WP : 222

Working Paper

WP222
WP
1978
(222)

IIM
WP-222

INDIAN INSTITUTE OF MANAGEMENT AHMEDABAD

ACCOUNTING FOR CHANGING PRICES - RECENT DEVELOPMENTS

by

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W P No. 222
July 1978

The main objective of the working paper series of the IIMA is to help faculty members to test out their research findings at the pre-publication stage.

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Abstract

With the rejection of ED-18 on July 6, 1977, the longest running epic of the financial world "Inflation Accounting" has come to a standstill where U.K. accounting profession is living with "An Interim Recommendation" and the U.S. (through its SEC requirements) is content with disclosure of fragmented and piecemeal information about replacement cost.

Accounting profession in India seems to be watching the debate with all curiosity and excitement. I wonder whether the professional accounting bodies here are just playing the role of spectators or sitting on the fence watching the developments in other countries before adopting any particular method for correcting inflationary effect on our financial statements. Nevertheless, we cannot remain inactive too long. It is high time for our accounting bodies to begin providing a platform to thrash out the problem and for our corporations to experiment with suggested methods.

This paper seeks to examine and review critically the various stages in development of the concepts and practices of accounting for changing prices. SSAP 7, Sandilands, Morpeth (ED-18) and finally the Accounting Standard Committee's current 'Inflation Accounting - An Interim Recommendation' are critically examined and evaluated. Managerial uses of the suggested inflation-adjustment method is highlighted by a case study - "Management Reporting System in Hindustan Lever Ltd."

ACCOUNTING FOR CHANGING PRICES - RECENT DEVELOPMENTS

On November 30, 1976* the Financial Times in London published the following "obituary".

> The U.K. funeral rites for H.C. will be conducted at Chartered Accountants' Hall at 11.30 this morning.

Here, the "U.K. funeral rites" refers to the November 30, 1976 press conference at which the publication of Exposure Draft No. 18 was announced by the U.K.'s Accounting Standards Committee (ASC). The "obituary" further adds that

> The passing away is reported of Historical Cost Accounting, better known to its followers as 'H.C.'. Death has followed several attempts at emergency surgery, the most recent being an experimental heart transplant aimed at making H.C. proof against inflation. But this failed after the onset of a complication known as Sandilands disease.

In 1976, the publication of ED-18 seemed to be an important landmark in the history of British Accountancy. It was launched with all the fun-fair coupled with skillful publicity. Press and government greeted it with praise, hardly a doubt was voiced. "In accounting profession", as Prof. Baxter puts it, "it was a giant leap forward, aiming at revolutionising most branches of accounting at one blow, and to introduce brand new concepts and methods." But 'H.C.' tested and practiced over a considerable period of time was not to give up so soon. It survived, in fact, bounced back. Some of its staunch supporters

denounced the whole philosophy of inflation accounting ('a historical cost is a fact'). On July 6, 1977, to the surprise of most, a majority of British Chartered Accountants voted for a motion "that the members of the Institute do not wish any system of CCA to be made compulsory." The Morpeth proposals (ED-18) were effectively killed.

Morpeth Committee in its ED-18 recommended too much too soon. Some pointed out conceptual flaws and inconsistencies, others stressed the high cost of revaluation. The hurried-up attempt was at odds with a lesson that mankind has learned from much painful experience: we should be modest and cautious with innovations and test them step by step. The vote did, however, have one happy by-product.

The amalgam of British accounting bodies, the Consultative Committee of Accounting Bodies (CCAB) stepped in and asked Mr. William Hyde, the Chief Accountant of Oxford University, to produce first-aid measures quickly. A team was hastily collected and Hyde Committee issued its report on November 4, 1977 known as "An Interim Recommendation." Morpeth is still working with his committee. Reports are that he feels his committee is still charged with the long-term implementation of the Sandilands recommendations, while Hyde proposals known as 'interim recommendations' are a short-term solution to the inflation accounting problem. It still hopes to produce a new version of ED-18 - a comprehensive standard with fewer snags than its predecessor.

It seems to be "we are back where we started". Now let us review briefly the historical developments in inflation accounting during the past one decade which culminated into present state.

Background

Accounting for inflation first became a subject for serious debate as a potential practical proposition in the early 1950s. The efforts did not go too far, because the inflation rate was not high enough to warrant any change in traditionally established and generally accepted accounting principles. However, the markedly sharper twist to the inflationary spiral during 1970s has alarmed the businessmen to concentrate on the problem of financing industrial plant replacement and the drain on working capital resources brought about as a consequence and aggravated by the level of taxation on corporate profits.

In June 1969, the Accounting Principles Board of the AICPA (USA) issued Statement No. 3, "Financial Statements Restated for General Price-Level Changes." This document is an extension and improvement of Accounting Research Study No. 6 issued by the American Institute of Certified Public Accountants in 1963 titled "Reporting the Financial Effects of Price-Level Changes." In January 1973 the Institute of Chartered Accountants in England and Wales published "Accounting for Inflation - A Working Guide to the Accounting Procedures" as a companion to the Exposure Draft (ED 8) on "Accounting for Changes in the Purchasing Power of Money" issued by the Accounting Standards Steering Committee (ASSC).

ED-8 proposed adoption of a method of adjusting published company accounts by reference to an appropriate index that would measure the degree of fall in the purchasing power of the monetary unit and enable comparisons to be made with the historic cost figures used in the statutory accounts of the organization.

The Exposure Draft (ED-8) was debated at length and in May 1974 it was followed by an ASSC's "Statement of the Standard Accounting Practice" (No. 7 in a series of SSAPs). This document, provisional in its nature, would require the quoted companies to provide inflation adjusted accounts as a supplement to the statutory accounts prepared under historic cost conventions. In January 1974 during the discussion period of ED-8, the government set up the Independent Committee of Inquiry into Inflation Accounting to look into all aspects of the problems of accounting for price changes. The committee chaired by Francis Sandilands submitted its report in September 1975.

The Sandilands Report took a different view to the ASSC on the most appropriate method of inflation accounting and it came down in favour of "Current Cost Accounting" (CCA), as opposed to the "Current Purchasing Power" (CPP) method which formed the basis of the ASSC's SSAP No. 7. The two systems are based on fundamentally different concepts. Under CPP, all the items in the financial statements are presented in a unit of measurement that represents the same amount of general purchasing power - the general purchasing power of monetary unit on balance sheet date. It

also recognizes the general price-level gains and losses that result from holding monetary assets and liabilities during inflation or deflation. Baring these two changes, the financial statements prepared under CPP method suggested by SSAP 7 are similar to the conventional statements based on historic costs. CPP preserves the cost basis and the realization rule of historic costs conventions. In contrast to the CPP approach to inflation accounting of adjusting the historic cost accounts by reference to an index of the purchasing power of the currency, the CCA system as recommended by Sandilands adopts the concept of revaluing physical assets such as building, plant and machinery at their "value to the business." This principle has now been enshrined in the Exposure Draft (ED 18) prepared by the Inflation Accounting Steering Group (IASG) under the chairmanship of Mr. Douglas Morpeth. We will come back to it later.

<u>CCA in U.S.A.</u>

On the other side of the Atlantic in U.S.A., in 1974 the Financial Accounting Standards Board (FASB) - a successor to Accounting Principles Board of AICPA has issued a proposed statement of Financial Accounting Standard that would require, for fiscal years beginning on or after January 1, 1976 the restatement of conventional financial statements for changes in the general purchasing power of the monetary unit and the reporting of certain information from adjusted statements. Their statement is formally known as "Financial Reporting in Units of General Purchasing Power". Later in August 1975, the U.S. Securities and Exchange

Commission (SEC) asked for comments on proposed disclosure requirements which would require corporations to measure and report the current replacement cost of certain assets. In March 1976 these requirements were made mandatory for approximately 1,000 of the largest U.S. manufacturing corporations. In a release - Accounting Series Release No. 190 dated March 23, 1976 - the SEC states that the purposes of the required disclosure of current replacement cost information are:

> "to provide information to investors which will assist them in obtaining an understanding of the current costs of operating the business.....(and) to provide information which will enable investors to determine the current cost of inventories and productive capacity as a measure of the current economic investment in these assets...."

On March 31, 1977 many of the United States's largest public companies filed with the Securities and Exchange Commission their first annual reports containing the disclosures required by the Commission's controversial replacement-cost rule. In a study made by Arthur Young (a prominent CPA firm in U.S.A.), summarising the results of 175 companies which disclosed the data by the time of study, the current cost of replacing gross productive capacity is, on average, about two times the original cost, net productive capacity is from two-thirds to three-fourths higher on a replacement cost basis; and current-cost depreciation expense averaged two-thirds more than historical-cost depreciation expense. However, the degree to which replacement costs exceeded historical costs varies widely among the companies included in the study. The

ratio of replacement cost to historical cost of inventories varied significantly, depending on whether the FIFO or LIFO method was used in preparing financial statements and whether additional replacement cost depreciation was included in estimating the replacement cost of inventories. The SEC has decided to continue with its replacement cost disclosure rule for the time being. On August 5, 1977, it issued a release confirming that it would again require replacement cost data for the current year. Meanwhile, to assist Financial Accounting Standard Board (FASB)-the rule-making body for the U.S. Accountants, in its efforts to develop a conceptual framework of accounting and reporting, the American Institute of Certified Public Accountants has set up a task force to study the various proposals of concept and measurement and to encourage experimentation with a minimum number of financial accounting models formulated from various alternative measurement methods which have been proposed. U.S. business executives, CPAs and regulators are also monitoring the latest British move. Thus, the FASB is in the thores of its own inflation accounting debate, and what others, particularly the British, do cannot help but affect the FASB deliberations. Now, let us return back to U.K. developments.

Post-Sandilands Events:

Before considering the content of ED-18, let us review developments since the Sandilands report was published in September 1975.

In November 1975, the CCAB (Consultative Committee of Accountancy Bodies - the six British professional bodies which sponsor the ASC) issued its "initial reactions" to the Sandilands Report. Although welcoming Sandilands as a valuable contribution to accounting thoughts, the CCAB said that CCA did not deal with changing value of money. Earlier ASSC in its publication "The Corporate Report" also insisted that a current value accounting must take account of the changing value of money. The problems of making valid comparisons over a period of time when the unit of measurement is unstable is not dealt at all in Sandilands report.

Later in the same month of November 1975, the British government adopted the Sandilands Committee's proposals, and Mr. Douglas Morpeth was appointed chairman of the Inflation Accounting Steering Group (IASG). In the words of Prof. Westwick - a member of the committee, "our task was to convert the proposals of the Sandilands Committee on current cost accounting into a draft accounting standard which would be practical, acceptable and auditable." The IASG was told to prepare a proposal for an exposure draft on CCA after taking into account the initial reactions of CCAB as well as comments made by others. The proposed exposure draft was submitted to the ASC early in September 1976, and after intensive discussion and modification, was published two months later as ED-18.

Concept of Profit Measurement and Maintenance of Capital

One of the problems that is central to inflation accounting, and indeed to all accounting, is the definition of profit. In measuring profit, we are trying to determine if firm has been able to maintain its capital, so that the firm may retain its "welloffness" as it existed at the beginning of the period. The accounting aspect of capital maintenance has been under serious discussion at least since the pioneering work of Henry W. Sweeney in the 1920s and early 1930s. Under historical cost accounting profit is what is left over after maintaining the money value of capital. This is the "legal" view embodied in conventional accounting practice. Under current purchasing power (CPP) method, it is what is left over after maintaining the purchasing power of capital. It maintains the "exchangeability" of the capital committed to the accounting entity by its shareholders. Under Sandilands' current cost accounting (CCA), the emphasis is on maintaining the actual physical material capital. The profits are calculated after charging against revenue the current value of the physical assets consumed during the year. The ED-18 accepts this view in calculating "current cost profits" in the profit and loss account. In ED-18, the amount available for "distribution and general reserve" is the sum of current cost profit for the year and the surplus on revaluation of assets during the year, less the amount appropriated to revaluation reserve by the directors. The amount to be appropriated is a discretionary sum to be decided by the directors based on what they consider "substance of the

business" to be maintained. Should this substance to be maintained in money terms, general purchasing power terms or specific power terms is for them to decide.

Major Provisions of ED-18

Under ED-18 the limitations of historical cost accounting under inflationary conditions are to be corrected in the following manner:

1) Depreciation and cost of sales for the year is to be calculated on "value to the business" of these assets, and not on their original cost. Thus, calculation of profits is based on current cost of assets consumed during the year.

2) The balance sheet will show current values for most assets and will no longer show their historic cost. The current cost is based on the "deprival value" of an asset.

3) There will be a new statement in the annual accounts - the appropriation account - in which there will be brought together the current cost profit, the revaluation surpluses, the amount which the directors consider should be retained within the business having regard to their assessment of its needs, and dividends. Directors may transfer from this surplus to a capital maintenance reserve, amounts required to maintain the "substance of the business".

4) There will be a note to the accounts entitled "The Statement of the Change in the Equity Interest after Allowing for Changes in the Value

of Money". The statement will clearly show how the company has performed in relation to the rate of inflation and will also show its losses or gains from the holding of monetary items.

It is hoped (vide para 5 of the report) that CCA will provide management, and the users of published accounts, with more realistic information on costs, profits, and value of assets, and the return on capital and on assets. I t also provides a distinction between the profits earned from the operations of the business and the money gains resulting from changes in the price of a company's assets.

Vide para 6, annual accounts prepared and presented on the basis set out in this draft should contain a profit and loss account, an appropriation account and a balance sheet. Except for wholly-owned subsidiaries there should be included in the notes to the accounts a statement of the change in shareholders' net equity interest after allowing for the change in the value of money.

In profit and loss account, the operating profit or loss is arrived at after charging depreciation and the cost of sales on the basis of current "value to the business" of the physical assets consumed during the year. The guideline to determine the value to the business of different assets in the balance sheet is as follows:

Fixed Assets

Plant and Machinery: Plant and machinery in the balance sheet will be shown at their "value to the business." This will be their net

replacement cost except where this is greater than both the economic value (which is, the present value of the income that will be earned from using the machine during the rest of its life) and the net realisable value in which case it will be the higher of the economic value and net realisable value.

The general rule of ED-18 is that the 'value to the business' is its "deprival value" that is, the maximum loss accruing to the firm if it were to be deprived of its assets. This deprival value will depend upon the intentions of the firm with respect to its assets. The firm can replace it, sell it or hold it. In each situation, net replacement cost, net realisable value and economic value respectively becomes relevant. Depending on the circumstances, economic value or net realisable value could be the appropriate value to the business. For example, if asset's net replacement cost was Rs 10,000, and if the present value of the net income that will be earned from using the machine during the rest of its life is only Rs 8,000, then the firm would not seek to replace it. Although economic value and net realisable value are possible bases for value to the business, the ED-18 Guidance Manual stresses that in most situations the most appropriate value to the business will be net replacement cost. Sandilands report also supports this view.

Technological Change and the Use of Indices: The gross current cost of plant and machinery is the cost to be incurred to obtain and install a substantially identical replacement or the cost of modern equipment in

case technological changes have taken place, whichever is lower. The value of the assets that the company has gets affected by the existence on the market of new, improved asset. The Sandilands report favoured the use of industry-wise indices in determining the value to the business of plant and machinery. Sandilands implied that such indices incorporate the effects of technological change, whereas in fact they are constructed to eliminate such effects. Sandilands' reliance on the use of official indices, while giving the impression of uniformity and accuracy, could in many cases be misleading. ED-18 recognizes this, and it sensibly expresses a preference for asset-based indices rather than industry-based indices.

However, ED-18 introduces a considerable degree of subjectivity into fixed assets valuation by the way in which it recommends that if technological improvements reduce asset costs this should be reflected in the current cost of the asset. In doing so, the estimated cost of the "modern equivalent asset" which would be deemed to replace the asset now owned by the firm, is to be adjusted to take account of (a) the present value of estimated differences in future operating costs (b) differences in output capacity, and (c) the estimated life of the improved machine over a substantially identical replacement.

Where the gross current replacement cost of plant and machinery is estimated, by reference to the cost of a substantially identical asset, that cost should be calculated by reference to one or more of the following

sources of data:

a) Suppliers' official price lists, catalogues, etc., with appropriate deductions for trade discounts;

b) The company's own replacement cost estimates based on expert opinion;

c) An index compiled by the company from its own purchasing experiences;

d) Authorized external price indices analysed by asset type; and

e) Authorized external price indices analyzed by using industry.

It is envisaged that most companies will use a combination of methods, using the methods higher in the list for the more important and more expensive items of equipment, and the methods lower in the list for the less expensive and less important items of plant and machinery.

In the United States, where the FASB and the SEC are moving much more cautiously in introducing current value accounting, the expected difficulties likely to be associated with accounting for technological change are already receiving attention. In U.S., SEC Accounting Series Release No. 190 (issued in 1976) requires only to disclose the estimated cost of stocks and of fixed assets in corporate annual reports. There is yet no requirement for replacement cost figures to be incorporated in income measurement, but an editorial in Business Week (August 9, 1976, p. 80) commented on such possibility in the following words:

> In a world of rapidly changing technology no one replaces old equipment with an exact duplicate. Replacement will take the form of new machinery that costs more but produces more efficiently.

> And so, to calculate earnings on a replacement cost basis, accountants must not only charge more depreciation, they must also adjust for differences in output and operating costs. When they have done so, they wind up in a curious dream world where companies substract savings they did not realize from costs they did not incur to derive earnings they did not make.

Recognition of technological change in the manner proposed by ED-18 not only leads to subjectivity of assets valuations, it also raises the important theoretical issue as to whether resultant depreciation charges are in fact a measure of the current value of the costs actually incurred by the enterprise in the current period, or whether they entail an unwarranted anticipation of possible future cost saving.

Land and Building

Like plant and machinery, the land and buildings are to be carried at their "value to the business" which in owner occupation will normally be their open market value for their existing use, plus estimated attributable acquisition costs. Open market values are to be supplied to the company by professionally qualified surveyors.

Professional valuations are to be carried out at least every five years unless there has been a substantial change in the market in that period. If such valuation cannot be made, the value to the business should be the total of the depreciated replacement cost of the buildings and the open market value plus estimated attributable acquisition costs of the bare land for its existing use. If economic value of such land

and buildings is smaller than the value estimated as above, then the economic value would be the value to the business.

Depreciation

The charge to the profit and loss account for depreciation should equal to the value to the business of the assets consumed during the period. When assets are valued on the basis of their net current replacement cost, the value consumed increases as the replacement cost of the assets increases, therefore, the charge may be based on average value for the period. The charge is obtained by apportioning the asset's average value over a period equal to the expected remaining useful life of the assets at the beginning of the period.

The selection of the average asset value for computing depreciation is a departure from the recommended use of the end-year value by Sandilands Committee.

In times of rising prices, the amounts charged to the profit and loss account will not be sufficient to accumulate a total provision for depreciation equal to the asset's gross current replacement cost at the end of its useful working life. The accumulated depreciation at the beginning of each year and the charge for depreciation for the year are both likely to be based on values which are lower than the value at the end of the year. The sum of the accumulated depreciation brought forward and the charge for the year will, therefore, not equal the

accumulated depreciation required at the end of the year. The shortfall is called "backlog depreciation."

In using average value for charging depreciation, there will be two elements of backlog depreciation. One, prior-year backlog depreciation, the amount of additional accumulated depreciation required to keep the accumulated depreciation account in the same proportion as over the year the replacement cost has increased. Second, current year backlog depreciation, the amount needed to uplift the annual charge based on the average depreciable value to the depreciation charge really needed to cover the replacement cost at year-end.

Para 11 of ED-18 suggests that backlog depreciation should be charged against the related revaluation surpluses, rather than to the profit and loss account.

Inventories

Inventories are to be stated at the total of the "value to the business" of the separate items of inventory, or of groups of similar items. This will generally be lower of replacement cost and net realisable value. The current replacement cost of stock and work-in-progress should include the cost of purchased items, together with the cost of manufacturing, processing and other expenses incurred in bringing the product to its present location and condition. This should include all related production overheads even though they accrue on a time basis.

The general principles in relation to stock and work-in-progress stated in ED-18 follow closely the recommendations made in the Sandilands report. One difference however is that ED-18 proposes that stock and work-in-progress be shown in the balance sheet at its "value to the business", while Sandilands recommended such value to be shown only by way of a note.

The sources of data used in the calculation of the current replacement cost of stock, and the current cost of sales are in descending order of preferences as shown below (vide para 164).

1) The costs currently being incurred by the company at the date of consumption for various cost elements.

2) Suppliers' official price lists, catalogue, etc., in respect of purchased items with appropriate deductions for trade discounts.

3) An in-house index compiled by the company from information on its own costs of purchases, labour and overheads.

4) An authorized external price index for the costs of each type of stock used by the company, or for the costs of stocks of companies in the relevant industrial category.

The ED-18 does not prescribe any particular method to be employed to determine the current replacement cost, each company will need to develop the techniques appropriate to their business.

<u>Cost of Sales</u>

Para 15 states that "the amount charged to the profit and loss account for the period for stock and work-in-progress consumed should

be the value to the business, at the date of consumption, of the stock and work-in-progress consumed during the period." The calculated cost of sales adjustment (COSA) would be added to or, where appropriate, deducted from the cost of sales charged to the profit and loss account for the period and included as part of the surplus or deficit arising on revaluation of stock.

The ideal would be to determine current cost of sales on an item by item basis, but it may be impractical. Generally, companies calculate cost of sales on a periodic basis. If a company which has a fairly regular sales pattern and if prices have increased steadily during the period, ED-18 has recommended averaging method for calculation of the current cost of sales. The objective of averaging method is to charge stock consumed at the average current cost during the period.

Further, a number of circumstances have been listed in which it will not be necessary for companies to make cost of sales adjustment. These are:

a) Work-in-progress which is being carried out as part of a contract, including stocks of materials ordered for a particular contract, and finished products not yet delivered.

b) Assets which were purchased solely with a view to gaining the benefit of an increase in their market value, e.g. the stock of a commodity dealer.

c) Stocks which were increased significantly in order to avoid increase in price.

d) Stocks which were purchased substantially below (or above) the market price.

e) Seasonal agricultural products.

Contract Work-in-Progress

The most important of these exemptions where COSA is not required, is contract work-in-progress. Morpeth Committee recommended that once a material had been allocated to a specific contract no further adjustment for increase in its cost should be made. This may appear to be a divergence from the strict theory of CCA. However, when allocated to a contract, materials ceases to be part of general trading stock of the company and it is appropriate to provide for their replacement by charging to the contract their replacement cost at the date of such allocation.

Another problem for contract work-in-progress is the question of financing of the cost of the contract by means of progress payments. Morpeth Committee decided that work-in-progress for a specific customer, less progress payments on this account, is more in the nature of a monetary asset than a physical asset, and therefore, needs no adjustment in cost of sales.

Gains due to Skilled Buying

One of the criticisms that was made of the Sandilands proposals is that the results of skilled buying would be shown as holding gain, whereas the results of skilled selling would be shown in the profit and loss account. Morpeth Committee has proposed that any profits made from skilled buying:

a) When a company makes a significant departure from its normal buying pattern by purchasing stock in advance of normal requirements in order to avoid an expected increase in price; or

b) When stock is purchased at a price substantially below the relevant market buying price at the date of purchase;

should be included in the profit and loss account and not in the appropriation account.

Capital-based Government Grants

An aspect of valuation not covered in the Sandilands report is the treatment of government grants. According to ED-18 (para 48), in arriving at a replacement cost of assets, the grant receivable from the government should be deducted from the gross current replacement cost as it is only the net outlay that the company would have to bear. Although this treatment is consistent with the theory of value to the business, it does have a rather odd consequence in that if the rate of grant falls, the "value" of the asset will increase and the company will therefore show a holding gain.

Intangibles:

In dealing with the valuation of intangibles ED-18 makes proposals which are both subjective and illogical.

In the case of goodwill only purchased goodwill is continued to be shown in the balance sheet at cost less amount written off. Such value at the time of purchase is to be determined by valuing the net

assets acquired "at their value to the acquiring entity according to the principles of CCA." In order to avoid introducing "too great a degree of subjective judgement into the preparation of balance sheet" it is recommended that no account should be taken either of any subsequent increase in the value of purchased goodwill or of any internally generated goodwill. ED-18 is also indifferent as to whether the every year write-off of goodwill is to be made to the profit and loss account or to the appropriation account.

Not only does this introduce confusion into the problem of income measurement, it is also inconsistent with the proposed treatment of other intangibles.

All other intangibles (including research and development expenditure) are to be recorded in the balance sheet at their current value, if such value can be established. If value to the business cannot be established the intangibles are to be written off in the profit and loss account. Such intangibles are not to be shown at their historical cost figure, since this figure "may bear no relationship to the current value."

It is difficult to understand why ED-18 is so selective in its disapproval of subjective estimates in case of goodwill and of the use of historical cost as a proxy for current value where the later is indeterminant.

Trade Investment

ED-18 draws no distinction between those held as current or as long-term assets. Quoted investments should be valued at their mid-market price (the average between 'bid' and 'asked'). Unquoted should be stated at their value to the business as determined by the directors; this would normally be related to (a) the net asset value to the company on a CCA basis; and/or (b) the present value of the expected stream of income from investment.

Investment in associated companies are to be shown at the applicable proportion of their net assets as shown by their CCA accounts. However, where the associated company is a quoted company, the investment may be valued at their mid-market value.

Liabilities and Deferred Tax

Deferred tax should be accounted for, on the liability method in respect of all timing differences "other than any tax reduction which can be seen with reasonable probability to continue for the foreseable future, either by reason of recurring or continuing timing differences or in the case of revalued assets by the continuing use of the assets or the postponement of liability on their sale." The potential diferred tax liability for all timing differences should be disclosed in a note.

Liabilities other than deferred tax should normally be shown at their face value. Discounting or the use of market values, is not to be

permitted. In case of quoted securities mid-market price at the balance sheet date should be shown by way of a note to the accounts.

The exposure draft introduces wide variations and inconsistencies into the use of market values and discounting in making valuations. Neither can be used for liabilities (even for quoted debentures, etc.) except that a new kind of discounting (involving a notion of "reasonable probability") is introduced into deferred tax accounting.

If quoted market values are to be used under ED-18 to produce current valuations of investments (vide para 63) and if discounting is acceptable in determining economic value and in valuing the impact of technological change on the value of plant and machinery, it is difficult to understand why the use of either basis is rejected in arriving at a valuation for liabilities. It is difficult to see what logical justification there is for excluding the use of discounting technique in valuing liabilities. Cann't it be concluded that expediency rather than principle governed the decision to use 'reasonable probability' (discounting having been rejected) in dealing with the problem of deferred taxation?

The Appropriation Account

Under ED-18 the figure of current cost profit in the profit and loss account is the same as recommended by Sandilands report. Current cost profit is what is left over after charging against revenue the current value of the physical assets consumed during the year. One of the most

significant and controversial departures which ED-18 makes from the recommendations of Sandilands comes in the form of an appropriation account.

The appropriation account should show

i) the current cost profits or loss for the year

ii) the surpluses or deficit for the year arising from the revaluation of assets

iii) the amount appropriated by directors to or from revaluation reserve

iv) dividend distribution, and

v) balance being transferred to general reserve.

It is envisaged that, in deciding what amount to appropriate, the directors will have regard to two matters:

i) What is the "substance of the business" that they consider should be maintained (is it the physical assets, or all the assets, or the long-term capital, or the owners' capital, etc.?);

ii) Should this substance be maintained in money terms, general purchasing power terms, or specific price terms.

Such transfer to revaluation reserve account is left at the discretion of directors. Sandilands was uncompromising in his refusal to allow any holding gains resulting from the revaluation of assets to be treated as part of distributable income. ED-18, on the other hand, recognizes a number of situations which may lead the directors to appropriate more or less than the amount of revaluation surpluses. It suggests appropriation to revaluation reserve in excess of holding gains

may be necessary to provide for such items as: backlog depreciation, the amount required to finance an increased volume of trade debtors, and stock as a result of inflation; or even an amount to maintain the purchasing power of stockholders' equity.

Directors also have discretion to provide less than revaluation surpluses, that is, to treat part of holding gains as distributable profits. ED-18 provides that, in general, holding gains are to be treated as capital. There are, however, three situations in which it is specified that holding gains should be treated as income. These are: (a) where the asset was purchased or held "solely" with a view to gaining the benefit of an increase in its market value (the main example being in investment and commodity dealing activities), (b) where usually large purchases are made in anticipation of future price increases and (c) where stock is purchased at a price substantially different from "the relevant buying price at the date of purchase."

Thus ED-18 blurs the whole concept of profit. The distinctions between capital and revenue charges are of arbitrary nature. This makes it all the more important for the profession to sharpen up its conceptual thinking on the question of what it means by "profit".

Statement of the Change in Shareholders' Net Equity Interest after allowing for change in the Value of Money

The decision by the Sandilands Committee to recommend current cost accounting (CCA) rather than the current purchasing power (CPP) basis advocated by the Accounting Standards Steering Committee in its earlier statement of Standard Accounting Practice No. 7 has undoubtedly tended to confuse many people who were already bemused by the whole controversy. ED-18 by recommending current cost profits on replacement cost basis seems to be wholly consistent with Sandilands recommendations. However, the most heated argument in recent years within the area of inflation accounting has been over the treatment of the maintenance of purchasing power of the equity interest and also over the gain or loss resulting from monetary items. One may recall the controversy followed by the publication of Sandilands report, in which ASSC insisted that a current value accounting must take account of the changing value of money. This reaction found favour with ED-18 and a statement by way of notes to accounts has been recommended.

This "Statement of the change in shareholders' net equity interest after allowing for the change in the value of money" shows whether the shareholders' net equity interest, valued both at the beginning and end of the year in CCA terms, has been maintained in real terms. This statement converts the shareholders' net equity interest at the beginning of the year into uniform purchasing power units based on Retail Price Index (RPI) at the end of the year. This figure then is compared with

net equity interest at the end of the year based on current cost accounts, so a comparison can be made whether shareholders' have been able to maintain the purchasing power of their interest in the company against the vagaries of inflation.

Also to be found in the notes to the accounts will be amount of gain or loss to the company as a result of owing monetary liabilities or holding monetary assets.

It can be observed in the words of Mr. Westwick, a member of the Morpeth Committee

> that the Steering Group decided to put the items about which there was the greatest measure of agreement, namely depreciation and cost of sales on a CCA basis, into the profit and loss account. Those items about which there was still some controversy have been dealt with as non-mandatory transfers within the appropriation account, and finally those items which are the most controversial are to be shown as notes to the accounts.

Auditing Current Values

One of the most important criticisms of the CCA method as proposed in ED-18 is that in determining the value to the business of the fixed assets such as building, plant and machinery, reliance will have to be placed to a considerable degree on the subjective judgement of officers of the company and on the opinions of professional valuers who may be called in. It can be seen that ED-18 will make life much more difficult

for auditors and will greatly increase the subjectivity of accounting measurement and scope for errors therein. And then, there are conceptual problems with regard to concept of profit and capital. It is evident that more we blur the distinction between profit and capital, and between capital charges and revenue charges, the more scope we shall be giving to management to indulge in what Americans have stigmatised as "imaginative accounting" on the lines of "Unaccountable Accounting" by Briloff published by Harper & Row, New York in 1972.

Post ED-18 Developments

To the surprise of most, ED-18 was rejected by a majority of C.As. vote on July 6, 1977. One of the accountants' chief criticism of both Sandilands and Morpeth was that they focused on adjustments to physical assets and ignored the effects of inflation on monetary assets and liabilities. If a company holds net monetary liabilities, the argument runs, a company gains purchasing power during inflation because it will be able to pay off its liabilities in cheaper pounds or rupees. One can make a similar argument for replacement calculations. To the extent that higher replacement-based cost of sales and depreciation can be financed by debt, there is no real replacement problem.

The Consultative Committee of Accounting Bodies (CCAB), on rejection of ED-18, appointed Hyde Committee to come up with quick solution so that investors would have access to some kind of information of

inflation adjusted data. The committee's report known as "An Interim Recommendation" dated 4th November has been adopted by Accounting Standards Committee (ASC).

An Interim Recommendation

This is a short and fairly simple statement. It leaves balance sheet values untouched, and recommends only adjustment to income. The information is to be included as 'a prominent separate statement' and would not affect the ordinarily published financial statement.

It is recommended that three adjustments should be made to the financial results as computed on historical cost convention. The adjustments are: (1) depreciation (2) cost of sales and (3) gearing adjustment. The first two adjustments are aimed to raise the historical cost to current cost, while the third adjustment is to account for purchasing power loss or gain on net monetary assets and liabilities.

Depreciation Adjustment

An adjustment should be made for the difference between depreciation based upon the current cost of fixed assets and the depreciation charged in computing historical cost results. Where the company already has "appropriate" ways of determining cost depreciation, these should be used. Otherwise, the company may correct the historical cost with specific index factor - either to the industry or the type of asset. To find the correction, the assets need to be grouped according to the year of purchase; the more recent the purchase, the smaller the factor.

Cost of Sales

Here also, where the business has already developed appropriate methods of computing the current cost of sales, it may continue to use so. For instance, standard costs, the base stock method or LIFO will also be acceptable.

The companies which do not have appropriate method of computing current cost, the cost of sales adjustment (COSA) should be computed using specific index factor. They will be used to revise the historical costs of both opening and closing stocks to the average current cost of the year to compute the cost of sales.

Gearing Adjustments

Its suggested rule vary according to whether the figure for net monetary assets is positive or negative, that is, whether company has net monetary assets or net monetary liabilities position.

Where monetary assets exceeds monetary liabilities, the profits should be charged with an adjustment for the purchasing power loss in value over the year. The charge is to be found by applying an "appropriate" index factor to the net balance of monetary assets (on average of the opening and closing balances, unless some other averaging method would give a better view).

Where monetary liabilities exceed monetary assets, inflation accounting aims to show the benefit of gearing. The guidelines state that "where the total liabilities of the business, including preference

share capital, exceeds its total monetary assets, a calculation should be made of the proportion of the net monetary liabilities to the net balance of monetary liabilities plus the equity share capital and reserves (including asset revaluation surplus). An amount equal to this proportion of the depreciation and cost of sales adjustments should be credited as a separate adjustment in the statement."

The concept behind these adjustments seems to be fairly simple. In a business either of the two possibilities are there:

(a) company has fixed assets, inventory, and net monetary assets; all these three are financed by equity; or

(b) company has fixed assets and inventory; financed partly by equity and partly by net monetary liabilities.

In case (a) where the assets of the company is fully financed by equity, all inflation related cost (that is, current cost adjustment) is charged to the profit and loss account. Current cost adjustment is provided using respective specific indices for different assets. In case of net monetary assets the specific index would naturally be the index reflecting the purchasing power of monetary unit. Therefore, the use of general price index seems to be appropriate to account for loss in value of net monetary assets holding.

In case (b) where company's fixed assets and inventory are financed partly by equity and partly by net monetary liabilities, then only part of its additional inflation-related costs for sales and depreciation will

be charged to its income statement. For example, if a company's debt-equity ratio is 1 to 1, then only half of its additional inflation-related costs will be charged to profit and loss account.

Managerial Use of CCA:
Hindustan Lever Limited - A Case Study

Surprisingly, we find that in India, one company, Hindustan Lever Limited, has been using such procedure for quite some time. To retain "substance of the business", the company management, in evaluating departmental performance, feels that each product group must make necessary provision for inflation in arriving at the trading profits of the group. The basis of computing total inflationary charge for the company and allocating it to the product groups is given in Exhibit 1.

For fixed assets, Hindustan Lever management provide for an additional depreciation charge which is a differential between current co st depreciation (they call it statistical depreciation) and historic cost depreciation. For inventory, they do not make any cost of sales adjustment as in this case the turnover of inventory, being mostly consumer items, is too fast to recognize any price change during inventory holding period. Nevertheless, in computing cost of sales the company is using some sort of replacement values. An acceptable surrogate of replacement values in computing cost of sales may be LIFO or base stock method.

To compute inflationary charge on monetary items, for no justifiable reasons (at least conceptually), the company is treating inventory as monetary asset to compute inflationary charge. (See exhibit 1). With this treatment of inventory, one may notice from the company's past balance sheet data that it holds a net monetary asset position, which they term as uncovered working capital. On this uncovered working capital they make an inflation charge using general price index. Further, the excess of interest over 6 per cent per annum is also considered of inflationary nature, and therefore, is added to the gross inflation charge. This total inflation charge is then allocated to the product groups in the ratio of average working capital employed by them.

Hindustan Lever's practice of making inflationary carge seems to be roughly in accordance with "an interim recommendation". The Hindustan Lever must be given credit to initiate the practice well before anybody we know of. It is yet to be seen, however, whether the management would take next logical step and publish the results.

Conclusion

It seems the longest running epic of the financial world "inflation accounting" has come to a standstill where U.K. accounting profession is living with "An Interim Recommendation" and U.S. through its SEC is content with disclosure of fragmented and piecemeal information about replacement cost. In my opinion, what could be a better conclusion than

to recapitulate Prof. Baxter's words, "while we still remain puzzled by new concepts, and uncertain about preferred cures, there is much to be said for a period of trial and error, widespread experiment may be far more helpful than an authoritarian edict."

Exhibit 1

SPECIMEN COMPUTATION OF INFLATION CHARGE*

For fixed assets, the practise is to compute replacement values using inflation indices applicable to buildings and plant. These indices are cleared with the Chief Engineer of the company and reference is made to economic journals and Reserve Bank bulletins to decide on the index. In the computation of trading profit statistical depreciation on replacement value is calculated and, therefore, the charge to results includes the provision necessary for inflation in replacement of fixed assets.

For working capital, the procedure is to estimate the gross working capital at the end of the year and this is reduced to the extent of estimated bank borrowing, long term loans, provisions for taxation, etc. The difference gives you the uncovered working capital which is supposed to be financed from company's past and current year's retained profits. The assumed rate of inflation for the following year is applied to the uncovered working capital amount to arrive at the net inflation charge. This amount represents additional finance necessary to be found from within the business for maintaining the substance of the business. However, the amount needs to be grossed up at the applicable effective tax rate of the company to arrive at the gross inflation charge. This is essential as the company needs to earn that much extra pre-tax profit to be able to finance the additional net working capital necessary to cope with inflation. To this gross amount is also added all interest payment on short term and long term loans which is in excess of 6%. The excess interest over 6% is considered of inflationary nature and therefore added to the gross inflation charge. Since interest is a tax deductable expense in the company assessment it is not necessary to gross up the element of excess interest. The computation is done as under:

		Rupees Thousands
Gross working capital (stocks plus debtors less creditors) at end year		
Less:		
Bank Overdrafts	( )	
Long term loans	( )	
Tax Provisions	( )	
Deferred Dividends	( )	( )
Uncovered Working Capital		
Inflation charged @ X%		
Grossed up for tax		
Add interest above 6%		
Total inflation charge		

The total company inflation charge is allocated to the product groups in the ratio of average working capital employed by them.

* This has been reproduced from a case titled 'Management Reporting Systems in Hindustan Lever' written by Prof. S.K. Bhattacharyya with IIMA's permission.