

## Depreciation Reserve & Provisions Under Price Level Changes [An Overview of Legal & Accounting Aspects of Small Scale Industries]

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### Abstract

Depreciation is the deterioration of the physical and functional utility of a fixed asset due to its usage and passage of time. Accounting for depreciation is a way of writing off the investment on fixed assets by prorating over a certain period of time of its usage. Ordinarily, depreciation accounting is designed, to recover simply the number of monetary units originally committed to the asset irrespective of differences in their purchasing power. This is quite satisfactory in periods of relative price stability but can be seriously, and even ruinously inadequate during period of relentless inflationary pressures with sharp drop in the purchasing power of the monetary unit. Valuation of fixed assets in real prices is very important for the following: economic analysis and forecasting of the development and use of the economic potential; identification of parameters of investments, and setting depreciation policies at the macro level and micro level. The value of fixed assets determines the size of property tax, depreciation charges, profit tax, etc. While going over to a market economy, India has been facing high inflation, which is typical of a transition period, and reevaluations had to be made more frequently than during the earlier period.

**Key Words:** Financial Statements, Purchasing Power, Economic Potential, Economic Analysis, Consumer Price Index, Capital Conservation Reserve.

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## **1. INTRODUCTION**

The present paper endeavours to seek the following specific objectives- (i) To identify the present status, strata, and accounting practices being followed by SSI units under study; (ii) To evaluate the present provisions of law relating to depreciation with reference to price level changes (iii) To assess and measure the price level changes during the period of study and their impact on the management of fixed assets and depreciation accounting in sample SSI units; (iv) To identify the growth pattern of the SSI sector and identify the reasons for success/failure; (v) To identify the barriers and constraints that SSIs are facing.

The present study has been done with the following hypotheses- (i) That sufficient provision for depreciation on fixed assets on the basis of historical costs renders it difficult for small scale units to replace the fixed assets at current prices; (ii) That the present relevant provisions of law for providing depreciation on fixed assets are not conducive for protection of investment in fixed assets; (iii) That the present accounting standards and contemporary accounting practices fail to accommodate price level changes and its impact on management of fixed assets especially in the small scale sector; (iv) That the study of sample SSI units on the subject will provide sufficient inputs for developing accounting and mathematical models for universal application.

The study has been undertaken in two phases. Phase-1: Qualitative Research with Policy makers and Institutions and Phase-2: Structured Survey.

There is immense potential to be tapped towards ancillarisation that needs proper networking systems to be developed for exchange of information, database, assignments and projects between bigger companies and SSIs. The Government could take a lead on developing these kinds of systems.

The policy makers feel that the SSIs should be driven by market forces rather than reservation of items. At times, somewhat larger industries have been hindered in their growth plans because of the reservation of the product under small scale. Keeping this in mind, the barriers have been removed and about 160 items have been de-reserved from SSI sector. This would also make them more competitive. The inputs from the qualitative research were used to frame the structured questionnaire in more detail.

A sample of 1000 companies in the SSI sector had been used for the quantitative survey. The final number on which the analysis has been conducted is 872. The companies in the Eastern region and the Northern region were not enthusiastic about the survey; therefore the required sample size could not be achieved. The survey work was completed in a span of three months from April 2011 to June 2011. 31% of the sample comprises of companies in the Northern region, 31% in the Southern region, 23.5% in the Western region and 14% in the Eastern region.

The cities which were covered in each region were: (1) Northern region- Dehradun, Delhi and NCR, Kanpur, Lucknow, and Meerut; (2) Western region- Ahmedabad, Baroda, and Jaipur; (3) Eastern region-Bhubaneshwar and Guwahati; (4) Southern region- Bangalore, Chennai, and Hyderabad.

The sample comprised of 81% companies in the manufacturing sector and 19% companies in the services sector. The ownership pattern of the companies in the sample was as follows: (1) Sole Proprietorship- 53%; (2) Partnership Firms- 22%; (3) Private Ltd Co- 22%; and (4) Public Ltd Co- 3%. The sample comprised of 45% companies belonging to the pre liberalization era (pre 1991)

and 55% of companies belonging to the post liberalization era (post 1991). Among manufacturing companies the industry sectors which were covered are- Textiles, Leather and Garments; Printing, Packaging and Paper, Plastic and Rubber, Machinery and Mechanical Products, Electrical and Electronic products, Chemical Industry and Products and Automobile and Auto Products/Services. The kind of companies which were covered in the Services sector are office automation, computer products and IT services; consulting, architecture, interior decoration, retailing and insurance services and beauty and health services etc.

Management of fixed assets includes gamut of activities. Acquire, maintain, safeguard, distribute, and administer the fixed assets needed to support the entity's mission, goals, and objectives. The ultimate object is to minimize the cost and maximize the utility of fixed assets acquired.

Depreciation is the deterioration of the physical and functional utility of a fixed asset due to its usage and passage of time. Accounting for depreciation is a way of writing off the investment on fixed assets by prorating over a certain period of time of its usage. Ordinarily, depreciation accounting is designed, to recover simply the number of monetary units originally committed to the asset irrespective of differences in their purchasing power. This is quite satisfactory in periods of relative price stability but can be seriously, and even ruinously inadequate during period of relentless inflationary pressures with sharp drop in the purchasing power of the monetary unit. The point has been forcefully emphasized by Mr. J. R. D. Tata, chairman of Tata Iron and Steel Company Limited in his statement for 1971-72 at the annual general meeting of the Company.

"...By a healthy and productive plant we mean one maintained at a peak of efficiency by continuously replacing worn out or obsolete parts and incorporating improvements in equipment, processes and techniques as they become available. All this costs far more money that available from allocations to depreciation in view of the enormous increase in the cost of new equipment over the historical cost of the equipment it replaces"

The present research has been able to identify certain problems related to the sickness of SSIs due to the faulty depreciation policies and practices which occur at the ground level and are faced by the SSIs in their day to day working and progress. The policy makers and institutions require addressing these issues for optimising the potential of the SSI sector.

The basic objective of Accounting is the preparation of financial statements in 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, namely investors, creditors, management, Government, trade unions, research institutions etc. These financial statements are prepared based on certain accounting concepts and conventions. The money measurement concept is a basic attribute of accounting.

The money measurement concept states that only those business transactions that are capable of being expressed in terms of money can be recorded in the books of account. It also assumes that the monetary unit used for recording the transaction is stable in nature. However, this is not true in practice as many countries, developed as well as developing, have been experiencing inflation of high magnitude in recent times. Inflation refers to state of continuous rise in prices. It brings downward changes in the purchasing power of monetary unit. Thus, financial statements prepared without taking into account the change in purchasing power of the monetary unit lose their significance. There is a demand that business enterprises should prepare inflation adjusted financial statements. The different ways through which financial accounts can be adjusted for

changing prices is studied under the subject "Inflation Accounting". Given that price changes can also be downward, it is more appropriately called "Accounting for price level changes".

Depreciation is an annual deduction out of the annual revenue that a business firm can claim for the cost of usage and value erosion in the assets with the passage of time; such assets are as vehicles, buildings, machinery and other equipment. In the contemporary tax laws, depreciation is defined as a reasonable deduction for the wearing down and/or obsolescence of the fixed assets. It is included on income statements as an expense for accounting purposes.

The cost of assets that are totally consumed within an accounting period will be recognized as an expense within that period. When an asset is not totally consumed within a single accounting period—as is typically the case with fixed assets—the cost of the asset must be allocated as an expense over the periods in which the asset is consumed. Depreciation arises from this attempt to assign asset cost to the period of asset consumption. The depreciation for an asset in a period is simply an estimate of the portion of the original cost to be assigned as an expense to the period. A similar concept is depletion, which is applied to the extraction of natural resources in recognition of the fact that a certain part of the natural resource has been consumed during a given period.

Since depreciation is an allocation of cost over several accounting periods, it is not directly connected to market value—or the amount that the asset would be worth, if it was sold. The book value of an asset, computed as the actual cost minus the accumulated depreciation, is simply the unallocated cost of the item. The pattern of depreciation is fixed and does not respond to changing market conditions.

Depreciation does not involve any cash flow. This is clear in the simple case of an asset acquired entirely by cash payment. Although the initial purchase is a cash flow, the subsequent allocation of part of the cost as a periodic expenditure involves only an accounting entry. Depreciation is not intended as a mechanism to provide for replacement of the asset. There are no cash flows associated with depreciation, and there is no connection with any cash accumulated for replacement of the asset. The asset may or may not be replaced—this is a capital budgeting decision that is immaterial to the recognition of depreciation as an item of expense. Because depreciation is an expense but there is no associated cash flow, it is sometimes described as being "added back" to arrive at cash flow for the firm. This gives the impression that depreciation is somehow a source of cash flow. The adding back, however, is simply recognition of the fact that no cash flow occurred and depreciation cannot supply cash.

## **2. AREAS WHERE PRICE LEVEL CHANGE INFLUENCE ACCOUNTING PRACTICES**

The accounting practices influenced by the price level changes are mainly in the following areas-

**2.1 Value Erosion of Cash and Near Cash Items:** Cash and bank balances or any other near cash items are possessed by almost every business firm to meet day-to-day need of payment of expenses and currently maturing liabilities due for payment. However, the purchasing power or value of cash and near cash items goes on reducing with the every bit of passage of time during the period of rising prices. The dormant cash in hand, bank balances or cash equivalent earns nothing but its value erodes during inflation or rising price levels. In the period of price rises or during inflation, holding the cash and its equivalent purchasing power of money will normally be subjected to the money value erosion. Therefore, it would be a suggestive accounting practice to

hold cash and cash equivalents just sufficient to meet requirement of a few days only *i.e.*, the minimum period to get funds generated from the other sources.

**2.2 Value Erosion in Debts and Receivables:** Selling on credit is the most common practice in almost every business for the purpose of improving market share. Credit sales generate debts and accounts receivables as an item of current assets in a business firm. The size and the length of time of holding debts and accounts receivable depends on the credit policy of the firm or the industry. Larger the size or lengthier the period of debts and account receivables in a business firm, greater is the probability of money value losses during the period of inflation or rising prices. Therefore, sound accounting practices call for a trade-off between the benefit generated by added sales by adoption of a credit sale policy and the money value loss of bad debts money value erosion during the pendency of debts and accounts receivables.

**2.3 Value erosion due to Dormant Inventory:** Investment in current assets includes variety of inventory items such as (i) stock of raw-materials waiting to be consumed in production, (ii) stock of finished goods waiting to be delivered to the customers/consumers, (iii) in process inventory or work-in-progress *i.e.*, the goods in semi-finished form in the pipelines well within the process of production, and (iv) lastly, sometimes the stock like loose tools, lubricants, nuts and bolts, rugs etc., needed for repair and maintenance of machinery and plant. Every industrial unit small or large is obliged to maintain stock of such inventories. Hence the capital investment therein such stock of inventory is inevitable. But sound accounting practices does not permit dormancy in such investment because of the loss of opportunity of earning some profits by the alternative use of such capital on the one hand and losses incurred due to the value erosion with the quality loss in such stock of goods with the passage of time as moisture, hot and cold weather and other natural phenomenon may wear and tear, rusting out. Pilferages and other cost maintaining such stocks may also be high at times. Scientifically decided minimum and maximum stock levels, Procurement under EOQ systems, ABC analysis etc are the well tested accounting techniques to solve such problems of dormancy of stock of inventory. On the contrary, in case of rising prices of such goods and commodities, even the higher levels of inventory are permissible as sound accounting practice. But one must be cautious about using the best alternative method valuation of issues and inventory. LIFO- [last in first out], NIFO- replacement value method or market value method would be most useful techniques for conserving capital investment in inventory during the period of inflationary prices.

**2.4. Impact of price level changes on current liabilities:** Current liabilities in a business firm are generated due the time lag in the payments of accounts payables and expenses. The sound accounting practices call for availing of the maximum benefits of the credit policies of the suppliers without impairing the creditworthiness and losing confidence of the suppliers. In competitive supply market such an opportunity is always easily available to the buying firms; however, in case of monopoly supply market or under the imperfect supply market conditions even the shortest credit period may be denied by the supplying firms. On the contrary, large number of items of expenses is contractual in character and the payments for them are due periodically on raising bills; hence, an opportunity of maneuvering the payment period in case of expense items is rarely available to a business firm. Therefore, the firms must use creditors' funds

with almost precaution as a means of financing the core investment in current assets. But one must always bear in mind that during the period of high rising prices, the technique of delaying payments towards current liabilities would definitely benefit the buying firms and the firms availing services without current cash payments.

**2.5. Impact on money value changes on Long Term Capital:** Long term capital includes owners' funds and long-term borrowed funds usually utilized by the business firms for long-term purposes such as: (i) Procurement of fixed assets; (ii) Redemption of currently measuring term loans; (iii) Investment in core current assets etc. Outsiders' funds invested in a business firms by way of long-term loans or advances creates a contractual liability on the firm to make payment of interest periodically. Until the EBI *i.e.*, earnings before Interest but after tax of a business firm is larger than the cost of such capital *i.e.*, the obligatory liability of payment of interest after adjustment of tax rebate available, the use borrowed funds as long-term investment in the business is always profitable proposition. Furthermore, the perpetuity of maintenance of borrowed funds during the period of rising prices gives the borrowing firm an added advantage, as the value of money at the time of repayment or redemption of borrowings at a future date on maturity would always be less than the value of money borrowed in past. On the contrary, owners' fund in the business enterprise goes on fluctuating with the net results of business operations. Profits increase it and losses reduce the total quantum of owners' funds in the business. The drawings for personal use or dividend payments reduce the quantum of owners' fund. However, the intrinsic value of owners' investment in a firm remains protected until the earning per rupee of investment minus dividend payouts is greater than the fund even during the period of rising prices.

Whatever the impact of money value erosion due to rising prices may be on different items of assets or liabilities, the accounting practices need certain adjustments for price level changes. The mathematical technique of deflating values through the general price index or according to current prices adjustment accordingly will be able to reflect their true current values of assets and liabilities in accounts. Therefore, distortion caused by the basic accounting data can be made good to a larger extent.

Thus, the historical cost based accounting fails to conserve real net asset value of a firm. The net assets of business owners in the enterprise *i.e.*, owners' equity or funds or capital goes on depleting during the period of price hikes or inflation. Though the book value of the capital input of the owners may be constant, the real present value of the same may be much less that. However, under continuous operating conditions, the net asset value is measured in phases, while the monetary value of each accounting period and the value of the assets they own may be much different. Therefore, in the historical cost accounting model, whether it is from the 'financial capital' point of view, or from the 'physical capital' *i.e.*, production capability point of view, net value of owned capital is difficult to conserve during the period of rising prices.

As the Historical Cost based Accounting Model does not react the changes of price or money value in accounting, the assets, liabilities and owners' equity and income, expenditures, costs and benefits can never be properly measured. When the general price rises, the historical cost measurement of assets presents the book value of assets at a lower value than their actual current value. The inflated book profits are inadvertently divided amongst the owners and similarly, in



accordance with virtual rupees in revenue, the income tax is paid to the exchequer. As a result, the capital of enterprises due to the different levels of price changes, which are subject to different degrees of erosion, thus, reducing the strength of enterprises by way of capital erosion. The historical cost accounting principles cannot react to price changes, resulting in the assets, liabilities, equity; revenue, expenses and profit function of the correct measurement, so that a corresponding decline in the quality of accounting information, therefore, it is necessary to the impact of price changes, to take corresponding countermeasures.

The larger portion of long-term capital (both the owned capital and long-term borrowed funds) of an industrial unit is used in acquiring fixed assets and remainder of it is used to finance the core portion of working capital, including inventories, account and bills receivable or balances of liquid funds i.e., cash, bank balance or short-term marketable securities. The erosion in capital is caused by insufficient provision of depreciation on the fixed assets on one hand and reducing quantum of inventory even though a firm tries to maintain its monetary value on the other hand. Similarly, the erosion in value of liquid assets including debtors, cash and bank balance and marketable securities is a feature which may be visible by the negative impact of inflation on money value invested in fixed assets and in current assets too.

### **3. INSUFFICIENT PROVISION OF DEPRECIATION ON FIXED ASSETS**

Insufficient depreciation provision on fixed assets results into plough back of lesser amount of capital than invested in the assets leaving insufficient sinking fund to replace the assts. The capital so eroded increases the taxable profit and, therefore, it raises the tax liability on one hand and the rest of the eroded capital bulges the divisible profits. Thus, the capital funds drain out. Therefore, to conserve capital it is imperative to provide depreciation on fixed assets at an appropriate rate to plough back the funds equal to the amount of capital investments in the fixed assets.

### **4. IMPACT OF INFLATION ON MONEY VALUE**

The money value erosion due to the inflation is yet another reason of capital drain out. Even the sufficient rate of depreciation charge on fixed assets does not guarantee the capital conservation. Under inflationary conditions, the present value of money is always higher than its future value. Hence, it becomes necessary to protect the worth of the capital rather than its quantum which can be done by creating special funds entitled "Capital Conservation Reserve (CCR)" out of divisible profits.

### **5. COMPUTATION OF CCR**

The accounting mechanism for creating such funds would be as follows:

Computation of Annual Contribution /amount of CCR: The amount of annual contribution can be computed either of the following ways:

**5.1. 'Wholesale Price Index' basis-** The whole price indices are representative of change in purchasing power of money. Therefore, WWI can be used to compute the amount of annual contribution required for creation of CCR. The following mathematical module may be useful-

$$X = (I_n/I_{n-1} \times C_0) - C_0$$

**5.2. 'Market Value basis'**- The capital can be conserved also by creating CCR annually equal to the amount of difference of the present 'Replacement Value of Fixed Assets' in use and the WDV of the Fixed Assets plus Accumulated Depreciation thereon till date for the capital investment in

fixed assets. Further, the investment of long-term capital in Current assets has two different facets- (a) Investment in core inventory and (b) Investment in minimum maintainable level of debtors and liquid asset balances including cash, bank balance and marketable securities. The proposition can also be understood other way round also i.e., the long term capital investment in current asset is the net working capital. The conservation of this part of capital investment is also necessary. The following mathematical module may be used:

$$X = \{RVfa - (WDV + AD)\} + \{In/In-1 \times (CA-CL)\}$$

**5.3. Tax Adjustment for CCR:** The tax on income is charged on 'Net Profits' calculated as per tax rules whereas, CCR can only be charged as an appropriation of profits against divisible profits after tax. Hence an amount of capital is also drain out by way of tax. Therefore, tax adjustment is needed in the calculated amount of annual contribution for CCR. The mathematical module for the same may be:

$$\text{Tax Adjusted contribution for CRR} = X (1 + t)$$

Whereas, t = tax rate

**5.4. Accounting for CCR:** The CCR may be maintained like any other capital reserve to avoid drain out by way of drawings, dividends of cash payments of bonus to the shareholders. For the purpose of replacement of assets after the expiry of their usable life, the treatment of the reserve may be on the pattern of Sinking Fund Investment Account.

The genesis of creating 'Capital Conservation Reserve' at least during the period of profit making by SSI units may work as an effective and early safeguard against the menace of sickness.

The standard service for the valuation of machinery and equipment is a rare exception in today's market. Standard service begins with planning the study and includes a site visit, an inventory of assets to the level of item control necessary for planning, and a valuation of the controllable units and property groupings.

Today's market demands lower-priced alternatives to arrive at the value of tangible personal property. Two practices in use within the appraisal profession that have responded to this demand are 1) net book value (NBV) equals fair market value (FMV) and 2) trend and depreciate historical property records. The question is whether these lower-cost practices can still provide a reasonable grasp of the asset values in question. Net Book Value Equals Fair Market Value: The provisions of both SFAS i.e., 141, **Business Combinations**, and 142, **Goodwill and Other Intangible Assets**, have led to an acceptance of the reported NBV as evidence of the FMV of the tangible assets. Net Book Value [NBV] is the net result of a variety of accounting decisions related to whether expenditures are capitalized or expensed. NBV is a function of the property classification of the asset, the application of a depreciable life and method, the recognition of a salvage value, and the application of a depreciation convention. NBV is further influenced by the accounting system's ability to keep up with asset transfers and partial or complete retirement of the asset itself. In addition, there is the impact of fully reserved assets that have zero NBV or that may even be removed from the record when they become fully reserved.

The presence of reported goodwill is the result of a company's having applied purchase accounting to an acquisition sometime in its past. Thus, the NBV of tangible assets is further subject to SFAS 141 purchase price allocation treatment and the application of depreciable lives and methods to what is essentially a collection of used assets.



FMV is dependent upon the cost of new assets, the market prices of similar assets being bought and sold in the used market, and the impact of age, wear, technology, and market conditions as they may be quantified in physical, functional, and economic obsolescence. What is the likelihood that NBV will equal FMV? Mathematically, it can and does happen. But those incidents are far fewer than proponents suggest. The following are some of the events that drive FMV to be different than NBV.

The existence of fully depreciated assets on the books and in use with NBV is equal to zero. For example, consider the valuation of a large developer of computer software for an SFAS 141 allocation. The company used an 18-month life for depreciation of its computer equipment. Thus, all computer equipment more than 18 months old had zero NBV. The company, however, had tens of millions of dollars of computer equipment more than 18 months old that was still in use. The equipment represented millions of dollars to the buyer of the business that would not be recognized if it were assumed that NBV equals FMV.

The capital-versus-expense policy may influence the magnitude of the difference between NBV and FMV. Many companies have high dollar cutoffs, meaning some longer-lived assets below the dollar cutoff may not be reported on the books at all. Other companies capitalize large expenditures because of the magnitude of the expenditure, but the result may not be a long-lived asset with value. Such costs include relocating equipment, repairs, cleaning, and painting. The effects of the capital-versus-expense policy can be compounded over time. The company may be more aggressive in expense treatment in good years, while capitalizing costs more in bad years.

NBV is based on the historical property record. Most companies' historical property records lack the communication and policies to capture and reflect all asset retirements. Many companies' property records have one or more "group" entries, such as "1997 equipment, Rs.2,749,635" or "1998 improvements, Rs.44,898,000," that do not describe any specific assets.

Under the trend-and-depreciate approach, price adjustment factors are developed to trend the original costs reported in the property record to estimates of cost of reproduction-new (CRN) as of the purchase date. Then, depreciation factors are applied to the CRN to arrive at an estimate of FMV. The accuracy of the resulting value opinion is often dubious due to a variety of factors, some of which are explored as- (i) Trend factors must be developed for the specific type and age of the equipment. The type of equipment makes a difference, since the price changes of equipment vary over time. For example, prices of computer equipment may decrease while general machine tool prices increase over the same period. Thus, the property record must reflect sufficient detail to develop trend factors to reflect a company's unique mix of asset types. Examples of records that would not be specific enough to be trended might include plant addition, machinery and equipment, warehouse equipment, and addition to the printing line. Such records lack the specific nature of the asset to properly develop a trend factor. (ii) The application of trend-and-depreciation factors depends upon the asset records reflecting the acquisition date and cost when purchased new. Property records that reflect prior purchase accounting have the acquisition dates reset to the date of the business purchase, and cost is allocated. An allocated record is not a proper base for trending and depreciation. Trend factors are developed based on price changes of the asset type over time. The base is always the cost of the asset when new in its year of manufacture. When either piece of information is lost through

purchase accounting, trend-and-depreciate methodology cannot be applied. NBV will equal FMV only by accident. (iii) The trend-and-depreciate exercise largely depends upon the quality of the historical property record. If asset retirements have not been properly removed from the record over the years, costs will be overstated and the resulting value will be too high. If the record is missing costs due to capitalization issues or write-offs of fully reserved assets, the value indicated by trending will understate the true asset value.

The standard service outlined earlier is the best means of determining what assets are present, their location, age, condition, and FMV. The standard service is costlier than some other services, but is the best approach when documented and fully supportable values are needed for the IRS, an accounting review, or the courtroom.

In the name of cost savings there are many abuses in the application of the NBV-equals-FMV theory and the trend-and-depreciate routine. Consumers of valuation services should be aware of other cost-effective means to determine FMV when records are suspect. Through the use of trained and experienced machinery and equipment valuation experts, valuation consultants are able to opine on supportable values in a cost-effective manner. Some of these alternatives include the following:

- If there are multiple properties that are similar in nature, such as retail stores, the appraiser can inspect and model typical facilities. Value indications of base models can then be applied to the universe of properties.
- If the requirements are simply to have values without much documentation, the experienced machinery and equipment appraiser can do a walk-through on a facility. Equipped with years of experience and knowledge of machinery and equipment values, the appraiser can create a short-form, line-item listing of what physically exists in the facility and its respective value.
- The trend-and-depreciate method can be combined with on-site verification. During the on-site verification, the appraiser can accomplish a number of things to enhance the reliability of the value conclusion. First, the appraiser can verify the existence of major assets and remove recorded assets which are no longer in existence. The appraiser can also spot major assets that may not be on the existing record, value them, and include them in the conclusion. By being on site, the appraiser can also note the use of assets and maintenance policies to develop depreciation factors representative of the actual property.
- Sometimes the sheer size of a project intimidates the parties. An acquisition may include tens or even hundreds of domestic locations and a similar number of international properties. The fear of large appraisal fees may influence the appraisal decision, resulting in minimal valuation work and unreliable value conclusions. One alternative is to stratify the project into modules; a valuation plan can be developed for each module depending on the size, relative value, and location of owned property. Depending upon the company's needs, major facilities may have walk-through and other locations may be trended, while some minor locations default to NBV. The result will be more supportable than a valuation based solely on trending or NBV equals FMV.

What are the implications of asset valuations that are completed hastily and result in poor and perhaps unsupported values? First, overstating asset values will overstate property tax bills for years to come. When records are used for insurance placement, overstating values means paying

excessive insurance premiums. Understating values exposes the company to inadequate coverage in the event of disaster. In addition, there is the excessive cost of labor to try and track and report the investment in fixed assets while using an asset record that is inaccurate and unreliable.

The most important reason, however, is that management and boards of directors have an ethical, legal, and fiduciary responsibility to properly maintain records that accurately report a company's financial position. Management and directors have an obligation to shareholders, the SEC, the IRS, taxing authorities, and others relying on their financial statements to supply records that fairly reflect reported assets.

Indian Accountants have gained some experience of drawing up balances of fixed assets at their full and/or residual values, as well as in constant prices and in their average annual prices for appropriate years. Indian Accountants use continuous monitoring to generate data concerning the fixed assets of large and medium-sized businesses and agencies that is required for drawing up these balances. In 2010 data on small businesses may be generated through selective inspections. Data concerning the age structure of fixed assets that is not found in reporting documents is received through the use of mathematical/statistical methods based on perpetual inventory methods. Mathematical/statistical methods are also used to appraise what influence current and projected volumes of investments in capital assets make on the age parameters of equipment.

A major problem in the field of accounting for fixed assets that was addressed during recent years with the participation of the Indian Chartered Accountants Summit was the problem of reappraisal of fixed assets to keep track of inflation. As is known, revaluations of fixed assets are needed because the value of fixed assets is reported in accounting and statistical records in acquisition prices that change because of inflation. Revaluations make it possible to address periodically the mixed character of appraisal and to express the replacement value of fixed assets in prices that are common on the dates of such revaluations.

Valuation of fixed assets in real prices is very important for the following: economic analysis and forecasting of the development and use of the economic potential; identification of parameters of investments, and setting depreciation policies at the macro level and micro level. The value of fixed assets determines the size of property tax, depreciation charges, profit tax, etc. While going over to a market economy, India has been facing high inflation, which is typical of a transition period, and revaluations had to be made more frequently than during the earlier period: they were made on 01.04.2006, 01.04.2008 and from then on at the beginning of every year.

Re-evaluations of fixed assets registered an increase in prices for products manufactured by the industries that create fixed assets. During 1991 through 2010 manufacturing prices rose 11,000 times over and prices of construction materials, 14,000 times over. Re-evaluations of fixed assets took into account the fact that the replacement value of the older plant and equipment and buildings had increased more slowly than that of new facilities. This is why in the course of re-evaluations the growth of the book value of fixed assets was behind the increase in prices of products used for building fixed assets.

## **6. INTERPRETATION OF RESULT DRAWN FROM RESPONDENTS**

- Normally Installed Capacity of Plant was responded by respondents was 100 percent.
- On an average 72% Capacity was being utilized by the SSIs.

- The Capital Investment in Fixed Assets was on an average was as follows- (i) Pre-establishment Capital Costs - 32%; (ii) Land & Building- 40%; (iii) Plant & Machinery - 30%; Furniture, Fixtures and Fittings- 15%; Office Equipments- 10%; and Loose Tools 8%.
- Foreign Technology Used: 28% uses foreign technology while 72% do not use foreign technology.
- Product Supply in Local market/ Inter-state Market/ Foreign Market: 80% supply their product in Local Market; 45% supply their product in Inter-state Market; and 9% supply their product in Foreign Market.
- Nature of Competition: 18% feel very high competition; 56% feel high competition; 26% feel less completion.
- Fixed Assets especially Plant & Machines purchased from Country Market/ Foreign Market: 84% purchased Machines from Country Market; 16% purchased Machines from Foreign Market.
- All of the respondents use specific Depreciation Policy.
- Method of Depreciation followed is as- 46% follow SLM; 6% follow Sum of Digit method; 44% follow Diminishing Balance Method; 4% follow Annuity Method; No body follow any other Method of Depreciation.
- When asked that do you think that the depreciation being provided by you on fixed assets is enough to replace the asset at current cost, 28% respondents supported favorably while 72% told that depreciation provided by them on fixed assets is not enough to replace the asset at current cost.
- When asked that do you think that present provisions of law for providing depreciation of fixed assets are not conducive for protection of investments in fixed assets, the response was that the present provisions of law for providing depreciation of fixed assets are not conducive for protection of investments in fixed assets- 70% respondents supported this statement while 30% respondent did not support the above statement.
- Awareness of the present International Accounting Standard and Accounting Standard framed by ICAI- 65% were aware of the present International Accounting Standard and Accounting Standard framed by ICAI while 35% were not aware of the present International Accounting Standard and Accounting Standard framed by ICAI.
- When asked that do you think that present accounting standards and Contemporary Accounting Practices fail to accommodate price level challenges, 79% supported that present accounting standards and Contemporary Accounting Practices fail to accommodate price level challenges; while 21 opined that present accounting standards and Contemporary Accounting Practices do not fail to accommodate price level challenges.
- Price index mechanism being followed- (a) 42% follow Whole sale Price Index; (b) 58% follow Consumer Price Index.
- 60% know about the changes in relevant provisions for charging depreciation on fixed assets in Companies Act and in Income Tax Act during the last decade while 40% do not know about the changes in relevant provisions for charging depreciation on fixed assets in Companies Act and in Income Tax Act during the last decade.

- Understanding as to the impact of such changes of legal provisions relating Depreciation on Fixed Assets Management, 20% feel difficulty to understand; 40% feel difficulty to calculate Depreciation; 22% feel difficulty in accounting treatment; 18% feel difficulty to maintain records of fixed assets.
- When asked whether you are having deficiency for covering up replacement cost of Depreciated Fixed cost, 72% say yes while 28% say no.
- When asked that do you think that depreciation on fixed assets on historical cost is one of the causes of sickness of SSI units, 87% say yes while 13% say no.
- While asked for their opinion about simple system of providing for Depreciation during price level changes, 82% say yes while 20% say no.
- Their suggestions to make simplification of Depreciation accounting policy were- (i) To make the provision simple it is desirable that for low value items of any plant or machinery including books the proviso to section 32 may be re-inserted to allow full cost in the year of acquisition without any condition. Considering the inflation the limit may be kept at Rs. 10000/- per piece. Any item of plant or machinery including books exceeding in cost of Rs. 10000/- may be made eligible for depreciation at normal rates. (ii) To avoid disputes, e-books may be included in definition of plant or 'book' may be defined to include e-book. Before such amendment the board may issue a circular. (iii) The provisions relating to depreciation should be modified to provide more impetus to the economy besides they should be made more clear and unambiguous. (iv) Accelerated depreciation of 33.33 % should be reintroduced. In fact in view of globalization of economy and more frequent changes in technology depreciation @ 50% is desirable because there is higher obsolescence. (v) At present under companies Act items costing up to Rs. 5000 are to be depreciated in first year. However, in the I.T. Act, such provision was omitted and need reintroduction with higher limit of Rs. 10000/-. The policy can be so devised that the assessee may be given an option to claim depreciation equal to 'actual cost' of any asset at any time. (vi) All depreciable assets including buildings and furniture may be considered as 'plant' and number of blocks and rates may be reduced. There is no purpose in indulging in lot of litigation about claim for depreciation, because higher depreciation only defers tax payment on account of income tax. Higher depreciation allowance can bring into more revenue by way of indirect taxes and more employments.

#### 7. OPINION SURVEY OF EXECUTIVES OF SSI UNITS

The questionnaire was sent to about 150 executives of SSI units out of which 122 executives of SSI units responds as follows:

1. The background of the knowledge of Accounting & Finance of Executives of SSI Units
  - a. Academic knowledge 62%
  - b. Experience 85%
  - c. Both Academic & Experience 62%
  - d. None 11%
2. Type of fixed assets especially 'Plant and Machinery' is being used in the units surveyed?
  - a. Brand New 76%
  - b. Purchased second hand 18%

- c. Old & Depreciated 6%
3. Do you see any future threat for your unit to become sick?
- a. Yes 34%
- b. No 66%
4. If yes! What are the probable reasons for such threats?
- Power crisis, Labour problem, Short availability of Raw Materials, Payment recovery Problem, Financing Problem, Seasonal demand of Products, Tax burden, Heavy Duty charges, etc
5. Are you satisfied with the productivity of fixed assets being used in your unit?
- a. Yes 68%
- b. No 32%
6. If Yes! How long you feel that the fixed assets in your control would give output at the targeted levels?
- a. From 1 – 2 years 21%
- b. From 2 – 5 years 5%
- c. More than 5 years 2%
7. If No! Have you ever suggested the managing owners to replace such assets?
- a. Yes 22%
- b. No 6%
8. What was the reaction of managing owner on your suggestion of replacement?
- a. ready to replace the assets in most of the cases;
- b. denied for want of funds in few cases
- c. any other reaction i.e., shortage of fund, no good machine available, new machine are very costly, No familiarity about technology etc.
9. Do you feel that the method of depreciation on fixed assets being used in your unit is correct enough to provide funds of replacement of assets after these are fully used?
- a. yes 43%
- b. No 57%
10. If no! What are your suggestions to improve the system?
- The method should be such that can make proper adjustment of price level change so that sufficient funds can be made available at the time of purchase of new plant & machinery.
11. Do you know about the impact of price level changes on creation of funds for replacement of fixed assets through depreciation mechanism?
- a. Yes 39%
- b. No 61%
12. If yes! What are your ideas or suggestions to beat the negative impact of price level changes on insufficient creation of funds for timely replacement of fixed assets?
- By a healthy and productive plant we mean one maintained at a peak of efficiency by continuously replacing worn out or obsolete parts and incorporating improvements in equipment, processes and techniques as they become available. All this costs for more money



that available from allocations to depreciation in view of the enormous increase in the cost of new equipment over the historical cost of the equipment it replaces.”

#### **8. SPECIFIC CONTRIBUTIONS OF SMALL SCALE SECTOR:**

- a. The contribution of Small scale sector to the manufacturing sector and GDP as a whole is significant in terms of its share in total value added.
- b. Small scale sector performs a very significant role in generating employment opportunities in a sustainable manner.
- c. Small scale sector can play a role in mitigating the problem of imbalance in the balance of payment accounts through its export promotion.
- d. While the large scale industries are expected to increase the inequalities of income and concentration of wealth, Small scale sector is expected to help widespread equal distribution of income and wealth.
- e. Small scale sector may provide opportunities to a large number of capable and potential entrepreneurs who are deprived of appropriate opportunities
- f. It can help to release scarce capital towards productive use.
- g. SSI can reap the benefits of lean production and can find new cost-efficient techniques of lean production.
- h. As small units can use resources more efficiently to the full capacity without any wastage, they may have higher allocative efficiency.
- i. As the element of risk is minimum in small scale sectors, more resources will be employed by large number of labour force.

#### **9. PROBLEMS FACED BY SMALL SCALE SECTOR**

Small scale sector are facing many problems. The following are some of their major problems- (i) Scarcity of inputs; (ii) Inadequate capital; (iii) Marketing; (iv) Under-utilization of capacity; (v) High cost of production; (vi) Small and insecure markets, due to low rural incomes, seasonality, poor access to large markets, and severe competition; (vii) Raw material shortages, often compounded by wasteful processing, restrictive regulations, poor distribution, and lack of working capital; (viii) Shortage of finance, in particular working capital, worsened by problems of access to what is available and by its cost; (ix) Non-availability of appropriate technology in the form of suitable tools and equipment; (x) Managerial weaknesses, which serve to worsen all the other problems since FB-SSI entrepreneurs often lack capacity to analysis situations and chart ways to minimize adverse impacts of problems; and (xi) Lack of organization of the enterprises in a manner which enables them to make effective use of available support services.

#### **10. INCENTIVES OF SMALL SCALE SECTOR**

Small Scale industry play an important role as less capital-intensive producers of consumer goods and providers of employment to labour there by addressing the problems of reducing the poverty and unemployment. According to rough estimates of 2003-04 there are about 113.95 lakh small scale industry units (registered and unregistered) in the country accounting for more than 40 percent of gross value of output in the manufacture sector and about 35 percent of the total export of the country. It provides employment to about 271.36 lakhs persons, which is second only to agriculture.

One of the measures of the policy support for promoting SSI's is the policy of reservation of economically viable and technically feasible items for exclusive manufacture in small scale industry sector. The policy of reservation initiated in 1967 primarily as promotional and protective measure vis-à-vis the large and medium scale sector, grant protection to small scale industry units by preventing fresh capacities being created in the large scale sector in areas which are techno-economically highly suitable for being taken up in the SSI. The only exception, being the case of large-scale units, is to undertake minimum level of exports as 75% of their total production. The IDR act was amended in 03/ 1984 empowering Government to reserve items for small scale industry sector. Reservation of items for manufacture in small scale industry sector is a continuing process monitored by an advisory Committee on Reservation constituted under IDR Act. The total number of items reserved for SSI is 675 as on 3rd June 2003 and 605 as on 20th October 2004.

The Small Scale Sector has acquired a prominent place in the socio-economic development of the country during the past five decades, contributing to the overall growth of the gross domestic product towards employment generation and exports.

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