

Financial Reporting in an Age of Inflation

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As we face the prospect of “double digit” inflation both in the United States and throughout the world, it seems apparent that accountants must improve their tools for dealing with this problem. We can all probably agree that the optimum solution would be to have economists develop tools which would make inflation disappear and permit accountants to return happily to their traditional information and measurement systems. Even in the face of ethical constraints on being associated with a forecast, however, it appears safe to suggest that a strategy of waiting for economists to develop a scheme for eliminating inflation is considerably less than the optimum one under today’s conditions. Accountants must provide useful information and measurements in the world as it exists, and inflation is with us in the world today.

Historically, it can be noted that the level of discussion and action about the accounting problems caused by inflation has not surprisingly been closely correlated to the rate of inflation currently existing. At low levels--perhaps under 3% per annum--financial statements based on an historical monetary unit of account have been felt to provide adequate information for most users. While a number of academics, thirsting for perfection in measurement, may always be found in the act of criticising the historical monetary unit approach, for most people the system worked pretty well. At the other extreme, when the rate of inflation reached dramatic levels--say over 25% per annum--financial statements based on historical monetary units could be generally agreed to have little value outside of a ritual dance enjoyed by preparers and actions to supersede such statements was necessary. In the middle range, however, practical answers are not so simple to arrive at. This can be called the “discussion range,” where traditional approaches must be reconsidered but where precipitous action to cope with crisis need not be taken. It is this stage which has given rise to most of the published work on inflation accounting and it is this stage that we are in today.

In the search for practical answers, it is important that the problem be properly defined. A narrow definition can excessively limit alternatives. Thus I believe that a problem definition

which simply asks “shall supplemental general price level adjusted financial statements be required in presenting financial results?” is too narrow in that it eliminates consideration of many relevant alternative means of dealing with inflation in financial reporting. The question that really must be addressed is how financial reporting should be changed as a result of an inflationary environment.

In trying to answer this question, a first step is the development of some idea as to what financial statements are trying to do. The Trueblood Committee report identified the fundamental objective of financial statements as being “to provide users with information for predicting, comparing and evaluating enterprise earning power” where earning power is defined as the enterprise’s cash generating ability. This is consistent with the traditional accounting matching model of income measurement. That model is essentially an averaging one, designed to report as income for a period the long-run average net cash inflow from operations at the current level of activity in the business. This is what accrual accounting is all about. Revenue recorded on an “as earned” basis measures the level of activity and the gross cash inflows at that level. Cost matching is an attempt to measure long-run average cash outflows at the same level. Within this framework, the balance sheet gives data about the firm’s asset structure and the source of those assets, but it is fundamentally a set of residuals left over from the determination of accounting income.

It is important in understanding this framework to recognize what the accounting model is not trying to measure. Accounting is not attempting to measure either “economic income” or the value of the firm. While “economic income” is subject to many definitions, a reasonable approximation may be said to be the increase in wealth (adjusted for distributions to owners) during a period. This economic model is based almost inevitably on future expectations, since the most commonly used measure of wealth at a point in time is the present value of discounted future cash flows.

Accounting data should be useful in supplying information to those who seek to determine the value of the firm, such as the fundamental security analyst, but the data do not attempt to present value or change in wealth. Put in another way, the ultimate objective of accounting in a perfect world is not to have book value equal to the fair market value of the firm.

In the light of this objective, what is the impact of inflation on financial statements? How does it affect their validity for the purpose they are designed to serve when they are prepared on the basis of an historical monetary unit?

In answering this question, one must first look at the impact of inflation on a business entity. It is immediately apparent that the impact does not fall equally on either businesses or on classes of assets or costs within a business. Some of these differences are reflected in conventional financial statements. The company which is able to raise its selling prices promptly to maintain its economic position in the face of rising costs is able to reflect this fact in increasing revenue figures while the company faced with competitive factors or government controls which prevent such a prompt response must report lower revenues. Under conditions of very rapid inflation, it may be necessary to report sales by segments of a reporting period and to express sales per segment in terms of some physical unit or index so as to permit understanding of the components of revenue and the level of real activity implied thereby in a rapidly changing environment. In most cases, however, accounting problems caused by inflation are not primarily felt on the revenue side.

On the cost side, however, inflation creates greater distortions when the historical monetary unit approach to measurement is used. It is obvious that matching historical monetary costs against current revenues will not give a good approximation of the long-run average net cash inflow at current activity levels under conditions of rapidly changing costs, although some artificial

conventions such as LIFO may ameliorate distortions to some extent. Nevertheless, in an inflationary time when revenues are largely based on current market phenomena, costs must be similarly based if the matching process is to produce a meaningful measure of results.

This seems to argue strongly for a measurement system using current economic costs. Under such an approach, expenses would be based on the current cost of replacement of the particular assets sold or used. In this way, the matching process would show a long run average cash flow figure based on current costs at the time transactions occur. This may be described as the earning power of the firm. If the value of the monetary unit is changing so rapidly that the combining of cash generation figures at different points within a year is misleading, an additional adjustment may be called for to equate cash at different points in time.

One of the principal criticisms of an accounting system based upon replacement costs is the practical difficulty of achieving these measurements. While such problems are not insignificant, they are also considerably less difficult than has been suggested by some. A recent study reported the application of a replacement cost approach to the financial statements of a medium size company and indicated very few implementation problems. Philips Lamp has used such a system for years. As long as accountants are prepared to develop some tolerance for imprecision, it appears that a practical system can be achieved. Estimates that may be required are considerably less difficult to make than the determination of economic life which serves as the basis for a precise calculation of depreciation expense for any period.

It has been suggested that an accounting measurement system based on price level adjusted historical costs rather than replacement costs will achieve many of the benefits of a replacement cost system and will have the advantage of being easy to apply since only a mechanical process must be undertaken to convert historical monetary measurements into the new system.

While the ease in application cannot be denied, since no new economic measurements must be made, there are serious doubts as to whether any significant benefit will be achieved from such a system. In fact, strong arguments can be made that the data produced by a general price level adjustment system may be affirmatively misleading rather than helpful to the users of financial statements. These arguments must be considered with care before any system using such measurements is mandated on either a primary or supplemental basis.

In essence, financial statements adjusted for general price level change represent a measurement system based on historical costs expressed in terms of a purchasing power unit. In the interests of easy communication, this may be called PuPu accounting. There is no reason to think that PuPu accounting will produce any better a measure of long-run average cash flows than will historical monetary units. In the first place, since the impact of inflation falls with dramatic unevenness on various sectors of the economy and various parts of firms, the relationship of historical PuPu's to current cash outflows is tenuous at best.

To take one example, suppose that petroleum companies had been using PuPu accounting in the first half of 1974 as the cost of crude oil was being multiplied by three. Under this system, to the extent that costs were passing through inventory, they would be increased by perhaps 6% before being matched against revenues. This would have had an insignificant effect on profits. Yet the impact of this dramatically increasing cost on the profits of oil companies which used any inventory system other than LIFO was huge, since the cost of old inventories acquired at less than half current costs was being matched against revenues which reflected the economic impact of cost increases. Any attempt to determine long run average cash inflows based on such profits would be impossible. The accountant's objective would not be achieved. Any number of other examples could be cited to indicate the diverse effects of inflation upon different entities and the potential for misleading investors that exist as a result of the application of a simple mechanical system of adjustment to all entities.

Not only will PuPu accounting suffer all the disabilities of any historical cost system, but it will have an additional significant potential for misleading investors arising out of the fact that it will appear to be an improvement when it is in fact not. This danger is particularly acute if the PuPu system is annointed by the Financial Accounting Standards Board as constituting significant and valuable new imformation.

While the benefits of PuPu accounting are difficult to perceive, the costs of adopting such a system on either a primary or supplemental basis are substantial. In the first place, there are out-of-pocket costs of a considerable magnitude in the mechanical accumulation of data in this format. Computers must be programmed, the dates of asset acquisitions determined and indexes recorded over time for various countries. While most of these costs will be of a one time nature, there will be some continuing costs of preparing, auditing and printing price level adjusted statements.

The second main category of costs of such a system are the costs of educating people to understand what such data mean and what they don't mean. These costs are difficult to measure but they are also likely to be far greater than those of the out-of-pocket variety. Most users of financial data today have a general familiarity with standard financial statements. They may not be sophisticated in their understanding of "the accounting approach," but they will have taken an accounting course at some point in their educational travels and they will have become familiar with basic concepts through the use of statements. They are relatively comfortable with data presented in this fashion.

If a new set of data is mandated, a massive educational effort will be required to teach users what they have and how it might be used. It is a safe bet that most users will think they have something that they don't. For example, at a recent meeting the senior financial officer of a billion dollar enterprise announced that his firm was developing a set of current value financial

statements. As he described them, it was apparent that what was being done was a general price level adjustment. If a senior financial officer who has authorized the expenditure of a substantial sum to produce PuPu statements still believes that he has current value statements, it is rather depressing to contemplate the level of understanding of the average user. If indeed the new data has value, which is doubtful, users must be taught to think in purchasing power terms.

A final set of costs of adopting PuPu accounting are opportunity costs. If the substantial out of pocket and educational costs associated with a new accounting approach are incurred on behalf of general price level adjusted data, it seems highly unlikely that an additional set of costs will be tolerated in the near future. While some who advocate the adoption of the PuPu approach view it as an interim step, this simply does not seem to represent a practical perception of how often significant change can be absorbed. If this step is taken, a clear cost will be the foregone opportunity to move in the direction of replacement cost or fair value accounting. This is a high cost indeed, and should certainly not be incurred until accounting objectives have been sufficiently defined so that the Board can be fully satisfied that the move is consistent with objectives. If objectives are ultimately identified in a fashion consistent with the views expressed above, it is by no means apparent that the PuPu approach is even a step in the right direction.

While there are serious questions as to the desirability of converting financial statements to a purchasing power approach, there may be some benefit in making a simple purchasing power adjustment to the figure of dividends paid. This adjustment should presumably be made on the basis of a consumer index, and it would measure changes in the consumption power of distributions made to shareholders who presumably at least have the option of using the cash distributed to acquire consumer goods. This would begin the process of making financial statement users familiar with purchasing power units and would do so on a basis which has some theoretical soundness.

If it is concluded that the PuPu approach holds little promise and has high costs, it is essential that rapid movement take place in the direction of replacement cost accounting so that investors can perceive the effects of inflation on the activities of business enterprise. Replacement cost is not current value, since value by its very nature is based on the output of an asset rather than the inputs that acquire it for the firm. Nevertheless, replacement cost will generally represent a reasonable approximation of the current value of individual assets (but not of the value of the firm as a whole) while at the same time representing a concept that is fundamentally consistent with accounting model based on matching output and input values at the point of sale to determine long-run average cash inflows at current activity levels.

If such a movement is to occur, one of the first questions which must be answered is whether our model based on the historical monetary unit should be supplanted or supplemented by the new approach. Strong arguments can be made for supplementation as long as the traditional approach has any positive information content, since the educational investment associated with this model is substantial and should be written off only with great caution.

If, however, inflationary phenomena effectively render useless historical monetary unit statements, a change would be required to supplant such data. It does not appear that this stage has yet been reached.

At the present time, the most significant inflation related deficiencies in financial statements can be identified in three areas: inventories, productive facilities and long-term debt. Supplemental disclosures in these areas, including disclosure of income effects, would be a productive first step. The Commission has already proposed such disclosure in the area of inventory and cost of goods sold, and it has urged disclosure of "inventory profits" which can arise in an inflationary environment.

The next step may be the requirement of a supplemental set of financial statements on a replacement cost basis. There is considerable benefit in the discipline of ordering data into statement form, and the implications for measurement must be more carefully considered. Once measurement objectives have been determined, the desirability of supplemental separate statements can be considered.

While firm answers are difficult to come by, it is clear that today's economic environment requires discussion and resolution of the problem of how to cope with inflation in financial reporting. It is important that this discussion not be truncated by hasty "solutions" which only create more problems. We at the Commission wish to be responsive to the needs of investors in this area, and we look forward to participating in the upcoming dialogue.