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Inflation Accounting: Does it Provide Useful Information?

Bryan T. Lawler

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INFLATION ACCOUNTING: DOES IT
PROVIDE USEFUL INFORMATION?

by

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B. A. in Political Science

University of Iowa, 1973

An Independent Study

Submitted to the Faculty

of the

University of North Dakota

in partial fulfillment of the requirements

for the Degree of


Master of Business Administration

Minot Air Force Base, North Dakota

April 1978

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Advisor

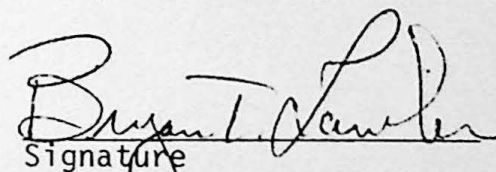
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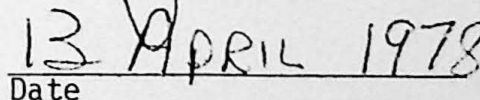
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TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	iv
LIST OF TABLES	vi
ABSTRACT	vii
CHAPTER	
I. INTRODUCTION	1
The Objective	
The Problem	
Plan of Presentation	
II. PARTIAL ADJUSTMENTS TO HISTORICAL COST STATEMENTS	8
The Concept	
Strengths	
Weaknesses	
III. REPLACEMENT COST ADJUSTMENTS TO HISTORICAL COST STATEMENTS	18
The Concept	
Strengths	
Weaknesses	
IV. GENERAL PRICE-LEVEL ADJUSTMENTS TO HISTORICAL COST STATEMENTS	27
The Concept	
Strengths	
Weaknesses	
V. CONCLUSIONS	35
BIBLIOGRAPHY	40

LIST OF TABLES

Table	Page
1. Illustration of LIFO Accounting	11
2. Illustration of Current Cost Depreciation	14
3. Replacement-Cost Data for Fixed Assets	22
4. Effect on Inventories and Cost of Goods Sold	22
5. Effect on Stockholders' Equity and Net Income	22

ABSTRACT

The continuing problem of inflation has spawned a debate among accountants, investors, and businessmen as to whether financial statements based on historical costs with no adjustment for the effects of inflation present an accurate picture of a firm's position. Many of these people feel present financial statements do not present an accurate picture and therefore contend the information in them can be misleading. However, these same people cannot agree as to how best to adjust financial statements to take into account the effects of inflation.

The debate, then, focuses on two questions:

1. Should financial statements be adjusted for the effects of inflation?

and

2. If so, which restatement method should be adopted?

In an attempt to answer these two questions this study examines the effects inflation can have on financial statements and shows why these statements should be adjusted. Secondly, three inflation adjustment proposals are analyzed (partial adjustments to historical cost statements, replacement cost adjustments, and general price-level adjustments) to determine whether they present to users of financial statements useful information for decision making in an era of inflation.

CHAPTER I

INTRODUCTION

The Objective

The task of accounting is to provide information, primarily financial in nature, concerning business entities. This includes information on a company's economic resources, obligations, profitability, estimates of future earning potential, changes in economic resources and obligations, and other information relevant to the needs of the external user. The users of this financial information include stockholders, bondholders, creditors, potential investors, financial analysts, bankers, labor unions, and various government agencies. The financial information, in the form of financial statements, should allow the users the ability to make judgements on a firm's ability to survive, to adapt, to grow, and to prosper amid changing economic conditions. But this information must be in a form that enables users to make sound judgements. Therefore the basic purpose of financial statements is to provide financial information that is useful in making economic decisions.¹ The key word here is useful; information that will provide an accurate as possible picture of a firm's position in relation to past performance and compared to other firm's in the industry.

¹American Institute of Certified Public Accountants Accounting Principles Board, Basic Concepts and Accounting Principles Underlying Financial Statements of Business Enterprises, Statement Number 4, (New York, N. Y.: American Institute of Certified Public Accountants, October 1970), p. 9.

To insure the information in financial statements is useful it must have certain characteristics or qualities. The Accounting Principles Board has identified seven qualities financial information should possess:²

1. RELEVANCE - Relevant financial information bears on the economic decisions for which it is used.
2. UNDERSTANDABILITY - Understandable financial accounting information presents data that can be understood by users of the information and is expressed in a form and with terminology adapted to the users range of understanding.
3. VERIFIABILITY - Verifiable financial accounting information provides results that would be substantially duplicated by independent measures using the same measurement methods.
4. NEUTRALITY - Neutral financial accounting information is directed toward the common needs of users and is independent of presumptions about particular needs and desires of specific users of the information.
5. TIMELINESS - Timely financial accounting information is communicated early enough to be used for the economic decisions which it might influence and to avoid delays in making those decisions.
6. COMPARABILITY - Comparable financial accounting information presents similarities and differences in the enterprise and their transactions and not merely from differences in financial accounting treatments.
7. COMPLETENESS - Complete financial accounting information includes all financial accounting data that reasonably fulfill the requirements of the other qualitative objectives.

The Problem

The financial information used in financial statements is measured by the monetary unit - the dollar in the United States. Monetary measure is one of the Major Concepts of generally accepted accounting principles.

²Ibid., pp. 36-38.

But the use of monetary measure presents serious problems because the value of money fluctuates during periods of deflation and inflation.

Although both deflation and inflation cause the instability of money as a measuring unit, inflation has been the general rule for the past several years. Inflation is an increase in the general price-level. It is caused by either an increase in the money supply or an increase in the velocity of money or a combination of both causes. For example, when consumers have more dollars to spend on goods and services they bid up the price and the result is a rise in the general price-level. Also, when the rapidity money and money substitutes changes hands during a given period of time (velocity of money) increases, the general price-level rises.

This rise in the general price-level (inflation) causes the general purchasing power of money to decline. A money's purchasing power measures its command over goods and services in general at a specific point in time. The general purchasing power of money is nothing more than the reciprocal of the general price-level. For example, if the general price-level index increased from 100 to 200, the purchasing power of the dollar would have decreased by one-half during the same period.

This fluctuation in the general purchasing power of money is what causes the instability of the dollar as a measuring unit. And it is precisely the problem that faces accountants and users of financial statements. Because the financial information in financial statements is measured by an unstable measuring unit - money - are these statements providing useful information?

Several problems can result in the presentation of financial information during periods of inflation. Balance sheet items are expressed

in terms of historical cost, net any allowances for bad debts, depreciation, etc. But these items, in most cases, are purchased or incurred, in the case of liabilities, at different times with dollars of varying purchasing power. The result is the balance sheet items do not have a common denominator from which meaningful and useful relationships can be obtained. These items, logically, should not even be added together. It is like adding apples and oranges. The result is a number with little or no meaning or usefulness.

An unstable measuring unit also causes problems in the income statement. First of all, an improper matching of revenues and cost of goods sold results. Revenue, stated in dollars having a particular general purchasing power, are matched against cost of goods sold which is made up of a conglomeration of dollars having different general purchasing power. This occurs because the turnover of inventories is never immediate and in some cases may take a considerable amount of time. The dollars used to purchase this inventory, during an inflationary period, have different purchasing power than that of the revenue they are matched against.

A more serious problem results from the improper matching of revenues and depreciation expense. The turnover period for plant and equipment is normally much longer than for inventory. Therefore, the difference between the level of the general purchasing power of the dollar at the time of acquisition of a fixed asset and the level of the purchasing power of the dollar at the time revenue and depreciation expense are matched (the dollar's current purchasing power) can be quite large.

As a result of the instability of the monetary unit, there is no meaningful relationship between revenue and the expense items. Operating income includes gains and losses as a result of differences in the general

purchasing power of the dollar. Because these gains and losses can be quite large the resulting net income figure may mislead investors as to the profitability of the firm. Consequently, the net income figure is of little use as a measure of the efficiency of management and as an aid in predicting the future.³

Financial ratios, which can be useful in determining the operating efficiency, liquidity position, and profitability of a firm become meaningless numbers. For example, RETURN ON INVESTMENT is measured by dividing the net income for the period by the firm's total investment (total assets or total liabilities). But, as was shown, both of these numbers are determined by adding and subtracting statement items valued by dollars of different purchasing power. A valid comparison is impossible because of this.

Although most accountants agree inflation causes some distortion of financial information, many argue the rate of inflation in the United States has not been consistently high enough to cause a serious enough distortion of financial information to justify making adjustments to financial statements. The effects of inflation are offset by the strengths of the historical cost concept. Historical costs represent an objective, verifiable account of the actual dollar costs incurred by a firm for goods and services. Present financial statements report financial events that have actually occurred during a reporting period, not what occurred under other conditions.⁴ In addition, statements

³Eldon S. Hendricksen, Accounting Theory, (Homewood, Illinois: Richard D. Irwin, Inc., 1970), p. 125.

⁴Ernst and Ernst, "A Proposal for Accounting Under Inflationary Conditions," The CPA Journal, Vol. XLVII, No. 8 (1977), p. 31.

prepared in accordance with generally accepted accounting principles are readily understood by their users.

However, these arguments fail to consider the effect even a moderate rate of inflation can have on financial statements.

First of all, cost of goods sold and depreciation are relatively large items compared to net income. Therefore, the effect of even a small rate of inflation on these expense items can have drastic effects on net income.

Secondly, if assets are held for a number of years, the cumulative rate of inflation can have a serious effect on depreciation. The general price-level change in any one year is only a part of the total effect.

"Furthermore, the effects of inflation compound over a period of years (for example, a constant 2% rate of inflation results in a 22% cumulative general price-level change in ten years and a 49% cumulative general price-level change in 20 years). Nonrecognition of the effects of inflation may therefore have a substantial effect on financial statement representations of assets held over long periods (such as investments and property, plant, and equipment), even though the amount of inflation each year has been relatively small."⁵

The objective of financial statements is to present useful information to users of these reports. But inflation has undermined the validity of the relationships in the statements. The lack of a common measuring unit means meaningful comparisons cannot be made between statement items nor among past and current statements for decision making and predicting the future. In other words, the financial information in unadjusted statements is not relevant. Objectivity and understandability are not sufficient. Relevance is the primary qualitative objective because information that

⁵American Institute of Certified Public Accountants Accounting Principles Board, Financial Statements Restated for General Price-Level Changes, Statement Number 3, (New York, N. Y.: American Institute of Certified Public Accountants, June 1969), p. 7.

does not bear on the decisions for which it is used is useless, regardless of the extent to which it satisfies the other objectives.⁶ Therefore, the information in financial statements should be adjusted for the effects of inflation to make it useful for decision making.

Plan of Presentation

Inflation, even at moderate rates, can cause serious problems in the presentation of financial information. The question now becomes - what can be done about it? There has been a continuing debate among accountants, investors, and businessmen on this very question for the past twenty years. Several proposals that would adjust financial statements for the effects of inflation have emerged as a result of this debate.

Chapters II, III, and IV contain an analysis of three of these proposals. The concept, strengths, and weaknesses of each proposal are presented.

Chapter V contains an appraisal of how each of these three proposals accomplishes the objective of financial statements established by the Accounting Principles Board.

⁶American Institute of Certified Public Accountants Accounting Principles Board, Statement No. 4, p. 36.

CHAPTER II
PARTIAL ADJUSTMENTS
TO HISTORICAL COST STATEMENTS

The Concept

The underlying concept of partial adjustment to historical cost statements is inventories and fixed assets are the only statement items that require adjustment for the effects of inflation. All other items are carried at current value and, therefore require no adjustment. According to Robert C. Tyson in his comments to Accounting Research Number 6:

"The main items entering into the determination of income are:

1. Sales of Products and Services
2. Employment Costs
3. Products and Services Bought
4. Depreciation
5. Interest
6. Taxes

For any practical purposes, all such items are expressed in current dollars received or spent therefore with the only exceptions being any effects of inventory valuation and the write-off of depreciation."¹

As a result, supporters of this concept believe partial adjustment for inventories and depreciation would correct most of the error in reported net income.

¹Staff of the Accounting Research Section Division of the American Institute of Certified Public Accountants, Reporting The Effects of Price-Level Changes, Accounting Research Study No. 6, (New York, N. Y.: American Institute of Certified Public Accountants, Inc., 1963), pp. 252-253.

Implicit in the concept of this partial adjustment proposal is the assumption an adjustment of income statement items is all that is necessary, since the main objective of accounting is to present a meaningful concept of income.² The adjustments would be toward improving information in the income statement only.

"...the income statement is understood by most people to be the principle measure of a company's past success and future prospects. The balance sheet is important in presenting certain aspects of liquidity but as a measure of success is generally of less importance to users than the income statement."³

To make the adjustment for inventory the Last-In-First Out (LIFO) valuation method would be employed. LIFO is not a new method and is currently used by many firms. The LIFO method involves charging the latest costs of inventory to cost of goods sold while the older inventory costs remain as the value of the ending inventory in the balance sheet. The desired result is a better matching of current inventory costs with current revenues. Because the most current inventory costs are matched against revenue, LIFO is a step toward eliminating from net income the holding gains and losses resulting from changes in the specific price-level of the inventory items and the general price-level. Because of inflation, holding gains have been the problem accountants have had to deal with and it is no small problem. In 1973 it was estimated that profits for nonfinancial institutions were overstated by \$24 billion because of inflation. Of this \$24 billion, inventory profits amounted to \$17 billion or 18% of total profits.⁴

²Eldon S. Hendrickson, Accounting Theory, p. 229.

³Ernst and Ernst, "A Proposal for Accounting Under Inflationary Conditions," p. 27.

⁴Harry C. Wallich and Mable I. Wallich, "Profits Aren't As Good As They Look," Fortune, Vol. LXXXIX, No. 3 (March 1974), p. 127.

Proponents of LIFO favor the exclusion of holding gains from operating profits in the determination of net income. The argument is that when holding gains are included the income figure presents a misleading picture of a firm's ability to continue current operations. Under inflationary conditions inventory that is sold must be replaced by more costly inventory. The income figure does not reflect the requirement to purchase this higher priced material. Therefore, an income figure overstated by holding gains could lead to unsound dividend policies and mislead creditors and investors as to the financial strength and future prospects of a firm.

The results from using LIFO will vary, however, depending on the type of inventory system that is employed -- periodic or perpetual. The periodic system relies on a periodic physical count of goods on hand. This count is usually accomplished once each year. As a result, there is no continuing record of the inventory. Charges are made to cost of goods sold when the count is taken. In contrast, the perpetual systems requires a continuous record of all receipts and withdrawals of each item of inventory. Charges are made to cost of goods sold as inventory is sold. An example of LIFO accounting is illustrated in Table 1.

Adjustments for depreciation would be made by restating depreciation expense in terms of the current cost of the firm's depreciable assets. Another alternative for restating depreciation is replacement cost. This proposal is discussed in Chapter III. The proposal this study will be analyzing was developed by the accounting firm of Ernst and Ernst. According to their proposal:

TABLE 1
ILLUSTRATION OF LIFO ACCOUNTING⁵

Record of Acquisitions and Sales During January						
Acquisitions				Sales		
Date		Units	Price	Total	Date	Units Sold
Jan. 1	Inventory	200	\$ 7	\$1,400	Jan. 6	100
Jan. 8	Purchase	1,100	8	8,800	Jan. 9	200
Jan. 25	Purchase	300	9	2,700	Jan. 15	400
Jan. 30	Purchase	400	10	4,000	Jan. 27	600
	Total	<u>2,000</u>		<u>\$16,900</u>	Total	<u>1,300</u>

Cost of Goods Sold (Perpetual System)

Jan. 6.....	100 issued @ \$7	\$ 700
Jan. 9.....	200 issued @ \$8	1,600
Jan. 15.....	400 issued @ \$8	3,200
Jan. 27.....	600 issued - 300 @ \$9 300 @ \$8	2,700 2,400
Total Cost of Goods Sold.....	<u>1,300</u> units	<u>\$10,600</u>

Cost of Goods Sold (Periodic System)

Jan. 1 (beginning inventory).....	200 units @ \$7.	\$1,400
Jan. 8 (first purchase).....	500 units @ \$8	4,000
Total (ending inventory).....	<u>700</u> units	<u>\$5,400</u>
Total Purchases + Beginning Inventory - Ending Inventory = Cost of Goods Sold		
\$15,500	+ \$1,400	- \$5,400 = \$11,500

Note: The Cost of Goods Sold would have amounted to \$10,200 under FIFO.

200 units	x \$7	= \$1,400
1,100 units	x \$8	= \$8,800
<u>1,300 units</u>		<u>\$10,200</u> Cost of Goods Sold

⁵Walter B. Meigs, *Intermediate Accounting* (New York, N.Y.: McGraw-Hill Book Company, 1974), pp. 298-299.

"Depreciation charged against income for both book and tax purposes would be computed on historical cost restated to current dollars by application of selected indices acceptable to the Treasury Department."⁶

The asset figures on the balance sheet would not be adjusted. A special account in stockholder's equity would be established for accrued depreciation in excess of historical cost depreciation.

Although the Ernst and Ernst procedure does not propose any specific indices to determine the current cost of depreciable assets, they recommend establishment of indices similar to those currently used for LIFO.

"We envision development of authorized indices for adjustment of depreciation expense following the precedent which has already been established in gaining acceptance for LIFO inventories."⁷

The objective of current cost depreciation expense is the same as for LIFO - a better matching of current revenues with current expenses. During periods of inflation, the depreciation expense based on historical costs, understates the cost that would be incurred to replace depreciable assets. Therefore, the net income figure does not accurately reflect a firm's ability to distribute dividends to shareholders and still maintain its current operation.

But restating depreciation expense in terms of current cost will, with inflation, lower the reported net income figure. This could make it difficult for a firm to obtain funds.⁸ To avoid this problem the

⁶Ernst and Ernst, "A Proposal for Accounting Under Inflationary Conditions," p. 28.

⁷Ibid., p. 29.

⁸Ibid., p. 28.

Ernst and Ernst proposal involves charging depreciation on a current cost basis for both book and tax purposes as is allowed for LIFO. Table 2 gives an example of how financial statements would be adjusted for current cost depreciation.

Strengths

The Ernst and Ernst proposal offers several advantages both to the firm and to users of the adjusted financial statements. First of all, LIFO inventory costing and current value depreciation expense are a step toward better matching of current costs with current revenues. The advantage here is that gains and losses from holding inventories and depreciable assets are eliminated from operating income. The result is a net income figure that more realistically measures the ability of the firm to replace inventories and fixed assets and continue present operations.

Secondly, the lower reported net income figure would reduce cash outlays for taxes and, therefore, improve the cash flow position of the firm.

Thirdly, the simplicity of the proposal offers a greater chance of acceptance for tax purposes. Because LIFO is already accepted for tax purposes, the only really new proposal is current cost depreciation expense. The restatement of depreciation alone, using approved indices, would be sufficiently objective to cause no significant problems of Treasury Department interpretation and administration. The result would be a real income tax rate that more closely approximates statutory rates. This, in turn, would provide tax benefits and aid in the maintenance or expansion of productive capacity, thereby creating jobs and related economic benefits.⁹

⁹Ibid., pp. 28-29.

TABLE 2
ILLUSTRATION OF CURRENT COST DEPRECIATION¹⁰

Position Statement Dec. 31, 1976			
Other Assets	\$400,000	Other Liabilities	\$285,000
Properties and Equipment	500,000 ⁽¹⁾	Taxes Payable	15,000
Less Depreciation	<u>200,000</u>	Shareholders' equity:	
		Capital stock	200,000
		Retained earnings	<u>200,000</u>
			400,000
	<u>\$700,000</u>		<u>\$700,000</u>

Income Statement (Historical Cost Depreciation) 1976		Income Statement (Current Cost Depreciation) 1976	
Revenues	\$1,000,000	Revenues	\$1,000,000
Other Costs	850,000	Other Costs	850,000
Depreciation	<u>50,000</u>	Depreciation	<u>70,000⁽²⁾</u>
	900,000		920,000
	100,000		80,000
Federal Income Tax	50,000	Federal Income Tax	<u>40,000</u>
Net Income	<u>\$ 50,000</u>	Net Income	<u>\$ 40,000</u>

Position Statement Dec. 31, 1976 Current Cost Depreciation			
Other Assets	\$400,000	Other Liabilities	\$285,000
Properties and Equipment	500,000	Taxes Payable	5,000
Less Depreciation on a historical cost basis	<u>200,000</u>	Shareholders' equity:	
		Capital stock	200,000
		Retained earnings	190,000
		Accumulated current cost depreciation	<u>20,000⁽³⁾</u>
	<u>\$700,000</u>		410,000
			<u>\$700,000</u>

NOTES:

(1) Properties and equipment are being depreciated over 10 years on a straight-line basis.

(2) Assume the cost indices appropriate to these assets have gone up an average of 40% since the assets were acquired. Therefore, the current cost of the assets is \$700,000 (\$500,000 x 1.4). Depreciation expense is 10% of \$700,000 or \$70,000.

(3) The difference between historical cost and current cost depreciation.

¹⁰Robert K. Mautz, "One Approach to Accounting for Inflation," Financial Executive, Vol. XLIV, No. 11 (November 1976), p.23.

Finally the proposal should prove easily understandable by users of these adjusted statements as long as restatement procedures are adequately outlined in footnotes to the reports. The financial information would, for the most part, remain on a historical basis. The basic structure of the financial statements would remain the same. As was mentioned earlier, the only new account item would be in the stockholder's equity section for accrued depreciation in excess of historical cost depreciation.

Weaknesses

The Ernst and Ernst proposal is appealing in its simplicity and practicality. It does, however, contain several weaknesses.

One weakness is inherent in the proposals name - a partial adjustment. Specific price-level adjustments are made only for inventory and depreciation expense. And these adjustments are reflected in the income statement only. The balance sheet items remain unchanged. The result is balance sheet and income statement items are not measured on the same basis. Therefore, no meaningful relationships can be drawn between them. For example, the ratio of net income to total assets/total liabilities would result in a meaningless and potentially misleading return on investment figure. All other financial ratios that result from relationships between balance sheet and income statement items would provide, in many cases, only meaningless information.

Another weakness stems from the fact that LIFO and current cost depreciation expensing do not adjust for effects of inflation. Inflation, as was pointed out in Chapter I, is a decrease in the value of the dollar. It is measured by the general price-level of goods and services. LIFO and current cost accounting involve specific price-level changes. Specific price-level changes reflect changes in the supply and demand for the

particular good or service, technology, market structure, or a combination of these. They do not reflect, necessarily, changes in the value of the dollar - inflation. Since LIFO and current cost accounting do not make adjustments for inflation, these methods do not solve the problem of an unstable measuring unit. Statement items are still measured by dollars of different purchasing power as with unadjusted historical costs.

LIFO in particular can present many problems in the presentation of financial information. First, LIFO can distort the inventory figure on the balance sheet. The latest costs of inventory are charged to cost of goods sold leaving the older costs on the balance sheet. During periods of inflation the balance sheet inventory amounts will be the lower costs. Given this method of valuation, inventory comes to be viewed as a quasi-fixed asset with current purchases being used to match current revenues.¹¹ The result will be a distorted working capital position (current assets minus current liabilities) which could give creditors and stockholders a misleading picture of the liquidity position of the firm.

Second, if a periodic inventory method is used, a concentration of purchases of inventory at the end of the period could result in matching end-of-period costs with revenues realized during the entire year.

Third, LIFO adjusts for current price changes only since the last purchase. If inventory turn over is low then older costs will be matched against current revenues.

Finally, if it becomes necessary for a firm to dip into older and lower priced inventory because of strikes or shortages, for example, older costs will be matched against current revenues.

¹¹Earl A. Spiller, Jr., Financial Accounting (Homewood, Illinois: Richard D. Irwin, Inc., 1966), p. 229.

Current cost depreciation can also cause problems by presenting potentially misleading information about the current operations of the firm. Implicit with the use of this proposal is the assumption that current costs equal the present value of the asset to the firm. But this may not always be the case.

"This is particularly true when technological changes have occurred in the production process or when significant changes have occurred in the demand for the product. For example, if the demand for a product has declined significantly, the specialized equipment required for its production has decline in service value to the firm; the depreciated cost of acquiring similar equipment is not a good measure of the value of the asset to the enterprise."¹²

¹²Eldon S. Hendrickson, Accounting Theory, pp. 268-269.

CHAPTER III

REPLACEMENT COST ADJUSTMENTS TO HISTORICAL COST STATEMENTS

The Concept

On March 23, 1976 the Securities and Exchange Commission issued Accounting Series Release No. 190 requiring companies with property and inventories of \$100 million or more to report replacement cost data on plant and equipment, inventories, cost of sales, and depreciation. Approximately 1,200 firms presently qualify under this rule.

"The significant numbers called for by the new rules are:

1. How much it would cost a company to replace its inventories as of the year end.
2. The past year's cost of sales restated, using the replacement cost of inventory at the time it was sold.
3. Year-end gross replacement cost of productive capacity.
4. Year-end depreciated cost of productive capacity recalculated on the basis of replacement cost.
5. The past year's depreciation expense calculated on the basis of average current replacement cost of productive capacity: use straight-line depreciation and lives corresponding to those used for existing assets."¹

In short, inventories and depreciable assets are to be restated to current replacement values. Cost of goods sold and depreciation will then be calculated from these restated figures.

¹Paul H. Gross, "Replacement Cost Accounting: Highlighting the Hidden Costs of Inflation," Management Review, Vol. 65, No. 12 (December 1976), pp. 5-6.

"The purpose of this rule is to provide information to investors which will assist them in obtaining an understanding of the current costs of operating the business which cannot be obtained from historical cost financial statements taken alone."²

It should be pointed out the SEC did not intend for these replacement cost restatements to be part of existing financial statements. ASR 190 is strictly for experimentation on one possible means of accounting for inflation. Therefore, these restated items are supplementary to the present statements.

The SEC's argument for requiring replacement cost data is that the matching of expenses based on historical costs against current revenues understates the costs of replacing the assets used in production of the revenue. This, in turn, overstates the reported income of the firm. Therefore, the net income figure does not reflect a firm's ability to continue current operations.

The effect of using replacement cost data is total profit is divided into two parts - operating profit and holding gains that result from holding assets that increase in value during a period of inflation. The operating profit reflects earnings available for distribution to owners, whereas holding gains represent earnings set aside in a valuation reserve and retained to provide sufficient capital for maintaining the physical capacity of the business.³

The question now becomes, how are the replacement costs determined? The answer to this question will vary depending upon the particular circumstances of the firm. The SEC has instructed companies to project

²Robert L. DeWalt, "Replacement Cost--Another Nightmare for Accountants," Management Accounting, Vol. LIX, No. 4 (October 1977), p. 19.

³Richard F. Vancil, "Inflation Accounting - The Great Controversy," Harvard Business Review, Vol. 54, No. 2 (March-April 1976), p. 60.

how they would replace existing assets if they were deprived of them. There are three possible approaches a company might use to estimate current replacement costs. These are:

1. Reproduction of existing assets.
2. Replacement of existing assets.
3. Replacement of existing capacity.⁴

Reproduction of assets involves replacing existing assets with a similar asset. This is possible when there has been no change or improvement made to the asset from the time it was first acquired and the time it is to be replaced. An example of a possible change in the asset is technological improvements. Therefore, if there has been little or no change to the asset in question, replacement cost would be based on reproduction of existing assets.

Replacement of existing assets involves exchanging one asset for another. This contrasts with reproduction of assets in that the asset has changed character. The reason for this would involve a change in technology. A possible example might involve the replacement of a highly labor intensive machine with a machine that performs the same operation with less labor required. In this case company management would have to decide if the old technology would be replaced. If so, then the reproduction cost would be appropriate. If it is decided the new technology would more likely meet the needs of the company, then replacement costs based on replacement of existing assets would be appropriate.

Finally, replacement of existing capacity would result if a major change is expected in existing assets that will change present capacity.

⁴Stephen F. Black and Albert A. Koch, "Replacement Cost - Charting the Uncharted Sea," The Journal of Accountancy, Vol. 142, No. 5 (November 1976), p. 73.

An example might involve plans to make an addition to the existing plant or to build all new facilities.

Under the SEC rules each of these methods for estimating current replacement costs would be permissible. But, because each method involves different decisions on how assets are to be replaced, the resulting replacement cost data will vary significantly, depending on which method is used.

The SEC rules for disclosing supplementary replacement cost information were effective for years ending on or after December 25, 1976. Richard D. Flynn has done an analysis of the first year reports of the 100 largest U. S. companies with fiscal years ending December 31, as listed in the 1976 Fortune "500". A portion of the information he gathered is shown in Tables 3 through 5.

Strengths

Current replacement costs for inventories and fixed assets represent the amount a firm would have to pay to replace assets used in the production of goods and services and the realization of revenue. In other words, replacement costs are a better measure than historical costs of the current cost of operating a business. Therefore, these replacement costs represent a better matching of current revenues and current costs.

The benefit to a firm and to users of the financial statements from better matching of revenues and costs is a more meaningful and useful net income figure. The use of replacement costs eliminates holding gains from operating income. Therefore, the resulting net income figure better represents the profitability of the firm. Table 5 illustrates the extent to which net income was overstated for the 100 represented companies. On a historical cost basis these 100 firms appear to have been operating on

REPLACEMENT COST DATA FOR THE
100 LARGEST U.S. COMPANIES
WITH FISCAL YEARS ENDING
DECEMBER 31, 1976
AS LISTED IN THE
1976 FORTUNE "500."⁵

TABLE 3

REPLACEMENT-COST DATA FOR FIXED ASSETS
(dollar figures in billions)

		Historical cost	Replacement cost	Dollar increase	Percentage increase
Productive capacity	Gross	\$ 278.5	\$ 572.3	\$ 293.8	105.5%
	Net	\$ 138.0	\$ 253.1	\$ 115.1	83.4%
Depreciation		\$ 16.4	\$ 26.2	\$ 9.8	59.7%

TABLE 4

EFFECT ON INVENTORIES AND COST OF GOODS SOLD
(dollar figures in billions)

	Historical cost	Replacement cost	Dollar increase	Percentage increase
Inventories	\$ 77.4	\$ 101.0	\$ 23.6	30.5%
Cost of goods sold (exclusive of depreciation)	\$ 406.3	\$ 407.5	\$ 1.2	0.3%

TABLE 5

EFFECT ON STOCKHOLDERS' EQUITY AND NET INCOME
(dollar figures in billions)

	Historical cost	Replacement cost	Increase (Decrease)	Percentage increase (decrease)
Stockholders' equity	\$ 208.1	\$ 346.8	\$ 138.7	66.7%
Net income	\$ 30.9	\$ 20.0	\$ (10.9)	(35.3)%
Rate of return on stockholders' equity	14.9%	5.8%	(9.1)%	(61.1)%

⁵Thomas D. Flynn, "Why We Should Account For Inflation," Harvard Business Review, Vol. 55, No. 5 (September-October 1977), pp. 152-154.

a fairly profitable basis with return on stockholders' equity averaging 14.9%. But when replacement costs were substituted for historical costs, much of this profitability proved to be illusory. Even though these firms were reporting net income of \$30.9 billion, only \$20.0 billion of this was actual net income. Of course, the 100 companies varied in the reported decrease in net income, but the average decrease was between 26 and 50 percent when replacement costs were utilized. Clearly, the net income figure that results from replacement cost adjustments is more representative of the profitability of a firm. Therefore, this information could prove to be more useful to users of the information.

The SEC proposal is an improvement over the Ernst and Ernst partial adjustment plan in that balance sheet figures are adjusted as well as the income statement figures. Because of this the relationships between the two statements is not distorted by two different valuation methods.

Weaknesses

Even though the SEC replacement cost disclosure rules improve income reporting during periods of inflation, the proposal and the replacement cost concept have many conceptual and practical weaknesses.

The SEC proposal does not consider monetary items and all non-monetary items for adjustment. Only depreciable assets and inventories are considered. Because of this it is similar to the Ernst and Ernst proposal--only a partial adjustment of financial statement. There is, for example, no consideration of the potentially large gains and losses from holding monetary assets and liabilities.

"These are outright omissions to take account of some of the obvious and known characteristics of holding or borrowing money in inflationary periods"⁶ It should be noted, however, the SEC recognizes that the replacement cost information it has requested does not constitute a comprehensive proposal for accounting for inflation.

Replacement costs can result in reporting misleading information on financial statements. Replacement costs involve costs of assets a firm does not own and may never own. Inventories and depreciable assets restated to their replacement cost on the balance sheet do not represent the true picture of a firm's position.

"Assets that are held by definition have already been purchased. An enterprise can do many things with the assets it owns, such as use them, rent them, sell them, invest them and exhibit them. The one thing above all that it cannot do with assets it owns is buy them."⁷

The balance sheet, instead of representing the position of a firm, becomes a sort of price list of those assets a firm could purchase to replace existing inventories and depreciable assets.

A problem of noncomparability among firms arises because the SEC proposal does not specify a specific method for determining cost. All that is required is the replacement assets must maintain present physical capacity. As was discussed in the previous section, there are three possible methods of determining replacement cost: reproduction of existing assets, replacement of existing assets, and replacement of existing capacity. The method employed will effect the characteristics of the replacement costs. One firm in an industry may use the reproduction

⁶R. J. Chambers, "NOD, COG, and PuPU: See How Inflation Teases!" The Journal of Accountancy, Vol. 140, No. 3 (September 1975), p. 62.

⁷Paul Rosenfield, "Current Replacement Cost Accounting - A Dead End," The Journal of Accountancy, Vol. 140, No. 3 (September 1975), p. 68.

method while another firm in the same industry might employ the replacement of existing assets. The first firm is opting for continued use of current assets. The second firm, however, has decided to replace its assets, for financial reporting purposes, with assets of the latest technology. Few meaningful comparisons could be drawn from the financial statements of these two firms. The replacement costs of their respective assets are based on two different assumptions about the future of their firms.

Following directly from the problem of noncomparability is the problem of subjectivity. Replacement costs are based upon predictions by management of the future. Instead of reporting what has happened in the operation of a firm, financial statements would report what might happen given a certain set of circumstances. The result is that instead of being used to help predict the future, financial statements are used to reflect a prediction of the future.

Proponents of replacement cost accounting claim it will serve to maintain physical plant or capacity. This is accomplished, the argument goes, by placing the gains from holding assets during periods of inflation in a special stockholders' equity account. This special equity account, which consists of the excess of replacement cost depreciation over historical cost depreciation, would act as a reserve to insure the maintenance of the current level of operations.

But replacement cost depreciation does not insure the maintenance of the required capital. An example will illustrate this:

"Suppose a firm bought a machine for \$1,000 in 1971, that its expected (and actual) life was four years, and that its scrap value was zero at the end of that time; and suppose that the purchase price of the asset rose by \$100 each year. The depreciation charges for the four years would be \$275, \$300, \$325, and \$350; total \$1,250. Yet the replacement price

at the end of the fourth year is \$1,400. The firm was not able to replace the machine out of the amounts retained through depreciation charges."⁸

Also, replacement cost accounting does not adjust financial statements for the effects of inflation. As with LIFO and current cost depreciation in the Ernst and Ernst proposal, replacement costs adjust for specific price-level changes. Inflation involves an increase in the general price-level. As a result, replacement cost adjustments do not solve the problem of an unstable measuring unit. Therefore, financial statement items are still measured by dollars having different purchasing power.

Finally, replacement cost accounting can lead to inconsistencies in the adjusted financial statements. Although the replacement cost information reflects the current cost of assets, no adjustment is made for possible changes in operating efficiency. The SEC rules for disclosing replacement costs allow for the replacement of existing assets or facilities. As a result, the cost of assets of advanced technology would be reflected in the financial statements. This advanced technology, however, can lead to improved operating efficiencies such as reduced labor requirements, less down time, and fewer rejects. But these efficiencies would not be reflected in the financial statements.

In most cases it would be virtually impossible to determine the extent of these operating efficiencies. But just presenting the replacement cost data would not tell the whole story. The replacement cost depreciation expense would be inconsistent with other operating expenses. As a result, the current costs of operating the business would not be accurately reflected.

⁸R. J. Chambers, "NOD, COG, and PuPU: See How Inflation Teases!" p. 62.

CHAPTER IV

GENERAL PRICE-LEVEL ADJUSTMENTS TO HISTORICAL COST STATEMENTS

The Concept

General price-level adjustments of financial statements are based on changes in the general purchasing power of money. In contrast, both the Ernst and Ernst and SEC proposals are based on making adjustments to financial statements based on specific price-level changes.

Specific price-level changes represent a departure from the "cost" principle in that current values are substituted for historical costs. General price-level accounting, however, does not abandon the "cost" principle on which present financial statements are based.

"In general, amounts shown at historical cost in historical-dollar statements are shown at historical cost restated for changes in the general purchasing power of the dollar in general price-level statements. The amount may be restated, but it still represents cost and not a current value."¹

The basic difference, however, between historical cost and general price-level financial statements is the unit of measurement used. In historical cost statements the unit of measure is money (or more specifically the dollar in the United States). In general price-level adjusted statements the unit of measurement is based on the general purchasing power of the dollar at a specific point in time.

¹Financial Statements Restated for General Price-Level Changes,
APB Statement Number 3, p. 3.

The purpose of general price-level adjustments is to eliminate the problem of an unstable measuring unit. It was pointed out in Chapter I that inflation causes the purchasing power of money to fluctuate. This, in turn, causes items in financial statements to be measured by dollars having different purchasing power. Restating all items in financial statements in terms of the same general purchasing power of money, would solve the problem of an unstable measuring unit.

To measure the changes in the general price-level an indirect measure must be used since there is no market place in the United States where money is bought and sold. This indirect measure is the exchange-ratio between the domestic currency (the dollar) and all the goods and services it is capable of acquiring.² This measure of the general price-level is accomplished through the use of a price index.

"A price index can be defined...as a series of measurements, expressed in percentages, of the relationship between the average price of a group of goods and services at a succession of dates and the average price of a similar group of goods and services at a common date. The components of the series are price index numbers."³

For example, the Consumers' Price Index stood at 186.1 in December 1977. The common year for comparison was 1967=100.⁴ This means the consumer prices that are included in the Consumer Price Index were 86% higher in December 1977 than in 1967.

Now that a means has been found to measure the general price-level it must be decided which index to use for adjusting financial statements.

²Reporting the Effects of Price-Level Changes, Accounting Research Study No. 6, p. 10.

³Ibid., p. 63.

⁴U. S. Department of Commerce, Business Conditions Digest, Vol. 18, No. 1 (January 1978), p. 83.

Several indices are available that measure the price-level changes of groups of goods and services. These include the Consumer Price Index, the Wholesale Price Index, the Composite Construction Cost Index, and the Gross National Product (GNP) Implicit Price Deflator.

Of these, only the GNP Implicit Price Deflator reflects the average of all goods and services exchanged in the economy. The other three indices measure the changes in the price-level of certain segments of the economy. For example, the Consumer Price Index is determined from the price changes of approximately 300 goods and services purchased by city wage earners and clerical-worker families. It represents only a small segment of the economy. Therefore, it is not a reliable measure of the general price-level. The same criticism can be made concerning the Wholesale Price Index and the Composite Construction Cost Index.

Because the GNP Implicit Price Deflator represents the most comprehensive index of price-level movements in the U. S. economy, it is a more reliable measure of the general price-level. Both the Accounting Principles Board⁵ and the Financial Accounting Standards Board⁶ have recommended the use of the GNP Implicit Price Deflator for general price-level accounting.

The next question that must be answered is which year should be used as the base in adjusting financial statements for changes in the general price-level. One possibility is to use the base year of the price index that is used. If the GNP Implicit Price Deflator were used, the base year

⁵Financial Statements Restated for General Price-Level Changes, APB Statement No. 3, p. 14.

⁶Financial Accounting Standards Board exposure draft, proposed Statement of Financial Accounting Standards, "Financial Reporting in Units of General Purchasing Power," (Stamford, Conn.: FASB, December 31, 1974), p. 23.

would be 1972. All items in financial statements would be expressed in dollars of 1972 general purchasing power. This procedure, however, would not present the position of the firm in the context of the environment it is currently operating in. The information would be difficult to interpret and therefore could prove to be confusing and misleading.

The Accounting Principles Board has recommended that financial statements should be presented in terms of the general purchasing power of the dollar at the latest balance sheet date.⁷ This information would be more relevant for decision making and more easily understood because it is expressed in the context of current operations.

Before general price-level adjustments can be made, however, each item in the financial statements must be analyzed to determine which are monetary and which are nonmonetary. This is necessary because monetary and nonmonetary items are treated differently for adjustment purposes.

Monetary items represent claims to or obligations to pay a specific number of dollars. According to the Accounting Principles Board:

"...their numbers are fixed by contract or otherwise in terms of numbers of dollars regardless of changes in specific prices or in the general price-level."⁸

In other words, the monetary items remain fixed in terms of the current dollar. Therefore, monetary items appearing on a firm's current balance sheet are already expressed in terms of the current purchasing power of the dollar, and no adjustment is required.

However, because the general purchasing power changes, holding monetary assets and liabilities will result in purchasing power gains and

⁷Financial Statements Restated for General Price-Level Changes, APB Statement No. 3, p. 14.

⁸Ibid., p. 8.

losses. During periods of inflation, a specific amount of money is able to purchase fewer and fewer goods and services. Therefore, holders of monetary assets experience purchasing power losses. Conversely, holding monetary liabilities will result in purchasing power gains because the purchasing power of the dollars paid back is less than the purchasing power of the dollars borrowed.

Items not classified as monetary are identified as nonmonetary. These items are generally expressed in terms of the general purchasing power of the dollar at the time of their acquisition. Therefore, nonmonetary items must be restated in terms of the current general purchasing power of the dollar. To accomplish this it is necessary to first establish an acquisition history of all nonmonetary items. This will establish the level of the general purchasing power at the time of each acquisition. The historical cost of the item is then adjusted for the changes in the general purchasing power of the dollar.

For example, assume a piece of equipment was purchased in 1971 for \$100,000 when the price-level index being used for the adjustments stood at 121. For fiscal year ending December 31, 1977, assume the price-level index stood at 151. The adjustment for this change in the general price-level is done by multiplying the percentage change in the price-level plus 1 or $(151/121 = 1.25)$ by the acquisition cost. The result is $1.25 \times \$100,000 = \$125,000$. The \$25,000 difference does not represent a gain to the firm but is simply an adjustment for the changing purchasing power of the dollar.

Strengths

General price-level adjustments to historical cost statements present financial information in dollars having the same general purchasing power. It solves the problem of an unstable measuring unit. It is therefore an adjustment for the effects of inflation on financial statements.

Although general price-level accounting requires adjustments for changes in the general purchasing power of the dollar, the historical cost basis for accounting is maintained. All general price-level adjustments do is restate these historical costs in terms of current general purchasing power. Therefore, the objectivity and verifiability of historical costs is maintained.

Finally, general price-level accounting represents a comprehensive proposal for adjusting financial statements for the effects of inflation. In contrast to the Ernst and Ernst and SEC proposals, general price-level accounting reports the effects of inflation on all items in the financial statements.

There are three advantages that result from this comprehensive approach. First of all, all items in financial statements are expressed in dollars having the same general purchasing power. A common basis of measurement is established so that statement items can be added, subtracted, and divided to obtain meaningful and useful information.

"Financial ratios computed from unadjusted balance sheet items may provide misleading information; these same ratios may be improved by stating both the numerator and denominator of the ratios in similar terms. The rate of return on investment is one of the best examples of a ratio that can be greatly improved by using figures restated in terms of a common dollar."⁹

⁹Eldon S. Hendrickson, Accounting Theory, p. 216.

Secondly, the restatement of previous years statements in terms of current general purchasing power enables users of these statements to make more meaningful and valid comparisons of past performance with current operations. This improved analysis allows for better predictions of the future.

Finally, a comprehensive approach allows for the recognition of holding gains and losses on monetary items. This disclosure is necessary in order to fairly present the current position of a firm in relation to its environment. For example, consider a firm that is highly leveraged. Because of inflation the dollars the firm has to repay have less purchasing power than the dollars the firm had the use of in its operations. This represents a gain for this firm that is not presently recognized in financial reporting. But, it seems these gains need to be reflected in the financial statements if the current position of the firm is to be fully represented.

One argument against reporting gains and losses on monetary items is they do not represent actual cash flows. This is true. But very few would argue against the recognition of depreciation expense - a non-cash expense - in financial statements.

"Perhaps the real target is accrual basis accounting, which certainly does not limit entries to the recording of cash transactions. Depreciation, depletion, amortization of intangibles,...would all qualify as "Non-cash charges and credits." Can it be that a sizable segment of the business community seriously advocate a cash basis of accounting?"¹⁰

¹⁰ Cecilia V. Tierney, "General Purchasing Power Myths," The Journal of Accountancy, Vol. 144, No. 3 (September 1977), p. 94.

Weaknesses

The principal argument against adoption of general price-level adjustments is that a single index of the changes in prices does not reflect the price changes that confront an individual business. The GNP Implicit Price Deflator is the weighted average of price movements of all goods and services produced in the United States for a specific period. The price changes of individual goods and services, however, could vary significantly from this average. For example, oil prices in 1973 rose over 200% but the general price-level rose only 8%. General price-level adjustments would certainly not reflect the impact of this price rise in the financial statements of the companies affected.

Also, because general price-level accounting would present financial information in different terms (current purchasing power of the dollar), a question arises as to whether users of this information would be able to interpret and understand it. A massive reeducation program would be required to insure the benefits of having financial data stated in terms of money of the same purchasing power are not foregone because the information could not be understood.

CHAPTER V

CONCLUSIONS

Having analyzed three of the proposals for adjusting historical cost statements for the effects of inflation, it is now necessary to judge whether these proposals present useful information in an era of inflation. The seven characteristics or qualities of useful financial information, as specified by the Accounting Principles Board in Statement Number 4 will be used as the criteria for this judgement.

1. RELEVANCE - Both the Ernst and Ernst and SEC proposals attempt to provide information that better represents a firm's ability to continue current operations. This type of information could prove to be more relevant than historical costs in making predictions about the future success or failure of a business entity. However, as was discussed in Chapters II and III, both proposals have weaknesses that could result in misrepresenting the current position of a firm. Information, no matter how current it is, is not relevant if it does not accurately reflect reality.

On the other hand, general price-level accounting makes no adjustments to the financial statements that will present the current cost of operation. Historical costs are merely adjusted for changes in the general purchasing power of the dollar. Therefore, the information may not be relevant to decisions concerning future operations. However, general price-level adjustments do provide a common denominator for measuring the account items.

This action restores the usefulness of the relationships among account items and allows for meaningful conclusions to be drawn that would aid in decision making.

2. UNDERSTANDABILITY - All three adjustment proposals present problems in this area because users of the financial information would not be familiar with the meaning of the adjustments. The Ernst and Ernst proposal presents the least amount of problems since only the income statement is adjusted. The balance sheet remains the same except for one new account item.

Replacement cost and general price-level accounting would, on the other hand, present entirely new types of financial information. If the users were not adequately educated on the meaning of the numbers, the benefits of the adjustments would not be realized. This writer believes this will prove to be one of the biggest problems facing the accounting profession in adopting any form of inflation accounting.

3. VERIFIABILITY - The SEC proposal lacks this quality. Replacement cost information is determined by management based upon how it would replace assets if the firm were deprived of them. This is a judgement based on an assessment of the future. Because judgements are called for, there is very little chance the results could be duplicated by independent measures. Therefore, the subjectivity of replacement cost information seriously limits its usefulness.

The Ernst and Ernst proposal would present no serious problems if reliable and universally accepted cost indices were established to determine the current cost of assets. A problem of subjectivity could arise, however, if any interpretation is required to determine which index applies to a particular asset.

General price-level adjustments are nothing more than historical costs restated in terms of the current general purchasing power of the dollar. No judgement is required to determine what basis to use for the adjustments because historical costs represent the actual amount of money paid for the asset.

4. NEUTRALITY - The Ernst and Ernst proposal fails to satisfy this characteristic. It makes adjustments to only the income statement. The balance sheet is left unadjusted. In addition, LIFO distorts the inventory figure on the balance sheet. As a result, users interested only in net income would be favored over users who need useful balance sheet information or information that requires a meaningful relationship between the balance sheet and income statement. For example, a creditor concerned with the net working capital position of a firm would get misleading information.

Neither the SEC proposal nor general price-level accounting favor the needs of any specific users. Both proposals require adjustment of balance sheet and income statement figures.

5. TIMELINESS - All three proposals satisfy this characteristic. The adjusted financial information would be a part of or supplementary to a firm's present financial statements.

6. COMPARABILITY - Neither the Ernst and Ernst nor the SEC proposal possess this characteristic. Neither proposal corrects the problem of an unstable measuring unit. Therefore, statements of previous years are not measured in the same terms as the current statement. In addition, replacement cost accounting could result in different decisions each year on how to determine replacement cost (reproduction one year and replacement

cost the next). A comparison of these two statements could result in misleading information on trends concerning profit margin and return on stockholders' equity.

Both these proposals also present problems on comparability between firms. The Ernst and Ernst proposal specifies LIFO inventory costing. But the inventory accounting system (periodic or perpetual) a firm employs will vary the amount of cost of goods sold. As a result, the financial statements of firms using different inventory accounting methods cannot be meaningfully compared. Some of the difference would be the result of different accounting treatments.

The SEC proposal enables the management of firms to use three different methods of determining replacement costs. The result from a firm using the reproduction of existing assets method could vary significantly from a firm using the replacement of existing assets. Again, the differences caused by the accounting methods distorts any comparison between firms.

In contrast to the other two proposals, general price-level accounting would actually improve comparability. First of all, because all items in the current financial statement are restated in terms of the current general purchasing power of the dollar, they have a common denominator which allows for meaningful comparisons. Secondly, previous years' statements would be adjusted in terms of the current general purchasing power of the dollar. This would also provide a common measuring unit between statements by eliminating differences caused by an unstable measuring unit.

7. COMPLETENESS - The completeness characteristic or quality requires that all information that has the first six qualities in reasonable degree should be reported.¹ Conversely, financial information not possessing the first six qualities in reasonable degree should not be reported.

This appraisal shows that financial information provided by the Ernst and Ernst and the SEC proposals does not in reasonable degree possess the first six qualities. Therefore, this information should not be reported because it does not provide useful information to users of financial statements.

General price-level accounting, on the other hand, does in a reasonable degree possess the first six qualities of useful information. The one problem area is UNDERSTANDABILITY. However, anytime a new procedure or concept is implemented there will be problems at first in understanding the new information. What must be decided is whether or not the benefits of providing general price-level information outweigh the costs of any problems of understandability.

Inflation causes the general purchasing power of money to fluctuate which results in an unstable measuring unit (the dollar). An unstable measuring unit undermines the validity of the relationships between and among the information in financial statements because there is no common denominator. This seriously limits the usefulness of present financial statements. General price-level adjustments would provide for a common denominator by presenting financial information in terms of the current general purchasing power of the dollar. Therefore, this writer feels general price-level accounting should be adopted in order to restore the usefulness of financial information.

¹Basic Concepts and Accounting Principles Underlying Financial Statements of Business Enterprises, APB Statement No. 4, p. 38.

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