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The Recording of Fixed Assets at Other Than Cost

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THE RECORDING OF FIXED ASSETS AT OTHER THAN COST

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INTRODUCTION

The familiar debate as to the proper method of reflecting asset values in financial statements goes on. This paper will deal with basic facts and the quthor's own ideas as to how and why assets should be recorded in a particular manner. It may or may not shed any light on the answer to the question, "Which is the correct manner to record fixed assets?"

There are several methods of recording fixed assets. They could be recorded at cost, that is, the cash outlay for a new asset or used asset plus any trade-in. This method is quite ezsily recognized as the historical cost method. This method is acceptable and lauded by the Accounting Principles Board of the American Institute of Certified Public Accountants in Opinion No. 6 dated, October 1965, which states:

> "The board is of the opinion that property, plant, and equipment should not be written up by an entity to reflect appraisal, market, or current values which are above cost to the entity. This statement is not intended to change accounting practices followed in connection with quasi-reorganizations or reorganizations."

This quote from the Accounting Principles Board Opinion No. 6 leads us to five other methods of recording fixed assets. These are using market values, current values or replacement cost, value to owner concept or equivalent service cost, the Net Present Value method, and the Price Level Adjusted Value method. These are some of the method titles and they may be called different names by different people in the accounting profession.

CHAPTER I

Methods of recording Fixed Assets

The reasons are many and diverse for using any one of the methods mentioned in the introduction. One may want to use a stepped up basis in the statements which will appear to be more relevant for today and also show a more promising investment picture. Another is in the federally reimbursed institutions who will use replacement cost because they are on a reimbursement rate that is determined by current costs. They will use a stepped up basis to get the best possible reimbursement from the government.[1]

A reason cited by many is that to have their financial statements properly show their economic growth, a method other than cost should be used. A person could go on and on citing various reasons for the type of method to use which would seem more proper than using the widely accepted method of historical cost. All businesses are different and each is trying to select a method that is most advantageous to it for reporting purposes internally and to stockholders. Herein lies the crux of the long debate over which method is most proper to use.

Now let us examine some of the effects of the different methods on the income statement and balance sheet.

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[1]These programs are medicare, medicaid, etc., usually dealing with hospitals and other medical institutions.

First a look at the historical cost method. This is the valuation method currently being used by most practicing accountants. Since depreciation is charged at different rates and methods, for the purpose of simplification, straight line depreciation will assumed to be used in all discussions.

Since fixed assets are to be used by the business, except when being mortgaged or let out as security for debts, the business must allocate some portion of the original cost to the revenue for the period being measured. The thought here is that during the useful life of the fixed asset the owners will eventually charge the cost, less salvage, to all revenue during this period. By using a historical cost basis, owners are saying that they expect to get at least the cost of the fixed asset back in revenue over the assets life, otherwise the business would not have bought the asset in the first place. The income statement will show a consistent charge and the balance sheet a like decrease in the unexpired cost of the fixed asset. This method shows the stewardship of management, and a consistent basis from which to compare subsequent income statements.

Market Values is another method that many businesses would like to use in recording their assets on the books. The first year cost would be used as that was the market value at the time of purchase. The next year, if market values went up, the depreciation charge would go up on that fixed asset. This method may report income more in economic terms, but there are other variables such as the demand

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Replacement cost is another of the methods that could be used to record assets at other than cost. Especially in a period of inflation it would be advantageous statement wise to be steadily increasing your depreciation expense as the replacement cost value increased thereby keeping your book income at a minimum without changing anything but the value on the books. The businessmen feel that since income taxes are going up and because inflation is decreasing the value of the dollar, inflation makes the asset depreciation not in line with the actual equivalent dollar depreciation that should be charged against income.

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[2]E. L. Kohler, A Dictionary for Accountants, (Englewood Cliffs, New Jersey: Prentice-Hall Inc., 1957), pp. 209-210.

These businessmen feel that a replacement cost basis would lessen the inequity that income taxes are siphoning off real capital and dividends due to the overstated income received by using the cost basis.

Replacement cost would be the most beneficial to our older corporations. These corporations were started when asset values were very low. If we were to allow them to use replacement cost, the depreciation charges would be enormous and the tax advantages to the corporations would be tremendous.[3] The idea of replacement cost is not consistent with the conservative axioms of the accounting profession. This would lead to investors pulling out of the market as income would go down leaving little for dividends and adding little to retained earnings. It could possibly cause investors to stop putting their money into firms that report no earnings on their financial statements during fiscal periods due to the use of the replacement cost method.

On the Balance Sheet, if one were using replacement cost and depreciation were taken on these values, the business would be overstating its assets and understating its income. This would be very deceiving to investors, stockholders, and the public, not to mention creditors, and lending institutions. It would put the whole accounting system on a non-factual basis that would be susceptible to change and if prepared by ten different people, the values could vary enormously, making for an incredulous financial statement.

One of the newer but seldom used methods of recording assets is the value to owner concept or current cost of equivalent services. This concept is one of seeing the real value of the asset to the owner as the current cost of replacing the service benefits given by the asset. This method may also be referred to as the opportunity cost method.[4] In laymans terms it would be the value the asset has in producing cash flows over a period of time. Although this concept has the advantage of vercoming the technology problem which haunts so many models of depreciation accounting, there are two objections to this method. First it produces an asset model with hybrid accounting concepts, because it is not merely an attempt to approximate N.P.V. but rather an introduction of another totally different concept. The valuation of current assets at N.P.V. and fixed assets by the "value to the owner" concept produces an asset valuation based on two different concepts and suggests that current assets and fixed assets are different in nature, and that assets are not capable of one broad, overall definition. Second the concept produces a "goodwill" valuation as merely a balancing item between the total N.P.V. of the firm and the replacement costs of other assets.[5]

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[3]G. A. Welsch, Intermediate Accounting, (Homeward, Illinois: R. D. Irwin, 1968), pp. 330-332.

[4]David Solomons, Economic and Accounting Concepts of cost and Value, ed. by Morton Bacher, (Prentice-Hall, Inc., 1966), pp. 117-127.

[5]This should be differentiated from the concept of current replacement cost developed by Edwards and Bell. They want a current replacement cost of historical inputs as a measure of management's efficiency in having those particular inputs, rather than a current cost of equivalent services.

This method of the value to owner concept is a very theoretical one and not used very much if at all. The income statement and balance sheet would vary from one period to the next dependent on the variables established by the accountant preparing the financial statements. The accounting principle of consistency and uniformity would be all but lost. This method seems least acceptable as compared to the other methods.

As a management tool this could be used extremely well for profections and forecasts. The main problem would be setting the value of each asset to the owner at the beginning of the year and applying them to the statements. The value to each individual owner of an asset may change drastically from one month to the next. One example of this would be the value the owner expected due to market conditions and what they will be in the future. You would always have to use the minimum of each value determined on each asset when using it for management. You can see where the calculations themselves to get a value to owners method of recording assets would be very difficult.

The Net Present Value method is one more method of recording fixed assets. A little explanation is needed to explain this theoretical concept. If the value of an asset to a particular enterprise is the discounted net present value of all future caah flows derived from that asset, it follows that its measurement is obtained by discovering those future cash flows and discounting them back at the prescribed rate of interest to the present date.

Cash flows are derived from three main sources: One, the individual assets and managements use of them, and two, the combination of these assets, and three, all the other economic factors affecting these assets in the future. The main problem for setting up an assets value on the Net Present Value method is that no one asset's cash flow can be determined accurately. The reason for this is that it is usually a combination of all the assets plus management that determine the total cash flow.

Future developments of N.P.V. will perhaps cause a change in the method of classifying individual assets. Instead of using the conventional classifications of "Buildings," "Land," "Plant and Machinery," "Furniture and Fittings," and so on, the cake may be cut the other way (across and not down) with classifications such as "Facilities for ProductA," "Facilities in Division B," etc. can be used. This will pro- provide information that is far more relevant for decision making and will also facilitate the isolation of cash flows.

Aside from being difficult to set up the values for the assets, this method would be ideal for management, creditors, and investors. Management must know the expected returns and by comparing their past decisions they will be able to properly assess their business. The public would be able to appraise management on their results based on net present values and this information would aid investors in buying or selling their stock.

One of the most relevent and accepted new ideas on recording asset values on financial statements is the General Price Level method.

The General Price Level method takes into account the general purchasing power of money. During inflation the purchasing power decreases and during deflation the purchasing power increases.

The effect this method would have on fixed assets can be seen by a simple example. If a building were boufht in 1960 for $50,000 and the price level has raised to make the value in 1970, $60,000, this does not imply a market price increase. It simply states the number of 1970 dollars that would have been used to purchase the building.

The index used to determine the values would be the GNP deflator index. This index would be used to multiply the base year cost by to determine the amount of current dollars that would have been used to purchase that asset.

Since the index is issued every quarter, the financial statements could be adjusted periodically. The asset and the depreciation charged could be stated in terms of the current dollars needed by using the GNP deflater index. The value then put on the assets would show a gain or loss, from changes in the price level, which could be shown on the financial statements.

General price-level statements should be presented in terms of the general purchasing power of the dollar at the latest balance sheet date. The Board has selected current general purchasing power as the basis for presentation because it believes that financial statements in "current dollars" are more relevant and more easily understood than those employing the general purchasing power of any other period. Current economic actions must take place in terms of current dollars, and restating items in current dollars expresses them in the context of current action.[6]

The Statement of Financial Position and the Income Statement of all companies would be greatly altered. All the current items as cash and receivables would be stated the same, but fixed assets would show a gain or loss depending on the rate of inflation or deflation at the time.

General Price Level statements, if made to be mandatory would meet our criteria for relevance and consistency. The statements would be very comparable to other companies and would be more informative to prospective investors.

We now come to one of the last methods of recording fixed assets. This is by appraisal. A little look into the past might shed some light as to why appraisal accounting came into being.

After World War II, inflation was high and businessmen were questioning the accountants basic concepts of accounting. They felt that the total reported net income was grossly overstated because of the deficiency of periodic depreciation charges. The people wanted

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[6] APB Accounting Principles, Commerce Clearing House, Vol. II Feb. 1, 1971, pp. 9007-9017.

depreciation charges adjusted for inflation and in general, to provide for replacement in kind of the assets being dissipated.[7]

Appraisal values are coming into acceptable use but only when recorded along with historical cost data and an unrealized increment account. By recording and charging the depreciation for the period on the assets to the unrealized increment account and crediting the reserve for depreciation-appraisal increase account, we are not affecting the periods income but yet on the balance sheet we are able to show both the historical cost and appraisal values, which are either in footnote or parenthesis.[8] This is useful for both management and the public. Appraisals of fixed assets occasionally are made in order to approximate their current fair market value for negotiation purposes relating to such matters as possible sale, merger, credit and insurance settlement. Of more direct concern to the accountant is the occasional use of appraisal data as a basis for restatement of the fixed assets in the accounts.

Appraisals are sometimes made on the basis of original cost less depreciation. The purpose of such an appraisal is merely to determine whether the asset accounts properly reflect the cost of the plant, and whether the depreciation provisions are justified

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[7]G. A. Welsch, Intermediate Accounting, 330-332.

[8]H. A. Finney and Herbert E. Miller, Principles of Accounting, (New Jersey: Prentice-Hall, Inc., 1963), pp. 200-219.

in the light of events subsequent to acquisition. If the appraiser's estimate of original cost differs from the balance in the asset account, an adjustment of the asset account to conform to the appraisal can be assumed to be an adjustment to a corrected cost basis, and a departure from the cost basis. If the appraiser's estimate of accrued depreciation differs from the balance in the accumulated depreciation account, it should be remembered that the appraiser's estimate of accrued depreciation may be based on physical deterioration of the plant; that the depreciation provisions in the accounts are intended to absorb the cost of the asset by charges to operations in reasonably equitable periodical amounts; and that the progress of physical deterioration and the accumulation of depreciation in the accounts are not presumed to keep in step. Therefore, a disagreement between the depreciation per books and the depreciation per the appraisal does not necessarily indicate that an adjustment of the accumulated depreciation account should be made. Such an adjustment might be in order if the appraisal indicated that the depreciation provisions had been based on an incorrect estimate of useful life.

CHAPTER II

Comparison of Cost and Other than Cost

There is much to be said of these five methods of recording asset values. The main concerns for recording of values in the books of account is the relevance, the objectivity, and usefulness of the amounts used.

Let us explore each of these in a comparable analysis situation. First there is relevance, which is defined in accounting as pertinent to the decisions of stockholders, creditors, investors, and managements. Do any or all of these meet this first criteria. Secondly there is objectivity. Objectivity in the accounting sense is the ease with which a measurable value can be set on an object, that is, pertaining to our subject matter[1] The third criteria to apply to our various methods is one of usefulness. Usefulness to management, investors, the public. government agencies, and the stockholders.

The method we will finally agree upon must meet or come close to meeting these three criteria. We must now see if each or any meet these criteria.

Historical cost gives us values that at any point in time after purchase are not true values because of changes in the value of that machine that are caused by inflation or market value, or the use to the manufacturer.

These costs do give us some indication of the stewardship of management in using the stockholders capital. The historical cost basis never gives us a true valuation at any given point in time. We can see that we are using static figures in an ever changing economy. This method surely does not meet the relevance criteria.

As far as the objectivity criteria, historical cost is easily measured and is readily available when an asset is purchased or at any time in the future. The third criteria is usefulness and historical cost is only useful for recording purposes. It does not give us the information needed that would be so valuable in such a dynamic economy. Generally, the historical cost meets the objectivity criteria but not relevance or usefulness.

The other methods, except for the price level method can be lumped into the same category as they all deal with subjective values that will vary with each type of business or the person determining their value. We can see that when using one of these methods, the person determining the values to use will use those values that are the most advantageous to him or the company. The relevance may be partial as the information may be relevant to management, but may not be relevant to creditors, or investors, The Net Present Value method seems to meet the criteria of relevance the best of all. It shows the present value of all the cash flows to be made by the fixed assets.[9]

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[9]Stephen H. Penman, <u>What is Net Asset Value?-An Extension of a Familiar Debate</u>, (The Accounting Review, April, 1970), pp.339-3340.

The Price Level method seems to meet the relevance criteria as all the values on a price level statement are stated in terms of present values, and they are easily determinable by using a standard GNP Implicit Price Deflator Index. This means that the relevance and objectivity criteria are both met by this method.

The basic problem with all the other methods of recording fixed assets is that they are not very objective. These methods cannot be easily measured and if they can be measured at all, they tend to be volatile. A case in point would be market values. If a businesses fixed assets are producing salable products and the next year the demand caves in for their product, the businessman then has a market value for those particular fixed assets of much less than the previous year. The depreciation charges would vary greatly from year to year due to the changes in fixed asset market values.

The third criteria of usefulness would also be met by all of the methods aforementioned. The problem is that the statements would only be useful for a single individual purpose and not in general for businesses. A method could not be widely acceptable if it only is useful to management and not to anyone else.

The major drawback to the other methods is that none of them can be easily measured. The number of economic varibles, along with human nature variables make most of these methods such as Net Present Value, Market Values, and replacement cost so variable that we could end up with great changes in depreciation charges frem year to year.[10]

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[10]E. L. Kohler, Dictionary, pp. 209-210.

CONCLUSION

This leads us to the thoughts of the author of this report. The ideas expressed herein were gathered from several sources and none of them came to the conclusion of any one method as being superior to another in all the criteria they set down. It is realized that this argument has been hashed and rehashed and never a firm answer has been given. The solution may seem simple when aired in the atmosphere of accomplished and proven accountants.

Recording of fixed assets and assets in general is important to any organization. The value they use or are allowed to uss determines the profitability of the business. This can be seen through the use of depreciation charges. A business must use a method which properly reflects depteciation charges in a manner that would be indicative of the reaources used up in a given period.

The method to use is the method that would meet the following criteria: ease of determining the value, consistency from period to period, and usefulness to management, the public, and government.

In the author's opinion the cost method is the only method to use in reporting the assets in the accounts and in financial statements. This is not to say that this method meets all the criteria, because it doesn't. The historical cost method is the only acceptable method for accounting purposes because of its ease of determining the value and its consistency when used from year to year. The only difference is that the use of one or more of the other methods in conjunction with the cost method when preparing statements should be used.

As an example, let the Price Level Method be used in conjunction with the cost method. The cost method would show the actual use of the fixed asset and current charges to that asset. The objectivity criteria is met, it is easily determinable, and consistent from year to year. With the price level statements alongside in a comparative statement it can be seen what the values in current dollars would be needed to be at the same point financially. When used over a period of years, the value to all segments of the business world would be visible to all. This is very hypothetical of course, as businesses are not required to do it as yet. It may change though, as the Accounting Principles Board is getting closer to requiring price level statements themselves.

This whole concept can be better seen when all management reports are using the more relevant values but using the cost figures for statement purposes. If businesses are allowed to choose their own method, and determine it themselves, corporations would be changing their values from year to year causing havoc with book income just to please the stockholders or show a more profitable year. The value of consistency in reporting is primary from any point of understanding. You cannot keep changing your values from year to year and still know your true financial position. True, by using a cost value that is not indicative of the current value of that asset we are overstating our income in a period of inflation. Businesses can never reconcile the fact of charging to income, depreciation values that were never there or are so vague and meaningless to most people that they are useless. The means of getting these values of the other methods are so arbitrary that control over them would be difficult.

The cost method should be used exclusively, but all companies should use in footnotes or parenthesis, other method values used that are meaningful to that type of business when used in statements prepared for outside use.

Accountants consistently have opposed departures from the cost principle in accounting for fixed assets on the basis the "Pandora's Box" literally would be opened to many ways for arbitrarily adjusting reported net income. The accounting profession has maintained the position that adherence to the cost principle provides an objective, verifiable, consistent, and understandable approach to tangible fixed asset accounting.

Accountants can reconcile in their own minds the use of a two method approach, such as price level and cost. Especially when these two methods meet most of the criteria set forth in determining the proper method to use.

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