they give a true and fair view of the operating results and the financial position of the business to its various users, such as investors, creditors, management, government, trade unions, research concepts and conventions. The user's decision oriented approach to corporate reporting has been widely advocated in literature. All these documents emphasize that corporate financial reports should be designed in such a way so as to present the information which may be used by various users' groups in their respective decisions.

Key words : National resources, growth

HISTORY OF INFLATION:

Accounting for price-level changes also referred to as inflation accounting is a financial reporting procedure which records the consequences of inflation on the financial statements that a company prepares and publishes at the end of the financial year, which is based on the assumption of a stable currency. The 1970s and 1980s were exciting period for accountants who welcomed change. The extremely high rates of inflation that were a feature of the period posed a considerable challenge to the traditional historically based financial accounting model. Within a period of less than twenty years, the professional accountancy bodies turned from conservative advocates of the historical cost status quo to radical reformers, urging the introduction of new systems and ideas. As the dragon of inflation was tamed, the urge for radical change dimmed, but reform did not come to an end. The challenge to the conventional wisdom that historical cost accounts were all one needed did not go away. The theoretical debate about the nature and purposes of financial accounting that accompanied attempts to take account of changing prices and the discussions about the merits of different models of measurement continued, to a large measure, in the area of standard setting. While the attempt to introduce a new orthodoxy based on the adoption of a system of financial accounting that comprehensively and systematically takes account of changing prices, general, specific or both, was halted via the withdrawal by the Financial Accounting Standards Board (FASB) of its standard on Accounting For Price Level Changes. Ball and Brown (2008) has the opinion that Financial accounting information in periods of rising prices has been criticized on the grounds that it reflects a number of dated monetary units while the value of the monetary unit is changing.

Beaver, (2008) says that conventional or historical cost accounting assumes that money has stable value. But in reality, value of money varies from time to time as a result of changes in the general level of prices. Prices of goods and services change over the time. The change in price as a result of various economic and social forces brings about a change in the purchasing power of money. "Inflation is the most important fact of our time, the single greatest peril to our economic health". Prices of various goods and services have been rising at an alarming rate- "Though the history of

mankind is a history of rising prices, inflation has become a worldwide phenomena since the second world war. In a country like India the problem is more acute with its developing economy". Governments ever rising administrative expenditure, enlarging plan outlays without corresponding increase in productivity and various types of subsidies have given an impetus to inflation. Each one of us experience the impact of inflation in everyday life. Neither can we wish away inflation nor can we remain insensitive spectators. Problems associated with inflation must be brought in to sharp focus to understand their magnitude.

PRICE LEVEL CHARGES & INFLATION ACCOUNTING:

Information concerning the financing and investing activities of a business enterprise and the changes in its financial position for a period is essential for financial statement users, particularly owners and creditors, in making economics decisions. When financial statements purporting to present both financial position (balancesheet) and results of operations (Statement of income and retained earnings) are issued, a statement summarizing changes in financial position should also be presented as basic financial statement for which an income statement is presented."

The Balancesheet gives a static view of the sources of finances (liabilities and owners' equity) and the uses (assets) to which these finances have been put at a point of time. But it does not indicate the causes of changes or the movement of finances between sources and uses from the end of one period to the end of the next period. Therefore, an additional statement should be prepared to show the changes in ASSETS, LIABILITIES & owner's equity between dates of two balance sheets. This statement is referred to as THE STATEMENT OF CHANGES IN FINANCIAL POSITION. Such a statement summaries as : Changes in assets and liabilities resulting from financing and investment transactions during the period, as well as those changes which resulted due to changes in owners' equity.

The way in which the firm used its financial resources during the period of e.g. to acquire fixed assets, to pay debts, to pay dividends to share holders, and so on.

PRICE LEVEL CHANGES & INFLATION ACCOUNTING

Under the price level changes accounting both rise in prices and fall in prices are considered, but under inflation accounting only rise in prices should be considered, but readily speaking prices rise and fall also, therefore in my self opinion it is better to use the words price level changes accounting system rather than inflation accounting system. The reason being that under this system all types of changes in price are considered while under inflation accounting as the word inflation indicates – only rise in prices are considered. In these days both price level change accounting and Inflation Accounting are treated or called as the same.

MEANING OF INFLATION ACCOUNTING :

- ❖ A system of accounting which incorporates inflationary changes is called inflation accounting.
- ❖ Accounting of inflation indicates those costs which prevail on the reporting date.
- ❖ All type of capital expenditure/maintenance of account on the basis of current cost is known as inflation accounting.
- ❖ Under Historical cost accounting are converted on the basis of current cost conversion comes under price level changes or inflation accounting.
- ❖ Profit and loss accounts & financial statement which are kept on traditional basis as historical base are converted on the basis of current cost price for having upto the information. After conversion of various amounts of these above statements, fresh statements are, prepared.

PRICE LEVELS IN INDIA

We have in consequence a state of continuously rising prices in the country for the last so many years, in other words the value of rupee is continuously falling. The real root cause of a fundamental nature of rising prices in the country in recent years are :

- ❖ Plan expenditure with a long gestation period.
- ❖ Increasing deficit financing.
- ❖ Wasteful officially known as outlaid Public expenditure.
- ❖ Government policy of import and export etc.
- ❖ Foreign exchange planning.

In 1956-57, Indian Govt. very heavily depended upon the deficit financing which help in creating inflationary tendencies. The 'price level' was naturally to be raise. The period after 1962-63 is particularly marketed with past aggression hectic funds and thereby creating more inflationary tendencies.

As is very much natural, the price level of the country will continue rising may be at a faster rate. The increasing price level retard and the growth in standard of living particularly, when the prices of consumer goods rise.

The rising price level of our country is a challenge to the economists, planner, Govt., and the public. It is not met with full vigors and vitality our entire dream of democratic socialism and democratic planning shall doom down to dust. The stability of the price level is one of the most urgently required thing.

Objects & Terminology of Inflation Accounting

- Inflation accounting indicates real financial statements position.
- Profit and loss account indicates real profit or loss.
- To show reasonable provision for replacement of capital assets taking into consideration the trend price in rise.
- Inflation accounting ascertains real income of capital can be easily ascertained.
- On the basis of inflation accounting effective and workable plans and policies can be framed easily.
- The effect of inflation on business can be found out easily.

The basic objective of inflation accounting is to provide more and useful information than historical cost accounts alone, for the use of management, shareholders, financial institution's researches and other; the statement specifically mentions matters such as the financial ability of the business, return on investment, pricing policy and gearing. Price level change/ inflation is based on a concept of capital represented by net operating assets (defined below) expressed a current cost, historic cost profit is determined after making certain charges against revenue to maintain history cost capital, while inflation accounting profit is determined by making charge against revenue to maintain current cost accounting capital.

Terminology: Net Operating Assets:

Comprise the capital expenditure including trade investments, stock and monetary working capital dealt within an historical cost balancesheet.

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

Current Cost Operating Profit: The surplus arising from the ordinary activities of the business in the period after following for the impact of price level changes on the funds needed to continue the existing business and maintain its operating capability. Whether financed by share capital or borrowing. It is capsulated before interest on net borrowing and taxation.

Current Cost Profit Attributable : To Shareholders : Is the surplus for the period after allowing for the impact of price level changes on the funds needed to maintain their proportion of the

operating capability. It is calculated after interest taxation and extra ordinary items. Value of the Business:

- Net current replacement cost or if a permanent diminution to below net current replacement cost has been recognized.
- Recoverable amount is the greater of the net realizable value of an asset and, where applicable, the amount recoverable from its future use.

MONETARY WORKING CAPITAL:

- Trade debtors, payments and trade bills receivables plus
- Stocks not subject to a cost of sales adjustment, less.
- Trade creditors, accruals and trade bills payable, in so far as they arise from the day-to-day operating activities of the business as distinct from transactions of capital nature. Bank balance or over draft may fluctuate with the volume of stock. The part of bank balance or overdraft should be included in the monetary working capital, together with any cash floats required to support day-to-day operations of the business, if to do so has as material effect on current lost operating profit, Net borrowing is the excess of :
 - The aggregate of all liabilities and provisions fixed in monetary terms (including convertible debentures and deferred tax but excluding proposed dividends) other than those included within monetary working capital and other than those which are, in substance, equity capital over.
 - The aggregate of all current assets other than those subject to a last of sales adjustment and those included within monetary working capital.

ADVANTAGES OF PRICE LEVEL CHANGES :

As rightly observed by the 'LITTLETON' "Net income determination is an accounting aim and an enterprise. Objective of central importance" 'Inflation accounting' provides tools for a realistic appreciation of net income in a growing or slowing economy where the purchasing power of the basic unit of accounting shows significant fluctuations. Its main advantage are :

- Capital / capital expenditure is maintained intact.
- The computation / determination of net income is more realistic.
- Financial statement indicates a more realistic picture of the economic and financial health of the enterprises.
- It provides a method of isolation and identification of benefits accruing to the enterprise as a consequence of managerial efforts as distinct from those of non- controllable external economic factors.
- The cost of sales which provides guidelines for fixation of price and profit ability of product mix for managerial decisions is far more realistic as compared to historical cost system during periods of hyperinflation or deflation.
- Depreciation on fixed assets at current costs are provided for in the accounts. Amount available for investment when replacement is needed is much nearer the current acquisition cost of the replaced asset.
- Under hyper inflationary conditions, it provides a check against the sense of under feeling of well being in its physical absence.
- It reflects in more concrete physical terms, the dynamic nature of business operations.

LIMITATIONS & DISADVANTAGES OF INFLATION ACCOUNTING

Inflation accounting is a sophisticated tool of management unless managers are tuned to highly refined techniques of modern scientific management and implement them in letter and spirit, refined inflation accounting data will not produce the desired benefits.

- ❖ It violates established and currently well understood meaning of terms like depreciation, cost and profit. It requires development of a new common language of the enterprise for its effective utilization.
- ❖ Even though higher rate of depreciation can be provided the speed in improvement of technology, by the time of replacement of some of fixed assets falls due, may be so fast that

the original assets may have become obsolescent. Inflation accounting provides for change in economic value of money but fails to provide for changes in the technological environment of the economy.

- ❖ Determination of appropriate index number for valuation of assets and liabilities will continue to present ticklish problems till the economic and statistical tools of analysis improved further.
- ❖ Inland Revenue authorities of most countries have not so far accepted the basic principles of inflation/ revaluation accounting for determination of taxable income.
- ❖ Its implementation and utilization involves development of higher types of conceptual techniques by managers and accountants leading to higher cost of their training and reorientation.

METHODS OF INFLATION ACCOUNTING

For valuation and accounting purposes

- ❖ Current Purchasing Power Accounting
- ❖ Current Cost Accounting

Current Purchasing Power Accounting (CPPA)

In this method General Price Index Number (GPIN) is used. e.g. a machine was purchased in 1980 for Rs. 80,000, at that time GPIN was 400. In 1990 this index number became 500, than value of machine in 1990 will be found out on the basis of the following formula:

$$= \frac{\text{GPIN of Current year}}{\text{GPIN of Base Year}} \times \text{Historical Cost of Calculated Asset}$$

$$= \frac{500}{400} \times \text{Rs. 40,000} = \text{Rs. 50,000.00}$$

For the purpose following consideration are made in using CPPA Method :

- ❖ Above given formula is used for conversion of Historical amounts.
- ❖ Conversion of items which occur throughout the year, purchase, sales, wages and advertisement expenses etc. They should be converted on the basis of average Index No. as:

$$\text{Concerned item} = \frac{\text{Index at the close year}}{\text{Average Index No.}}$$

$$\text{Where average Index} = \frac{\text{Index at Beginning} + \text{Index at close}}{2}$$

Note : Opening stock, closing stock and depreciation are not converted according to this Index No. If opening and closing Index No. as stated above are not given, but Index No. of the middle of the year concerned is given, then this Index No may be used.

- ❖ Calculation of P & L on monetary items, under it adjusted amounts of payments made during the year is found out on the basis of Index Nos (I Ns). Adjusted amount of receipts acquired during the year is foundout on the basis of 9 No. Adjusted amount of the working capital of the begining of the year is found out on the basis of 9 Nos. After various adjust monetary capital of the end of the year is calculated. It this capital is more than the real monetary working capital, then this excess is treated as profit and if it is less, then this deficiency is treated as losses.

Problem of Index Numbers : Ascertainment of appropriate index numbers for conversion of historical values of assets and liabilities to replacement valued is of vital significance. Two index number generally published by appropriate government departments are the following :

- ❖ Index of wholesale price and
- ❖ Index of cost of living, also designated as consumer's Price Index.

These are worked out on the basis of appropriate weights to large number of heterogeneous components. Appropriate indices for use in revaluation accounting must be selected carefully.

CURRENT COST ACCOUNTING METHOD:

In this method historical price of assets is not considered. On the other hand current price of each item is considered concept of current cost, it is sometimes called 'Replacement Cost'. Current cost can be found out by following method:

Net Realisable Value : If existing asset is sold on the date of balance sheet what net price will be realised the same is treated as net realisable discounted present value : If a machine is used four years more in future and income of Rs. 20,000 is derived every year from it and per year expenses on this machine are Rs. 6,000, then net income per year is Rs. 14,000. In the next four years net income from this machine will be Rs. $14,000 \times 4 = 56,000$. Its present value is found out after deducting discount. This is known as discounted present value.

- ❖ Net replacement cost : This is the cost at which concerned asset can be purchased in the market on the date of balancesheet. This method has been explained in Valuation and Accounting of Depreciation chapter no. fifth. Out of the above three methods, net replacement cost method is treated as best.

VALUATION OF ASSETS UNDER CCA:

1. Plant and Machinery: Plant and machinery are valued on net replacement cost as has been explained earlier.

2. Self-occupied Land and Buildings: They are valued on open market price and cost of its acquisition is added in it. Actually its valuation is to be made after every five years period by experts and during this period of five years their valuation be made by company's directors on the advice of professional valuers.

3. Long period Investment: Their valuation is made as under :

- If the investments are quoted in stock exchanges, their valuation is made on the price ruling therein.
- The investments, which are not registered in stock exchange, are valued on the basis of current cost, i.e., net asset of that company be found out in which this investment has been made and valuation should be made on the basis of this amount.

4. Current Investments: They should be valued as stock.

5. Stock: Its replacement cost and net realizable cost on the date of balancesheet be found out and whichever amount is less out of these two, that should be treated as value of stock.

6. Work-in-progress: It is valued in the same manner as stock.

- **Current Assets other than Stock and Work in Progress.** These assets are shown at the same amounts which appear in historical cost. Their examples are: Cash, B/R and Debtors etc.
- **Current Liabilities:** They are shown at the same amount which appears in historical cost.

COST OF SALES ADJUSTMENT OF COSA:

Sales are made at current prices hence there is no need of adjustment of sales, but all elements of cost of sales are not on current cost, hence they are adjusted at current cost. When stock is included in cost of sales, then its adjustments becomes necessary because remaining amounts of cost of sales are at current price. This adjustment is called Cost of Sales Adjustment.

METHOD OF COST OF SALE ADJUSTMENT:

Average current cost of closing stock is found out in the following manner :

$$\text{Closing Stock} \times \frac{\text{Average Index Number}}{\text{Closing Index Number}}$$

Average current cost of opening stock is found out in the following manner :

$$\text{Opening Stock} \times \frac{\text{Average Index Number}}{\text{Closing Index Number}}$$

Average Current cost of closing stock— Average current cost of opening stock= Cost of Sales Adjustment.

$$\text{COSA} = (\text{C}-\text{O}) \left[\frac{\text{C}}{\text{IC}} - \frac{\text{O}}{\text{IO}} \right]$$

COSA = Cost Of Sales Adjustment

C = Historical Cost of Closing Stock

O = Historical Cost of opening Stock

Ia = Average index number for the period

IC = Closing Index number for the period

IO = Opening index number

DEVELOPMENT S ABROAD:

Need for inflation accounting has been recognized world over. There has been a very lively debate in 1970s and 1980s which centered around evolving an appropriate method of inflation accounting. In U.K. SSAP-7, Accounting for changes in purchasing power by money' recommended current purchasing power method of accounting. This standard was not mandatory. This was followed by SSAP- 16 accounting standard recommending current cost accounting. This standard was withdrawn in April 1990 on account of strong difference of opinion in the accounting profession.

In USA securities and exchange commission issued ASR- 190 requiring corporations to include current replacement cost disclosure in financial; statement. FASB had issued SFAS no. 33 which was followed by SFAS no. 89 encouraging supplementary disclosures on current cost or constant purchasing power current basis.

In other countries of the world effects have been made to find out an appropriate method for accounting for change in value of money. However, in India except for a guidance note issued by the Institute of Chartered Accountants of India neither the accounting profession nor the Govt., the industry has made any whole hearted effort to evolve an inflation accounting. This is in spite of the fact that problem of inflation is more acute in India than in most of the western countries.

Although the world over debate has taken a respite the need for inflation accounting continues to exist. Various controversial area remain. The problem of interpreting inflation adjusted accounts, generating norms of debt equity, earning per shares, return on capital etc., and have to be tackled. Some of the norms could be quite different from those which the users of accounts are accustomed to under Historical cost accounting problems of investments in foreign countries having separate inflation rate devaluation of currencies and different trends in price rise specific to different industries have also to be satisfactorily dealt with.

These and various other related issues need debate so as to find an acceptable solution. But this can be done only if a beginning is made.

INFLATION ACCOUNTING IN INDIA:

Discussion about inflation took place in India. Following particulars are available in this connection:

- ❖ In 1975, Institute of cost and works accountants made a thorough study of inflation accounting and made a research on the basis of some selected companies in order to find out effect of inflation on their financial position. This institute published its findings of research for the information of public in general.
- ❖ Sufficient attention has been paid on inflation accounting by the Institute of Chartered Accountant of India.
- ❖ Some companies, of private sectors have prepared their final accounts on the basis of historical cost and also on the basis of inflation accounting in which current purchasing power accounting (CPPA) method has been used. These companies are T. I. cycles and Ashok Leyland.
- ❖ In public section, M/s Hindustan Machine Tools and M/s Bharat Heavy Electrical Limited have prepared their final accounts on the basis of historical cost as well as inflation accounting in which current cost accounting (CCA) method has been used.
- ❖ So far there is no legal provision for the adoption of inflation accounting but all important institutions and companies realise the importance and necessity of this accounting system.
- ❖ At present in our country so many companies i.e. M/s oil India limited, M/s Indian Oil Corporation & others are following accounting of inflation.

CONCLUSION;

Accounting and auditors in developing countries i.e. like our country, where the purchasing power of the currency unit has been decreasing at an appreciable rate face a peculiar problem of professional integrity. If they continue to certify that to the best of their knowledge and belief final accounts in general and values of fixed assets and consequent contribution of their depreciation on the basis of historical costs in particular represent true and fair view of the affairs of the company even though purchase value of the currency unit has change by way a few hundred per cent by implication; they certify their invincence of their own economic expedience due to changes in money value. This is a rather uncomfortable situation. The situation is a little more difficult for accounts and auditors who have been associated with the company for a few decades over which the purchasing power of currency unit has fallen down appreciable. With significant changes in money values over time, accounts based on historical cost cant appropriately be certified to represent a true and fair view of the affairs of the company.

“Inflation/price level changes accounting involving integration of the sciences of economics and accounting under the developmental environment of complex actual life socio-economic factors in developing economies exposed to violent changes in the purchasing power of their currency unit appears to provide a solution. It can however, be implemented only in conjunction with highly refined techniques of scientific management yet to take concrete shape in the countries.

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