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ACCOUNTING FOR INFLATION— RECENT PROPOSALS AND THEIR EFFECTS

BY P. W. PARKER, T.D., M.A., F.I.A. AND
P. M. D. GIBBS, M.A., F.C.A.

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It is better to be vaguely right than precisely wrong.
Attributed to J. M. Keynes

THE PROBLEM

A TIME-HONOURED convention in accounting has been that accounts should be based on the principle of historic cost, namely that all items should be recorded in terms of the purchasing power of the pound at the date of each transaction. This convention has the virtue that the accounts are based largely on factual monetary transactions and fewer items need be determined subjectively. It is a valid convention so long as the value of money remains constant, but in a period of inflation, accounts drawn up on this basis become distorted, and the higher the rate of inflation the greater the distortion. For example, amounts based on historic cost which are set aside for depreciation of plant and machinery will, in a period of rapid inflation, be totally inadequate either to provide funds for the eventual replacement of those assets or to maintain the real value of the shareholders' original capital investment. Similarly profits are overstated by the inclusion of profits on stock which arise solely from a general increase in price levels. Again, no account is taken of the real cost of holding cash or other monetary assets when money is losing its purchasing power. Conversely, no credit is taken for the gain derived from having borrowed money, when the liability for repayment of the loan is in real terms reduced.

2. In a period of continuing inflation the traditional historic-cost accounts become a meaningless mixture of 'pounds' of different dates and of differing real values when expressed in terms of today's pounds. It can be compared with adding together figures in different dimensions. Not only is the answer without real meaning, it is also dangerously misleading. The degree of distortion which can result from ignoring the impact of inflation on accounts may be illustrated by the findings of a report[1] in September 1973 by the National Economic Development Office into the financial effects of inflation on 126 quoted United Kingdom companies in the mechanical engineering industry between 1965 and 1971. Having adopted the method discussed below (§ 8 *et seq*) for the adjustment of accounts for inflation, the report discloses *inter alia*:

(*a*) In terms of 1971 prices, pre-interest pre-tax profits increased by 13% between 1966 and 1971 compared with an apparent increase of 57% shown in the accounts.

(*b*) The proportion of profits after interest taken by tax was 53% compared with 41% as shown in the accounts.
(*c*) Return on capital employed remained in the range of 9·5% to 10% in real terms between 1966 and 1971, rather than rising from 12·5% in 1966 to 13·8% in 1971.
(*d*) Far from expanding their businesses by ploughing back £124 million into them as the accounts show, in fact [the] sample companies really only retained £10 million of their earnings over the period. Since these are aggregate figures the implication is that nearly half of them must have run down their businesses quite substantially.

The import of these findings not only for investors but also for management, the tax authorities, the trade unions and creditors is clearly considerable. What different decisions might have been taken by any of these groups if they had been based on the inflation-adjusted accounts rather than distorted historic-cost accounts?

THE HISTORY OF INFLATION ACCOUNTING

3. There is nothing new about the problem of accounting for inflation. The discussions and arguments at seminars and in professional and financial journals during the last 18 months or so are matched by those which took place during and after the German hyperinflation period of 1918–1923, when the value of the mark fell to 10^{-12} of its prewar value. In the U.K. the subject has come into prominence intermittently during the last 25 years. In January 1949, for example, the Institute of Chartered Accountants in England and Wales (referred to in this paper as the I.C.A.) issued a Recommendation on Accounting Principles, number N12, for its Members' Handbook, entitled *Rising price levels in relation to accounts.* This recommendation recognized the inflationary problem for accounts, but merely stated that amounts set aside to meet the enhanced cost of asset replacement should be treated as specific capital reserves rather than as provisions. In May 1952 the I.C.A. issued a further Recommendation N15, *Accounting in relation to changes in the purchasing power of money,* which discussed the issue further and went into some of the alternative methods of full-scale inflation accounting. The actual recommendation, however, added little to N12, but it was decided to invite other professional bodies to join in a further study of the subject. In the following 18 months two such meetings took place, but no agreement was reached as to what method of accounting for inflation should be adopted, and the discussions were terminated. Perhaps largely as a result of a reduction in the rate of inflation in 1952 (see Appendix 1) the issue became less topical, and while the inflation rate fluctuated between about 1% and 5% per annum, nobody seemed to be particularly concerned. It was not until the rate increased after the 1967 devaluation that the issue once again became a live one.

4. The I.C.A., together with the Institute of Chartered Accountants of Scotland, the Institute of Chartered Accountants in Ireland, the Association of Certified Accountants and the Institute of Cost and Management Accountants (referred to, as a group, in this paper as the I.C.A.s), established in 1970 an Accounting Standards Steering Committee (A.S.S.C.) to formulate recommendations on accounting principles. The normal pattern is that these are first issued as 'exposure drafts' and are then, after a period for discussion and possible modification, reissued as 'accounting standards' with which all members of the I.C.A.s are expected to comply. In 1958 the Research Foundation of the I.C.A. had issued a booklet entitled *Accounting for Stewardship in a period of inflation*, which put forward a suggested method of inflation accounting. This suggestion was subsequently incorporated in Exposure Draft No. 8 (ED8)[2] published in January 1973 by the A.S.S.C. and entitled *Accounting for Changes in the purchasing power of money*. This was described by the *Financial Times* (25 June 1973) as 'perhaps the most fundamental reform yet proposed in the presentation of company results'. The basic principles of ED8 are discussed in § 8 *et seq.*

5. Comments on ED8 were invited, to be received by 31 July 1973. Among these was a memorandum[3] by the Society of Investment Analysts, to which reference is made in § 16. The A.S.S.C. had, moreover, kept in touch with a committee set up by the Confederation of British Industry (C.B.I.) in early 1972 to examine the problems posed by the effect on financial statements of changes in the value of money. An interim report was published by the C.B.I. committee in January 1973 and a final report[4] in September 1973. This report strongly supported the proposals of the A.S.S.C. In the normal course, an accounting standard would have been published during the winter of 1973–74. On 25 July 1973, however, the Government intervened by stating that it intended to set up an enquiry into inflation accounting. Under its terms of reference the committee of enquiry has been asked 'to consider whether, and if so how, company accounts should allow for changes (including relative changes) in costs and prices having regard to established accounting conventions based on historic costs, the proposal for current general purchasing power accounting put forward by the A.S.S.C., and other possible accounting methods of allowing for price changes, and to make recommendations. In considering the question the following matters, *inter alia*, should be taken into account: (i) the effects upon investment and other management decisions, and upon the efficiency of companies generally, (ii) the effect on the efficient allocation of resources through the capital market, (iii) the need to restrain inflation in the U.K., (iv) the requirements of investors, creditors, employees, Government and the public for information, (v) any implications for the taxation of the profits and capital gains of companies, the assumption being that the share of the total direct tax burden borne by the company sector remains unchanged, (vi) the repercussions on the accounts of other corporate bodies, (vii) procedures in other countries particularly E.E.C.'

6. The motives for such an enquiry are not entirely clear. One view is that any moves threatening to institutionalize inflation, such as inflation accounting,

would run contrary to the Government's anti-inflation programme, and that by the time of the committee's report the rate of inflation might have subsided. Another view is that inflation accounting highlights the fact that the company tax bill is a good deal higher than it seems and that this has far reaching implications not only for the Treasury, but also the country's economic performance. It seems unlikely that this realization would ever lead to a reduction in the total corporate tax burden, but it might, and in our view should, form the basis of a redistribution of taxation between companies. This view is recognized in § (v) of the terms of reference of the committee. The enquiry of the Committee on Company Accounts and Inflation which held its first meeting on 21 January 1974 under the chairmanship of Mr Francis Sandilands, C.B.E., is expected to last for some eighteen months.

7. Despite this enquiry, however, the A.S.S.C. decided not to abandon their drive for inflation accounting to be introduced as soon as possible. By way of compromise, a 'provisional accounting standard' is to be issued in the first half of 1974*, and this may be eventually adjusted as the result of the findings of the enquiry. While this provisional standard will not have quite the authority of a full standard, the great majority of listed companies are likely to conform with it. No firm date has yet been given for its application, but if it is to apply to accounting periods beginning after 1 January 1974, as originally suggested, there is little doubt that more and more companies will anticipate its application, by showing the relevant information in their accounts as they are published during 1974. Already, simply on the recommendations of ED8, something like a dozen listed companies including Guest, Keen & Nettlefolds and Distillers have shown the supplementary information, as has also the Bank of England.

THE BASIC PRINCIPLES OF ED8

8. The main features of ED8 are clearly set out in paragraph 11 of that document which states that

(*a*) companies will continue to keep their records and present their *basic* annual accounts in historical pounds, *i.e.* in terms of the value of the pound at the time of each transaction or revaluation
(*b*) in addition, all quoted companies should present to their shareholders a *supplementary* statement in terms of the value of the pound at the end of the period to which the accounts relate
(*c*) the conversion of the figures in the *basic* accounts into the figures in the *supplementary* statement should be by means of a general index of the purchasing power of the pound.

Choice of index

9. Possible indexes of current purchasing power (C.P.P.) would include the gross domestic product (G.D.P.) deflator, the consumer price index, and the

* This was issued in May 1974 as SSAP7.

retail price index. The G.D.P. deflator is widely based and more volatile than the others; it tends to show the highest rate of inflation. The consumer price index is more stable and tends to show the lowest rate of inflation. Both are published quarterly and subject to retrospective revision. In ED8 the index recommended was the consumer price index, but the provisional accounting standard will recommend the retail price index, since this is available monthly, is very much more up to date, and is not subject to revision. Appendix 1 shows that differences between the indexes are not great, and it is emphasized by the A.S.S.C. that it is pointless to strive for over-elaborate precision in C.P.P. statements.

The mechanics of conversion

10. Paragraphs 16 to 19 of ED8 describe some of the principal differences that exist when it comes to the actual mechanics of the conversion process, particularly between monetary items and non-monetary items. Monetary items are those whose amounts are fixed, by contract or otherwise, in terms of numbers of pounds, regardless of changes in general price levels; they include cash, debtors, creditors, and loan capital. Non-monetary items are all other items (except the equity interest); they include stock, plant and machinery, and buildings, holders of which neither gain nor lose purchasing power directly through inflation, since changes in the price of these assets will tend to compensate for changes in the purchasing power of the pound. The owners of a company's equity capital have the residual claim on its net monetary and non-monetary assets; the equity interest is therefore neither a monetary nor a non-monetary item.

11. When converting the basic (i.e. historic-cost) balance sheet to a supplementary C.P.P. statement, the monetary items at the end of the year are by definition already expressed in terms of purchasing power at the end of the year, and require no conversion. The non-monetary items are increased by the percentage change in the index between the date of acquisition and the balance sheet date. In the profit and loss account, depreciation is increased in line with the increase in value of fixed assets, and all other revenue and expenditure items are adjusted by the change in the retail price index between the date of the transaction and the balance sheet date. Where a company has oversea operations, separate C.P.P. indexes for each country may be used provided these are available, and the resulting figure converted to sterling at the rate of exchange at the year-end. Alternatively, and certainly in the particular case where reliable oversea indexes are not available, items may be converted to sterling at the historic rate of exchange and the resulting figure adjusted by means of the U.K. price index. ED8 provides that the final figures so determined are then to be reviewed (and, if necessary, provisions made) so that, for example, the value placed upon stocks does not exceed the realizable value, and the value placed upon fixed assets does not exceed their estimated value to the business. The mechanics of the conversion process are probably best illustrated by way of a simple example (Table 1). The mathematical notation is our own, and is intended to assist the actuarial reader, without confusing the accountant.

Table 1. *Example of a C.P.P. adjustment*

Data

1. The accounts are for the year from $t = 0$ to $t = 1$.
2. £ is used to denote a historic-cost pound, and $£_t$ to denote a pound of current purchasing power at time t.
3. All revenue transactions are assumed to take place on average in mid-year, except that stocks are acquired three months before the end of each year.
4. Fixed assets (in this example, plant not property), were purchased three years before the end of the accounting year and are depreciated at 10% per annum on historic cost.
5. The retail price index (ρ) at relevant times was:

$$\rho_{-2} = 160,\ \rho_{-\frac{1}{4}} = 196,\ \rho_0 = 200,\ \rho_{\frac{1}{4}} = 210,\ \rho_{\frac{3}{4}} = 216,\ \rho_1 = 220.$$

Profit and Loss Account

	Historic £	Factor	Adjusted $£_1$		Historic £	Factor	Adjusted $£_1$
Opening stock	1,000	$\rho_1/\rho_{-\frac{1}{4}}$	1,122	Sales	3,000	$\rho_1/\rho_{\frac{3}{4}}$	3,143
Costs	2,800	$\rho_1/\rho_{\frac{1}{4}}$	2,933	Closing stock	1,500	$\rho_1/\rho_{\frac{3}{4}}$	1,528
Depreciation	200	ρ_1/ρ_{-2}	275				
Loss on short-term monetary assets			50	Gain on long-term monetary liabilities			100
Profit	500		391				
	4,500		4,771		4,500		4,771

Balance sheet at beginning of year ($t = 0$)

	£	Factor	$£_1$		£	Factor	$£_1$
Equity interest	2,000		2,662	Fixed assets	2,000		2,750
Loan capital	1,000	ρ_1/ρ_0	1,100	*less* depreciation	400		550
Current liabilities	500	ρ_1/ρ_0	550				
					1,600	ρ_1/ρ_{-2}	2,200
				Current assets			
				Stock	1,000	$\rho_1/\rho_{-\frac{1}{4}}$	1,122
				Debtors	500	ρ_1/ρ_0	550
				Cash	400	ρ_1/ρ_0	440
	3,500		4,312		3,500		4,312

Balance sheet at end of year ($t = 1$)

	£	$£_1$		£	Factor	$£_1$
Equity interest ($t = 0$)	2,000	2,662	Fixed assets	2,000		2,750
Profit for year	500	391	*less* depreciation	600		825
Equity interest ($t = 1$)	2,500	3,053		1,400	ρ_1/ρ_{-2}	1,925
Loan capital	1,000	1,000	Current assets			
Current liabilities	700	700	Stock	1,500	$\rho_1/\rho_{\frac{3}{4}}$	1,528
			Debtors	600		600
			Cash	700		700
	4,200	4,753		4,200		4,753

Notes

1. The gain on long-term monetary liabilities is the difference in value of the loan capital between the beginning and end of the year, namely £1,000 ($t = 0$) less £1,000 ($t = 1$), or $£_1100$.
2. The net current assets (less stock) at $t = 0$ were $£_0400$ and at $t = 1$ were $£_1600$. The value at $t = 1$ of $£_0400$ is $£_1440$ and the value at $t = 1$ of the increase in net current assets (less stock) is $£200 \times (\rho_1/\rho_{\frac{1}{4}}) = £_1210$, giving a loss over the year of $(£_1650 - £_1600)$ or $£_150$.
3. Taxation is ignored in this example.

Monetary assets and liabilities

12. Few would probably argue in principle with the elimination of inflationary stock profits and the recognition of increased depreciation. The example, however, illustrates a controversial point, namely the treatment of monetary gains and losses. There is certainly a real gain in having borrowed money during a period of inflation and a real loss in holding cash, but the question is whether these are revenue items or capital items. In treating these items as revenue accountants argue that current high rates of interest are at least in part compensating for the high rate of inflation. It is therefore logical that the high interest cost charged in the profit and loss account should be offset by the fall in the real value of the debt, so that only the real net cost is charged against profits. Conversely, high rates of interest received are offset by the fall in the real value of the monetary assets held. The opposing view is, first, that profits are being affected by differences in a company's capital structure, which is not relevant to the fundamental trading position; and, second, that gains on monetary liabilities are not realized and it is therefore misleading to include them in profits since they cannot be distributed without either running down the company's real capital resources or borrowing additional funds.

13. The first of these counter-arguments seems weak. We cannot see an essential difference between a decision of management to select a particular type of plant (or to market a better product) and a decision as to the most profitable capital structure for a period of high inflation. The results of all these decisions should be reflected in the profits. The second argument has greater force. The gain from having monetary liabilities can be substantial, and the greater a company's debt, the greater the gain, even though that company may be dangerously illiquid. Conversely, the more cash a company has the more heavily penalized it is by C.P.P. accounting, despite the tactical value of holding cash at a time of rapid inflation. The gain on monetary liabilities arises from the inflationary rise in non-monetary assets, as can be seen from a simple balance sheet example where the conversion factor is 1·1:

	£	£$_1$		£	£$_1$
Equity interest	100	110	Fixed assets	200	220
Profit on long-term liability		10			
Loan	100	100			
	200	220		200	220

The C.P.P. gain on the loan is only a profit to the extent that the value of the fixed assets is 220. It cannot be denied that it has something of the nature of capital, but in an inflationary age, capital profits are likely to recur regularly, and the distinction between revenue and capital ceases to have much relevance. If, however, we are to retain this distinction, then perhaps the gain on *long-term* liabilities should be treated as a capital item. A particular difficulty arises with convertible loan stocks. We feel that it is misleading to treat these as monetary

liabilities (as suggested by the working guide to ED8 procedures), with a consequent annual gain to profits, until there is no longer any possibility of their conversion into equity.

Theory and practical advantages of the C.P.P. method

14. The concept behind the adoption of a general price index adjustment (as recommended by ED8) is that of the shareholder who is primarily concerned with the maintenance of his own general purchasing power. Thus if he invests £1,000 in a company for some time, and by the end of that time there has been an increase of 25% in the retail price index, then at least £1,250 should be returned to him to maintain the general purchasing power of his original capital. This concept is quite independent of what it might cost to replace the company's assets in order to continue in the same particular business. In the A.S.S.C.'s view, asset replacement is a new investment decision and this should not be confused with the maintenance in real terms of the investors' capital, which should be the minimum objective of the directors of a company. In this way the accountants' long-established convention, that accounts are basically a record of past stewardship and should therefore be based primarily on historic cost, is maintained, with merely an adjustment to convert all items into the same current pound terms at the balance sheet date. This method clearly has a valid conceptual logic and from the A.S.S.C.'s point of view has the following practical advantages: first, that the calculations required are relatively straightforward, and to this extent it will be easier to persuade companies to adopt this method rather than the more complicated alternatives; and, second, that all companies will be working on the same basic data so that the resultant figures will be wholly comparable between companies. Any departure from conventional accounting is likely to involve additional work for management accountants and auditors, but the adoption of a single index minimizes the burden of extra work and expense.

The disadvantages of the C.P.P. method

15. In our view the main disadvantages of the ED8 proposals are:

(*a*) The concept is somewhat theoretical and may give a spurious impression of accuracy.
(*b*) The general price index suggested does not necessarily have any relevance to the price movement of individual companies' assets.
(*d*) The inclusion of all monetary gains and losses in earnings can give a dangerously misleading impression of the financial health of a company.

AN ALTERNATIVE METHOD—REPLACEMENT COST ACCOUNTING

16. The C.P.P. method of accounting for inflation has had a strong measure of support, particularly from the C.B.I. whose report[4] had only minor reservations

about accepting the proposals. The A.S.S.C. would, however, probably admit that the C.P.P. method may not be the complete answer, though it is at least a relatively simple and acceptable first step. The most frequently canvassed alternative method is replacement cost (R.C.) accounting, which is by no means without support from industry. The memorandum[3] of the Society of Investment Analysts was also in favour of this alternative on the grounds that the information provided would be more practical and useful for existing and potential investors.

17. The principal practical difference between R.C. accounting and C.P.P. accounting is in the actual indexes used. We discuss the conceptual difference later (§ 19). With R.C. accounting the indexes used are those directly relevant to the company's own particular assets, rather than a general price index which does not necessarily have any such relevance. In this way a number of indexes are likely to be used in any one company's accounts; some may be official Government indexes, some may be semi-official indexes constructed by trade associations, and others may possibly be formulated by the company itself. The principal objections to R.C. accounting are: first, that it allows too great an element of subjectivity to be introduced into accounts and is therefore open to abuse; and, second, that replacement of assets is a new investment decision which should not be anticipated: assets may not necessarily be replaced, or if they are they may have been technically superseded, in which case there is no easily-determined basis for setting aside replacement provisions.

18. The first of these objections can be countered by stating that the traditional historic-cost accounts, and therefore the C.P.P. accounts as well, are also largely subjective in two areas crucial to the determination of profit—namely depreciation and valuation of stocks. But in any event should we not welcome a subjective element in accounts? Will not the shareholder be more interested in the directors' best estimate of real asset values and depreciation rather than in historic-cost figures adjusted by an irrelevant general price index? As to abuse, directors who are determined to undertake some 'creative accounting' will find a way of doing so, whatever accounting system is adopted. In relation to the second objection, concerning asset replacement, we feel that it is a justified assumption on economic and social grounds that most businesses are continuing businesses and that sooner or later assets will be replaced in order to maintain production; only the small number of entrepreneurial enterprises, which move from one field to another as opportunities arise, fall outside this category. Even if there have been substantial technical changes it is still perfectly feasible to set aside replacement provisions to meet the cost of sufficient new plant to maintain the same volume of output. If this means less depreciation than before, then this saving may properly be regarded as available for distribution to shareholders.

19. More important than these practical differences is the difference in concept between R.C. accounting and C.P.P. accounting. The essence of this difference is that C.P.P. accounting is designed to reveal 'true' earnings in relation to the

shareholders' own general purchasing power, while R.C. accounting reveals 'true' earnings after preserving the original capital in terms of the company's own productive capability. Being much closer to the internal management accounts used for decisions on pricing and capital expenditure it may be more useful to existing and potential shareholders, who are seeking more a guide to the future than a record of past stewardship, and it should not be overlooked that the purchasing power of a shareholder will only be maintained in real terms if the price of his shares rises at least as fast as the rate of inflation.

20. Very different figures of profit may be given by the two methods according to the relative change in the general level of prices and the level of prices relevant to the company. This applies particularly to stock profits. Consider the example of a company which bought £1,000 of stock at the beginning of a year and sold the same stock at the end of the year at £1,500. During the year the retail price index rose by 10%, but the cost of replacing the same stock rose by 40%. The profits would be accounted for as follows:

	Historic Cost £	C.P.P. Accounting £$_1$	R.C. Accounting £$_1$
Sale proceeds	1,500	1,500	1,500
Cost of stock sold	1,000	1,100	1,400
Profit	500	400	100

If the C.P.P. profit were to be distributed as dividend, the capital would admittedly have been maintained in general purchasing power terms, but the company would not then have sufficient capital to replace the same volume of stock and to continue as before. The R.C. profit could all be distributed, and the company would still retain sufficient funds to replace its stock and continue trading. On the other hand, there is a clear gain to the company whose stock has appreciated faster than the general index and R.C. accounting would exclude this gain from the profit and loss account, contrary to the current accountancy principle that items should not, in general, go directly to the balance sheet.

21. It is essential to be clear as the meaning of R.C. accounting when it is put forward as an alternative to C.P.P. accounting. Of the companies which do apply R.C. methods (and there are as yet only a few in the U.K.), the majority apply them only to fixed assets. This involves the revaluation of fixed assets to their replacement value and the depreciation of the higher figure. Other companies such as Philips apply R.C. methods to stocks as well, but as far as we are aware, none applies the methods to every item in the accounts as is done with C.P.P. accounting. To be a viable alternative to C.P.P. accounting, R.C. accounting must be applied equally comprehensively, by the use of a general price index for monetary items. To summarize, we prefer the C.P.P. method for valuing stock, as this credits a company with the gain through holding the right materials at the right time, but think that for depreciation of plant there are advantages in using the specific indexes of the R.C. method.

CURRENT VALUE ACCOUNTING

22. A development of the R.C. approach leads to current value (C.V.) accounting, a concept which is familiar to those accustomed to actuarial operations, where the total wealth of an enterprise is considered at the beginning and at the end of the period under review, and the difference is the profit for the period. Following Ross,[5] such an increase in total wealth might be analysed thus:

(*a*) contributions or withdrawals of capital
(*b*) withdrawals of accumulated income (dividends)
(*c*) holding gains or losses, such as result from changes in the general price level, foreign exchange adjustments, and so on
(*d*) ordinary income and expenditure
(*e*) extraordinary items of profit and loss
(*f*) adjustments of income for previous periods.

Assets (whether current or long-term) are stated in terms which measure their current value. Long-term liabilities are discounted to present value; quoted loan stocks would hence be included at market value. Profits on appreciation of assets are taken into account period by period (and for some of these periods a loss might have occurred) and not only in the period of their realization. To illustrate the principle, consider a retailer which owns its own shops and makes a post-tax profit of £1m. a year on trading and whose site values also appreciate by £1m. a year. On traditional principles, only the former profit appears in the profit and loss account, and investors capitalize this figure to estimate a value for the company's shares. But why should the appreciation of site values be totally ignored? It is as likely to recur, under inflationary conditions, as the trading profit. Or consider the further example of a building company with a land bank which has appreciated in value over ten years from a cost of £1m. to £10m. If this company develops the land and sells the houses in the tenth year, the credit for £9m. appreciation is taken in the one year, but obviously the profit has in fact accrued over the whole period, and this would be recognized by the C.V. method.

23. It is necessary to determine acceptable current values. Many different methods may be used simultaneously: cost may be adequate for a recently-acquired asset, replacement price or a written-down value for an older asset. Depreciation has little, if any, further relevance except as a method of allocating the total increase in wealth between classes (*c*) and (*d*) above. Stocks are revalued either by reference to current selling price or by reference to current cost price, but not at the lower of cost and net realizable value. Intangibles are best excluded. The following example of the C.V. method is adapted from that shown in Table 1 (§ 11).

It will be seen that the equity shareholders' interest has increased from £3,250 to £4,125, i.e. by £875, compared with the profit of £500 shown by conventional accounting methods. If it is desired to allocate this increase in shareholders'

Data

1. All figures are shown in historic cost pounds (£).
2. Values at $t = 0$ are: fixed assets £2,500, stock £1,050, loans £700.
3. Values at $t = 1$ are: fixed assets £2,700, stock £1,575, loans £750.

Balance sheet at beginning of year ($t = 0$)

	Historic £	C.V. £		Historic £	C.V. £
Equity interest	2,000	3,250	Fixed assets (net)	1,600	2,500
Loan capital	1,000	700	Current assets		
Current liabilities	500	500	Stock	1,000	1,000
			Debtors	500	500
			Cash	400	400
	3,500	**4,450**		**3,500**	**4,450**

Balance sheet at end of year ($t = 1$)

	£	£		£	£
Equity interest	2,500	4,125	Fixed assets (net)	1,400	2,700
Loan capital	1,000	750	Current assets		
Current liabilities	700	700	Stock	1,500	1,575
			Debtors	600	600
			Cash	700	700
	4,200	**5,575**		**4,200**	**5,575**

total wealth between classes (*c*) and (*d*) above it is necessary to calculate a notional depreciation charge. If this were 10% of the current value of the fixed assets at the beginning of each year the charge for the period we are considering would be £250. The notional holding gain on the fixed assets would then be £450 (i.e. the increase in value of £200 plus notional depreciation of £250), from which one must deduct the £50 loss on the loan capital leaving an operating gain of £475.

24. Although the difference between the C.V. gain of £875 and the conventional profit of £500 is largely due to the inclusion of the gain on holding fixed assets, which owes much to inflation, the figures are expressed in historic pounds. C.V. accounting should therefore not be regarded as a method of accounting for inflation, but rather as an alternative to historic cost accounting. To calculate the year's gain in accordance with C.P.P. principles a further adjustment must be made to the opening balance sheet as follows:

Balance sheet at beginning of year ($t = 0$)

	C.V. Historic £	C.V. Adjusted £$_1$		C.V. Historic £	C.V. Adjusted £$_1$
Equity interest	3,250	3,575	Fixed assets	2,500	2,750
Loan capital	700	770	Current assets		
Current liabilities	500	550	Stock	1,050	1,155
			Debtors	500	550
			Cash	400	440
	4,450	**4,895**		**4,450**	**4,895**

There is no need to adjust the closing balance sheet since this is, by definition, already expressed in £$_1$. The C.P.P. increase in total wealth for the year is therefore £550 (i.e. £4,125 less £3,575). C.P.P. depreciation will be £275, so one can analyse the total gain as follows:

	£$_1$
Holding gains	
Fixed assets (£275−£50)	225
Loan capital	20
Short-term monetary assets	−40
	205
Operating gains	345
	550

The C.P.P. operating gain of £345 can be compared with the figure of £475 shown by the historic-cost C.V. method. The difference of £130 reflects £105 reduction in stock profits and £25 extra depreciation.

25. If the profits as determined by C.V. accounting were to form the basis for taxation, then tax would effectively be charged on unrealized capital profits. This principle has already received some measure of recognition recently as evidenced by its application to certain gains of Lloyd's underwriters (Finance Act 1973, s. 39), and the proposed property development tax. The objection to a tax on unrealized gains is that it can cause liquidity problems. But provided the tax were levied on the C.P.P. gain there would at least be no question of taxing the element of the rise in the value of the assets which merely resulted from inflation.

26. So far C.V. accounting has attracted little more than academic interest, but the method has considerable appeal and we think that it merits further consideration. The principal problems arise from the valuation of the fixed assets. Not only are there theoretical difficulties to be resolved—what is the value, for instance, of a factory which has been purpose-built on a greenfield site but which is suffering from insufficient demand for its products?—but there would be practical difficulties and substantial costs involved in carrying out an annual revaluation of all fixed assets, and ensuring that this was done on a consistent basis from year to year. We do not feel, however, that these problems are insurmountable. Thinking in the accountancy profession is already moving in the direction of more frequent valuations, at any rate for property. The I.C.A. and the Royal Institution of Chartered Surveyors (R.I.C.S.) set up a joint working party in 1973 to examine the problems of valuing property. The recommendations of the committee have recently been issued in the form of a statement (S 20) by the I.C.A. and guidance notes from the R.I.C.S. These suggest that property revaluations should be carried out annually by property companies and at intervals of three to five years by other types of company. Methods of valuation recommended by the R.I.C.S. include current open market value (either for existing use or

alternative use) and depreciated replacement cost, but not the 'going concern' basis since this would include an element of goodwill reflecting the current profitability, or lack of profitability, of the business. No recommendations have been included for the revaluation of plant and it is here that many of the most difficult problems would arise. But it should be remembered that companies, such as Philips, which depreciate their assets on the R.C. basis have to calculate the replacement cost of their plant each year. (Philips do this by means of indexes of plant costs.) Having arrived at the replacement cost, the current value can then be calculated by reference to the estimated working life of each type of plant.

THE EFFECT OF INFLATION ACCOUNTING ON COMPANIES

27. The effect of applying the proposals of ED8 is generally to reduce company earnings as currently published (although some companies' earnings are increased) and to increase asset values. At the time of writing only a few companies have produced the additional C.P.P. figures in their accounts, so that there is little firm material on which to base an analysis of the differing effects of C.P.P. accounting between one company and another, and one industry sector and another. However, some work has been done in applying the ED8 proposals (as far as can be done by an outsider) to the accounts of 120 major U.K. quoted companies, with a market capitalization of about 60% of the total market value of U.K. equities quoted in London. This work formed the basis of an article[6] in *Accountancy* by Cutler and Westwick. Appendix 2 gives similar but updated figures and explains the method of calculation which has been modified since the original article. It should be emphasized that these figures are necessarily approximate and should therefore be treated with some caution. However, a comparison with the actual figures produced by the few companies which have published C.P.P. statements has so far shown only a few major discrepancies, and these have been mainly in the adjustments of depreciation. In our estimates we have used published figures wherever available.

28. The figures of Appendix 2 show some interesting results. First, 88 of the 120 companies have lower C.P.P. earnings than published and 32 have higher earnings. Second, in calculating these earnings it might have been supposed that depreciation would have been clearly the most important factor, but this was not entirely so. The gain to earnings from the fall in the real value of net long-term monetary liabilities during the year and the reduction of earnings as a result of the elimination of stock profits were by no means minor factors. This is evident from Table 2 which shows the relative importance of the factors which made the C.P.P. earnings differ from the published earnings. Table 2 emphasizes the importance of a method of accounting for inflation which takes into account all factors and not only, say, depreciation.

29. The figures of Appendix 2 reveal a clear division in the effects of C.P.P. accounting between companies in manufacturing industries, where earnings are

Table 2. *Ranking of factors in order of importance*

Ranking	Depreciation	Stock	Other P & L	Monetary Liabilities Short-Term	Long-Term
1st	44	35	—	7	34
2nd	34	31	5	11	39
3rd	27	30	22	16	25
4th	14	7	54	30	15
5th	1	17	39	56	7

generally sharply reduced, and companies in service industries, where earnings are either little affected or even increased. This is illustrated by Table 3 which shows the effects on different sectors of industry.

Table 3. *Average change in estimated earnings on ED8 principles*

	%		%
Property	+310	Tobacco	−15
Entertainment, Catering	+40	Food Manufacturing	−20
Breweries	+35	Office Equipment	−25
Miscellaneous (other groups)	+5	Oil	−25
Stores	+5	Household Goods	−35
Food Retailing	+5	Packaging & Paper	−35
Newspapers, Publishing	−10	Shipping	−40
Contracting, Construction	−10	Miscellaneous (capital)	−40
Building Materials	−10	Engineering (Heavy)	−40
Hire Purchase	−15	Textiles	−50
Banks	−15	Engineering (General)	−50
Chemicals	−15	Electricals	−50
Wines & Spirits	−15	Motors & Distributors	−60
Light Electronics &c	−15		

The median change is −15%, equivalent to a pre-tax change of −7½%.

Among the sectors most affected are Motors & Distributors, Electricals, Textiles, Engineering, and Packaging & Paper, where companies have high depreciation and stock levels relative to profits. Shipping companies are adversely affected both by their high depreciation charges relative to profits and by their generally strong cash positions. The sector to show most gain from C.P.P. accounting is Property, where companies have a large long-term debt. The exclusion of convertible debt (as suggested in § 13) would substantially reduce the change to around +170%. Breweries and hotel groups benefit partly from gearing and partly from depreciation being relatively low in relation to profits. Similarly, Stores are not unduly affected: although they carry large stocks, they derive a compensating benefit from generally having short-term and long-term net monetary liabilities.

30. Figures for individual companies bring into prominence the question of real dividend cover. This has already been complicated by the introduction of an imputation tax, which for a wholly U.K. company has increased dividend

cover by 19%, and by a smaller proportion for companies with oversea interests. As a result of this, coupled with dividend restraint at a time when earnings were increasing rapidly, average cover is at the exceptionally high level of nearly three times. Nevertheless, C.P.P. accounting will mean that not a few companies will find their dividends uncovered by C.P.P. earnings. It is not known to what extent directors will be influenced in their dividend policy by the figure for C.P.P. earnings, but it would be hard to believe that they could totally ignore it.

Asset values

31. Estimates of asset values under ED8 proposals are not possible in the same way as for earnings because of the proviso that assets should not be entered in the balance sheet at more than their realizable value. However, it seems virtually certain that asset values, particularly if they include property, will be higher on a C.P.P. basis than on a conventional accounting basis.

Insurance companies

32. In a memorandum[7] dated May 1973 following an earlier comment,[8] the British Insurance Association (B.I.A.) urged 'that insurance companies should be exempt from the proposed Standard Accounting Practice on Accounting for Changes in the Purchasing Power of Money, on the understanding that consideration is given to the practicability of producing a separate standard specifically for insurance companies'. At the time of writing the B.I.A. has not produced its suggested alternative. We do not wish to divert discussion from the wider aspects of inflation accounting, but feel that we should outline our suggested approach to this sector.

Life companies

33. Certainly the application of ED8 to insurance companies presents problems. For life assurance companies we feel that the addition of a C.P.P. profits figure would add little, if anything, to the value of the figures currently produced, largely because of the comparatively arbitrary determination of the profits for a particular year. Smith[9] has pointed out the dismay of accountants, who 'hanker after a figure for "true profit of the year"' when they are told that the actuary can, within limits, determine the rate at which surplus emerges, and that surplus (being a function of the valuation basis) is not the same as profit. Conventional accounts show the net premium method of valuation; this takes assets at a value which is basically historic-cost together with such proportion of any unrealized capital surplus as the directors may decide, and it values liabilities with implicit but not specific provision for bonuses and expenses. Even ignoring practical difficulties it is difficult to see much purpose in presenting such figures on a C.P.P. basis. In the discussion on Smith's paper, however, it seemed to be widely agreed that for the purpose of presenting results to investors and policyholders a bonus reserve valuation would be more useful. To our minds the most

critical point in such a valuation in inflationary conditions is the liability for future operating costs. As far back as 1954 Donald & Jamieson[10] drew attention to the fact that life offices were only to a limited extent immune from inflation, and that a pronounced and sudden fall in the value of a currency might make it impossible to carry on life assurance business owing to the resultant heavy and uncontrollable increase in expenses. Even in a more gradual inflation the effect on surplus was more serious than might appear. We accordingly feel that the provision for future expenses should be specified.

34. The bonus reserve valuation should, naturally, state assets at a realistic value in relation to the liabilities, and in our view the published balance sheet should show clearly the total market value of the funds from year to year and should indicate what part of the growth of these funds is derived from (*a*) the net inflow of funds during the year, (*b*) the growth of the fund necessary merely to retain its value in real terms, and (*c*) the 'real' growth of the fund. It should also be made clear to policyholders on their bonus notices to what extent the bonuses reflect a real gain after allowing for the effect of inflation on the sum assured plus bonus and the premiums paid. This information might be expressed as the real rate of return on the premiums paid. It would be fully appropriate only when regarding the policyholder as an investor as it would ignore the temporary life cover provided and the office expenses. Provided that comparisons were made only with the real returns from other forms of investment, shareholders and policyholders would then be better equipped to judge the success or otherwise of the company's investment policy.

Non-life companies

35. The application of ED8 to general insurance is complicated because it is essentially designed to measure the effects of past inflation, while insurance company profits depend on estimating future inflation. The provisions for 'unearned premiums' and 'outstanding claims' which form a large element of most insurance companies' balance sheets are being calculated with an increasing emphasis on future inflation. 'Unearned premiums' for example are generally no longer on a strict time-apportionment basis; the premium charged is calculated on the assumption that the rate of premium required in the latter part of the period of risk is greater than that in the earlier, thus allowing for the effect of inflation on the cost of any claim. 'Provision for outstanding claims' takes into account the impact of inflation on claims reported but not settled, and also usually includes provision for the estimated cost of claims incurred at the balance sheet date, but not reported to the company. In this way the year's profit and loss account already makes allowance for the estimated effect of future inflation on current profits. By the very nature of their business insurance companies are therefore in some respects a step ahead of C.P.P. accounting. Although the accounts could be adjusted for the profit or loss on monetary items, we therefore tend to agree with the B.I.A. that ED8 cannot comprehensively be applied to insurance company accounts and it will be interesting to see what alternative

the B.I.A. will propose. In the meantime non-life companies also could perhaps give some indication of the effect of inflation on their business. For example, it would be useful to know what rate of inflation a company was assuming when making its provisions for unearned premiums and what term to ultimate settlement for outstanding claims. Again, a company might disclose to what extent an inflation rate higher or lower than previously estimated had reduced or increased the year's profits. The growth in the value of investments could also be analysed in the same way as we suggested above for life companies.

THE IMPACT ON INVESTORS

36. Despite the arguments over the proposed method and the uncertainty as to the outcome of the Government enquiry, an increasing number of companies will now be publishing C.P.P. statements in their accounts. What will be the effect of this on the stock market? So far, the publication of C.P.P. statements by a few companies has not had any measureable immediate effect on share prices.

Table 4. *Sector price performance* 1 *January* 1968–31 *December* 1973

	(1) %	(2) %		(1) %	(2) %
Property	+310	+133	Tobacco	−15	+9
Entertainment, Catering	+40	−1	Food Manufacturing	−20	−7
Breweries	+35	+34	Office Equipment (3)	−25	−11
Miscellaneous (other groups)	+5	+4	Oil	−25	+1
Stores	+5	+13	Household Goods	−35	+13
Food Retailing	+5	+5	Packaging & Paper	−35	−37
Newspapers, Publishing	−10	+26	Shipping	−40	+73
Contracting, Construction	−10	+8	Miscellaneous (capital)	−40	−14
Building Materials	−10	−27	Engineering (Heavy) (4)	−40	+5
Hire Purchase	−15	+92	Textiles	−50	−31
Banks	−15	+35	Engineering (General) (4)	−50	−17
Chemicals	−15	−15	Electricals	−50	−12
Wines & Spirits (3)	−15	+23	Motors & Distributors	−60	−57
Light Electronics &c	−15	−5			

(1) Average change in estimated earnings on ED8 principles (as in Table 3)
(2) Sector price performance relative to *FT*-Actuaries all-share index
(3) Change since 16 January 1970 (4) Change since 31 December 1971

However, as more companies produce these statements they will receive increasing critical examination by institutional and other investors, particularly if the inflation rate remains high. Where C.P.P. figures are not given they will certainly be estimated by potential investors. The effect on share prices will, we think, be significant, but it will be a long-term effect. In the short term a number of factors militate against a dramatic general reaction. First, the C.P.P. statements will not replace the traditional accounts but will merely be supplementary. For this reason investors and potential investors will continue to pay some attention to the historic-cost accounts. Second, it will take some eighteen months for the initial C.P.P. statement of all listed companies to appear. Third, the some-

what theoretical nature of the figures, when used to calculate investment ratios, may lead to some lack of acceptance by investment analysts. Fourth, the stock market is not, and has not been, so naïve as to ignore the effects of inflation on company profits, and an interesting feature of the last six years is the way in which it already appears to have been making allowances for these effects in terms of the ratings attributed to different industry sectors. This can be seen from Table 4 which shows the relative price performance of different sectors of the market over the last six years and provides some evidence that the impact of inflation has not gone unnoticed.

37. It will be seen that of the five sectors (Property; Entertainment, Catering; Breweries; Miscellaneous (other groups); Stores) which gain most from inflation accounting only Entertainment, Catering has failed to outperform the index. All four principal losers from inflation accounting (Motors & Distributors; Electricals; Engineering (General); Textiles) have substantially underperformed the index. Taking the list as a whole we find a correlation of 0·67 between the change in earnings on ED8 principles and the relative price performance over the six years. This must be at least partly due to investors' increasing awareness of the differential effects of inflation on different sectors. The seeking of a hedge against inflation must have played a major part in the performance of Property shares, and the property element must have contributed to the success of Breweries. An indifferent record of profits is largely responsible for the poor performance of the Motor, Textile and Engineering (General) groups, but this is not unattributable to inflation since some companies have been sucked into the vicious cycle of having insufficient profit to finance the rising cost of the new plant necessary to produce higher profits. It should be remembered that in order to obtain a meaningful ten-year record of a company's earnings and dividends, a double adjustment must be made; first an adjustment must be made each year to the end-year value of the pound and second, a subsequent adjustment to the value of the pound at the end of the ten-year period. The C.P.P. proposals will alter both price/earnings ratios and earnings growth rates, sometimes in different directions, so that a higher C.P.P. price/earnings ratio may be justified by a higher C.P.P. earnings growth rate. At the present time, when inflation is around 15% per annum and dividends are restricted to growth of 5% per annum, the shareholder is being forced to accept a reduction in his real income and this would be clearly shown by the C.P.P. record.

38. In the longer term, then, inflation accounting will bring the impact of inflation on company earnings more and more into the limelight both as regards management and investors. C.P.P. accounting may be a first step toward the provision of more information on future sources and uses of funds. It is likely to have an increasing influence on corporate dividend policy, and hence we expect the trend of market price performance shown in Table 4 to continue. The greater the rate of inflation the greater the difference is between these sectors in terms of C.P.P. earnings. These differences might be reduced, but not eliminated, by a fundamental change in taxation such as is discussed later (§ 42). This point

is illustrated in Appendix 3 which shows price/earnings ratios on three bases for our sample of 120 companies. Column (4) is based on historic earnings; column (5) on estimated C.P.P. profits with current tax charges; and column (6) on estimated C.P.P. profits after application of the increased tax rates suggested in § 42. It will be found that (ignoring price/earnings ratios above 50) the spread of price/earnings ratios about the mean decreases somewhat from column (4) to column (5), and substantially from column (5) to column (6). The coefficients of variation are respectively 48·8%, 48·5% and 38·9%.

39. A further effect of C.P.P. accounting will be, we think, that it will add to the confusion and disenchantment with the concept of 'earnings' as a yardstick for share evaluation. Imputation tax gave rise to three alternative earnings figures—'nil', 'net', and 'full'; now we shall have C.P.P. earnings available on these three bases also! There are doubts, too, over the value of oversea earnings which may be unremittable, or earnings based on subnormal tax charges. Consider the not untypical company with oversea earnings, a subnormal tax charge and a large convertible loan issue. It is quite possible to produce 48 different earnings figures for that company, all of them justifiable. Inflation-adjusted accounts are likely to lead to greater use of dividend yields as a criterion rather than earnings per share and price/earnings ratios.

PRACTICE IN OTHER COUNTRIES

40. There is an increasing tendency by accountancy bodies throughout the world to recommend the publication of supplementary statements adjusted for inflation, similar to those of ED8, and Scapens[11] has produced a wide-ranging review of current practice. In the United States a recommendation for such statements was published in 1969, but a survey in 1971 showed that none of 500 companies examined had provided the suggested information and although 23% of the companies referred to the effect of price-level changes, not one quantified this effect. This lack of positive action has recently prompted the Securities and Exchange Commission, which agrees with the view that in inflationary times traditional accounting methods are deficient, to demand at least the disclosure of

Table 5. *Earnings of Philips of Eindhoven*

	1964	1965	1966	1967	1968	1969	1970	1971	1972
Earnings per share (florins)									
Netherlands basis	2·58	2·52	2·19	2·21	2·78	3·27	2·63	1·99*	4·25
United States basis	3·21	3·39	2·99	2·67	3·14	3·76	3·38	2·99	5·23
Percentage difference	24	34	36	21	13	15	28	50	23
Change in Netherlands price index during year %	+6·8	+3·8	+5·8	+3·3	+3·8	+7·4	+3·6	+7·5	+7·8

* (The company modified its Netherlands accounting basis in 1971)

the amount of stock profits included in published figures. Companies in other countries have often gone some way toward showing the effects of inflation, but generally only in relation to depreciation of fixed assets and, occasionally,

stocks. The R.C. method adopted by Philips in the Netherlands is widely quoted, but only about 15% of companies listed on the Amsterdam Bourse had adopted this approach in 1967 and the proportion is not thought to be much higher today. A comparison of Philips' earnings on Netherlands and U.S. accounting bases is given in Table 5.

In European countries generally revaluations of fixed assets are based on replacement costs rather than on a price index, in contrast with the official proposals in the U.K. and U.S., and indeed with the legal requirements in several South American countries, where annual revaluation of fixed assets on a local price index is compulsory.

IMPLICATIONS FOR TAXATION

41. There is one area where we should like to see the implications realized in more direct action, and that is company taxation. Inflation accounting reveals that company taxation is at a significantly higher rate than appears from the published figures. It could be argued that some allowance for inflation is already being made by the Inland Revenue in the form of accelerated depreciation allowances for tax purposes, although these are probably to be considered more as capital investment incentives than as compensation for inflation. In any event no allowance is made by the Inland Revenue for such items as inflationary stock profits and losses on monetary assets, nor are gains on monetary liabilities taxed. A similar pattern applies in the U.S. and in European countries, where additional depreciation on revalued assets is not as a regular practice allowed against tax. In several South American countries, however, additional depreciation is allowable against tax, and in Brazil and Chile the increased cost of stock replacement is also allowed, subject to certain restrictions.

42. Is it likely that the U.K. tax authorities would agree to the taxation merely of real profits as disclosed by C.P.P. accounting? There is still much sense in Adam Smith's principle of taxation, that subjects ought to contribute as nearly as possible in proportion to their respective abilities, and we are glad that the way is clear for the Government enquiry to recommend such a course, provided that the total tax borne by the corporate sector is not reduced. There would be some adjustment of the tax burden as between companies, and we return to this in § 47. Our sample of 120 companies (§ 27) had an average tax charge of 47%, taking U.K. and foreign tax together. Since ED8 reduces the pre-tax profits by 7·2% it would be necessary to increase the aggregate tax charge to 50·6% (i.e. 47/92·8) in order to bring in the same total revenue. A proportionate rise in the average tax charge in each country would involve an increase in the basic rate of U.K. corporation tax to approximately 54%, which might well be rounded up to 55%. Price/earnings ratios for our sample of companies, calculated by applying to our estimated C.P.P. profits this increased rate of 55% (and oversea tax proportionately) are shown in column (6) of Appendix 3.

43. It is not only in the corporate sector that inflation leads to distortion of

taxation policy. For example, capital gains are taxed regardless of the inflationary element, and tax on personal income rises faster than the rise in income through a general increase in prices. To raise the same amount as at present, by a capital gains tax levied on 'real' amounts in a period of continuing inflation, such high rates would be necessary as to be psychologically unacceptable unless they were supplemented by a wealth tax.

OTHER IMPLICATIONS

Management

44. It has been suggested that as managements begin to appreciate the true position revealed by C.P.P. accounting they are likely to increase their prices to restore profits to their previous real level, a clearly inflationary move. But no efficient management can still be unaware of the impact of inflation on real profits and companies must be presumed to be already charging either the highest price that the market will bear or the maximum permitted by current legislation. Competition from abroad is also a restraint. Inflationary price rises would place companies in no better position in real terms, and inflation accounting might well assist a better understanding of this position, and encourage more effective steps towards efficiency.

Trade Unions

45. It has also been argued that inflation accounting could be valuable in convincing the trade unions that companies were not making excessive profits and that there must be restraint in pressing for wage increases. We feel that this is wishful thinking since the level of company profits is becoming less relevant to trade unions when Governments are increasingly prepared to underwrite declining companies in the social cause of full employment. Any system of accounting which is more complicated would almost certainly be treated with suspicion. In any case wage demands would soon be similarly expressed in real terms to look correspondingly modest, a trend which has received some element of official recognition in the establishment of a 'threshold' in Phase III.

Creditors

46. C.P.P. accounts will usually show increased asset cover for loans and reduced earnings cover at least for industrial companies. To the extent that this falls below the commonly-accepted multiple, the raising of long-term debt may be more difficult. Even where the multiple is high by domestic standards, there may be difficulties in raising money in international markets if the effect of the U.K.'s lead in inflation accounting is to show lower earnings than for comparable companies in other countries which still account on a traditional basis. Certainly the lender will seek a real rate of return on his loan, either by a high fixed rate of interest, or a rate of interest index-linked, or by having an interest or option in the equity of the company. This is no new problem. It is a pity that

the recommendation by the Page Committee of an index-linked Government bond was rejected; the argument that the existence of such a bond would promote inflation is not entirely compelling. One local authority has issued such a bond, but as only the interest payment and not the capital repayment was index-linked, it was not sufficiently attractive to the investor. The attraction to the Government of an index-linked bond would be to raise cheap money at a time when it believed the rate of inflation was about to fall; the investor, on the other hand, might be suspicious of an artificially-determined rate of interest, particularly if the borrower were able, for example by subsidy, to influence the level of the particular index chosen. Short-term creditors, too, are likely to become more aware of the value of money owed to them and a more prompt settlement of debts may marginally increase the velocity of money circulation.

CONCLUSION

47. Inflation is socially divisive. Individuals who have savings largely in money assets and who are weak in wage-bargaining power become poorer; those who have real assets and have exercised their power to borrow and are economically strong become richer. Nobody should wish other than success to Governments which attempt to restrain inflation, but they are unlikely to be able to eliminate it completely, and to the extent that some inflation is countenanced by Governments, they should be prepared to reduce its divisive impact. We have seen some moves in this direction—a proposed tax on property development, schemes whereby the mortgagee of house property receives an equity interest, the threshold provisions of the pay and prices policy. To compensate in every situation where a person is at risk from inflation would undoubtedly reduce the strength of public support for anti-inflation policies, but it seems possible in practice to draw a dividing line between the personal sector and the corporate sector. We regard inflation accounting as a desirable move, particularly if it leads to a fairer distribution of tax between companies which gain from inflation and those which lose from it, including many sectors of manufacturing industry. We hope that the Committee on Company Accounts and Inflation will find a convincing case for inflation accounting, for inflation-adjusted profits to be recognized for tax purposes, and that the Government will act on its recommendations. We welcome the proposals of ED8 as desirable and indeed necessary in a time of inflation, and we should like to see the gradual abandonment of traditional historic-cost accounts. The provision of inflation-adjusted accounts as supplementary information should be only a first step towards substitution for conventional figures. We have indicated in what respects C.P.P. methods leave room for improvement, and we are particularly attracted by the concept of current-value accounting. Until publication of inflation-adjusted accounts by companies becomes general practice, investors and creditors are strongly advised to make their own estimates of the impact of inflation on individual companies.

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APPENDIX 1

United Kingdom Price Indexes

	Consumer expenditure		Retail prices		G.D.P. deflator	
	1970 = 100	Change % on previous year	1970 = 100	Change % on previous year	1970 = 100	Change % on previous year
1951	52·2		49·5	+9·6	48·9	
1952	55·3	+5·9	53·9	+8·8	53·3	+9·0
1953	56·4	+2·0	55·6	+3·1	54·9	+3·0
1954	57·4	+1·8	56·6	+1·8	56·0	+2·0
1955	59·5	+3·7	59·1	+4·5	58·1	+3·7
1956	62·1	+4·4	62·0	+4·9	61·7	+6·2
1957	64·2	+3·4	64·3	+3·7	64·2	+4·0
1958	66·0	+2·8	66·2	+3·0	67·1	+4·5
1959	66·6	+0·9	66·5	+0·5	68·2	+1·6
1960	67·4	+1·2	67·2	+1·0	69·4	+1·8
1961	69·3	+2·8	69·5	+3·4	71·7	+3·3
1962	72·0	+3·9	72·4	+4·2	74·2	+3·5
1963	73·4	+1·9	73·9	+2·0	75·8	+2·2
1964	76·0	+3·5	76·3	+3·3	77·8	+2·6
1965	79·7	+4·9	80·0	+4·8	81·0	+4·1
1966	82·9	+4·0	83·1	+3·9	84·3	+4·1
1967	85·3	+2·9	85·2	+2·5	86·8	+3·0
1968	89·5	+4·9	89·2	+4·7	89·5	+3·1
1969	94·5	+5·6	94·0	+5·4	92·9	+3·8
1970	100·0	+5·8	100·0	+6·4	100·0	+7·6
1971	108·2	+8·2	109·4	+9·4	110·3	+10·3
1972	115·1	+6·4	117·2	+7·1	120·9	+9·6
1973	125·0	+8·6	128·0	+9·2	131·9	+9·1

APPENDIX 2

Estimated effect of ED8 proposals on the earnings of 120 listed companies

		Percentage change in earnings					
					Monetary Liabilities		
	Year end	Depreciation	Stock	Other P & L	Short-term	Long-term	Total
Building Materials							
Pilkington Brothers	31 Mar 73	−30	−10	+10	+5	+15	−10
Associated Portland Cement	31 Dec 72	−10	−10	+10	−5	+30	+15
BPB	31 Mar 73	−40	−15	+10	−5	+40	−10
Ready Mixed Concrete	31 Dec 72	−90	−10	+20	+10	+50	−20
Marley	31 Oct 72	−10	−15	+10	+5	+20	+10
Redland	31 Mar 73	−40	−10	+15	–	+40	–
Rugby Portland Cement	31 Dec 72	−30	−10	+15	−15	+25	−15
Turner & Newall	30 Sep 72	−40	−25	+10	−10	+25	−40
Tarmac	31 Dec 72	−45	−15	+10	–	+25	−25
		−35	−15	+10	–	+30	−10
Contracting, Construction							
Taylor Woodrow	31 Dec 72	−35	−45	–	+55	+40	+20
Wimpey (George)	31 Dec 72	−35	−45	–	+25	+20	−35
		−35	−45	–	+40	+30	−10
Electricals							
B.I.C.C.	31 Dec 72	−50	−45	+25	−10	+40	−40
General Electric Co.	31 Mar 73	−25	−40	+15	−10	+30	−35
International Computers	30 Sep 73	−125	−90	+30	−25	+125	−85
Plessey	30 Jun 73	−35	−50	+10	–	+25	−50
		−60	−55	+20	−10	+55	−50
General Engineering							
Birmid Qualcast	31 Jul 73	−30	−20	+10	−25	+15	−50
Renold	31 Mar 73	−15	−65	+10	+10	+50	−5
Dowty Group	31 Mar 73	−25	−45	+15	−10	+15	−50
*Guest Keen & Nettlefolds	31 Dec 72	−30	−40	+10	+5	+30	−25
Tube Investments	31 Dec 72	−50	−55	+10	−10	+55	−50
Vickers	31 Dec 72	−75	−110	+25	−15	+80	−95
Hawker Siddeley	31 Dec 72	−35	−60	+15	+5	+15	−60
International Compressed Air	30 Sep 73	−25	−55	+10	−5	+30	−45
		−35	−60	+10	−5	+40	−50
Heavy Engineering							
Babcock & Wilcox	31 Dec 72	−40	−80	+15	+20	+20	−65
Simon Engineering	31 Dec 72	−30	−40	+15	+5	+40	−10
Steetley	31 Dec 72	−65	−25	+15	−5	+40	−40
		−45	−45	+15	+5	+30	−40

		Percentage change in earnings					
					Monetary Liabilities		
	Year end	Depreciation	Stock	Other P & L	Short-term	Long-term	Total
Miscellaneous (capital)							
IMI	31 Dec 72	−45	−35	+10	−10	+35	−45
Delta Metal	31 Dec 72	−35	−40	+10	–	+45	−20
Johnson Matthey	31 Mar 73	−10	−50	+15	−10	+10	−45
Smiths Industries	31 Jul 73	−20	−50	+5	−5	+30	−40
Lead Industries	31 Dec 72	−35	−30	−20	–	+10	−75
Foseco Minsep	31 Dec 72	−25	−15	+10	–	+15	−15
		−30	**−35**	**+5**	**−5**	**+25**	**−40**
Household Goods							
Hoover	31 Dec 72	**−15**	**−15**	**+10**	**−15**	–	**−35**
Light electronics etc.							
Decca	31 Mar 73	−20	−20	+10	+5	+10	−15
Ever Ready (G.B.)	2 Feb 73	−25	−15	+10	+15	+5	−10
Rediffusion	31 Mar 73	−55	−10	+15	+20	+20	−10
Thorn Electrical Industries	31 Mar 73	−55	−20	+15	+15	+15	−30
		−40	**−15**	**+10**	**+15**	**+15**	**−15**
Motors							
British Leyland	30 Sep 72	−120	−130	+25	+90	+40	−95
Joseph Lucas	31 Jul 73	−40	−50	+10	−25	+40	−65
Associated Engineering	30 Sep 73	−70	−80	+10	+10	+70	−60
BBA Group	31 Dec 72	−45	−35	+20	+15	+15	−30
Dunlop Holdings	31 Dec 72	−125	−95	+50	+5	+120	−45
		−80	**−80**	**+20**	**+20**	**+60**	**−60**
Food Retailing							
Cavenham	31 Mar 73	−25	−35	–	+15	+80	+30
Tesco	27 Feb 73	−10	−20	+10	+20	–	–
Unigate	31 Mar 73	−50	−30	+5	+15	+45	−15
		−30	**−30**	**+5**	**+15**	**+40**	**+5**
Breweries							
Allied Breweries	30 Sep 73	−20	−20	+10	+10	+55	+35
Bass Charrington	30 Sep 73	−15	−15	+10	+10	+50	+40
Arthur Guinness	30 Sep 73	−30	−20	+10	+5	+40	+5
Scottish & Newcastle	30 Apr 73	−20	−20	+10	+5	+50	+30
Whitbread	28 Feb 73	−20	−10	+10	+10	+60	+50
		−20	**−15**	**+10**	**+10**	**+50**	**+35**
Entertainment, Catering							
Granada	30 Sep 72	−85	–	+20	+30	+30	−5
EMI	30 Jun 73	−40	−30	+10	+20	+60	+15
Grand Metropolitan	30 Sep 73	−25	−30	+5	+45	+130	+125
Trust Houses Forte	31 Oct 72	−20	−5	+5	+5	+70	+60
Associated Television Corp.	31 Mar 73	−10	−5	+10	+5	+15	+15
		−35	**−15**	**+10**	**+20**	**+60**	**+40**

	Year end	Percentage change in earnings					
		Depreciation	Stock	Other P & L	Monetary Liabilities Short-term	Monetary Liabilities Long-term	Total
Food Manufacturing							
Associated British Foods	31 Mar 73	−45	−30	+10	+25	+30	−15
Brooke Bond Liebig	30 Jun 73	−25	−65	+5	+20	+40	−20
Cadbury Schweppes	31 Dec 72	−40	−40	+15	+10	+20	−40
Ranks Hovis McDougall	1 Sep 73	−45	−30	+10	−20	+70	−15
Spillers	31 Jan 73	−55	−40	+10	+35	+50	+5
Unilever	31 Dec 72	−40	−30	+10	–	+15	−45
		−20	**−40**	**+10**	**+10**	**+35**	**−20**
Newspapers, Publishing							
Associated Newspapers	31 Mar 73	**−15**	**−5**	**+10**	**−5**	**+5**	**−10**
Packaging and Paper							
Dickinson Robinson Group	31 Dec 72	−45	−30	+10	−5	+30	−40
Metal Box	31 Mar 73	−60	−55	+15	+35	+30	−30
		−50	**−40**	**+15**	**+15**	**+30**	**−35**
Stores							
Boots Pure Drug	31 Mar 73	−10	−15	+10	+5	+5	−5
British Home Stores	31 Mar 73	−10	−10	+10	−5	+5	+5
Debenhams	30 Jan 73	−20	−20	+5	+10	+45	+20
Grattan	31 Jan 73	–	−20	+5	−10	–	−20
Great Universal Stores	31 Mar 73	−5	−10	+10	−20	+5	−25
House of Fraser	30 Jan 73	−5	−15	+5	–	+15	–
Marks & Spencer	31 Mar 73	−5	−5	+10	+5	+10	+15
W. H. Smith	31 Jan 73	−10	−10	+10	–	+10	–
U.D.S. Group	31 Jan 73	−10	−10	+10	–	+15	+5
F. W. Woolworth	31 Dec 72	−10	−20	+10	+15	+10	+5
Burton Group	31 Aug 73	−25	−45	+5	+30	+65	+30
		−10	**−15**	**+5**	**+5**	**+20**	**+5**
Textiles							
Coats Patons	31 Dec 72	−40	−50	+15	+5	+25	−45
Courtaulds	31 Mar 73	−40	−25	+10	−10	+45	−25
Tootal	31 Jan 73	−55	−65	+15	+5	+50	−50
Carrington Vivella	31 Dec 72	−85	−120	+20	+15	+100	−70
		−55	**−65**	**+15**	**+5**	**+50**	**−50**
Tobacco							
British American Tobacco	30 Sep 72	−15	−35	+10	+5	+10	−25
Gallaher	31 Dec 72	−20	−45	+10	−5	+20	−40
Imperial Group	31 Oct 73	−25	−45	+10	+15	+65	+25
		−20	**−40**	**+10**	**+5**	**+30**	**−15**
Wines & Spirits							
*Distillers	31 Mar 73	**−5**	**−25**	–	**−5**	**+20**	**−15**

	Year end	Percentage change in earnings: Depreciation	Stock	Other P & L	Monetary Liabilities: Short term	Monetary Liabilities: Long term	Total
Chemicals							
Fisons	31 Dec 72	−35	−35	+10	–	+45	−10
Glaxo	30 Jun 73	−20	−25	+10	−5	+35	−5
I.C.I.	31 Dec 72	−90	−35	+25	−10	+70	−45
British Oxygen	30 Sep 72	−90	−40	+25	+10	+70	−25
Beecham Group	31 Mar 73	−15	−10	+10	−5	+25	+5
Reckitt & Colman	31 Dec 72	−20	−25	+10	–	+15	−20
Smith & Nephew	31 Dec 72	−25	−25	+10	−5	+20	−25
L.R.C.	31 Mar 73	−25	−40	+10	+25	+25	−5
		−40	**−30**	**+15**	**–**	**+40**	**−15**
Oil							
British Petroleum	31 Dec 72	−105	−30	+10	+20	+40	−65
Burmah Oil	31 Dec 72	−25	−15	+5	+15	+50	+20
I.C. Gas	31 Mar 73	−35	−5	+10	−5	+30	−10
Shell Transport & Trading	31 Dec 72	−80	−25	+15	−5	+35	−60
		−60	**−20**	**+10**	**+5**	**+40**	**−25**
Shipping							
British & Commonwealth	31 Dec 72	−100	−10	+15	+5	+80	−10
P & O	30 Sep 72	−150	−5	+20	−40	+85	−90
Ocean Transport & Trading	31 Dec 72	−65	−5	+10	−10	+50	−20
		−105	**−5**	**+15**	**−15**	**+70**	**−40**
Miscellaneous (other groups)							
Bowater Corporation	31 Dec 72	−140	−60	+30	+5	+120	−45
British Electric Traction	31 Mar 73	−60	−20	+20	+25	+25	−10
Thomas Tilling	31 Dec 72	−25	−35	+5	+20	+25	−5
Sears Holdings	31 Jan 73	−15	−25	+10	+5	+35	+10
Transport Development	31 Dec 72	−40	–	+10	–	+25	−5
English China Clays	30 Sep 73	−30	−15	+10	+5	+25	−5
Reed International	31 Mar 73	−50	−35	+10	−10	+75	−10
Trafalgar House	30 Sep 73	−25	−25	+10	−5	+145	+100
		−50	**−25**	**+15**	**+5**	**+60**	**+5**
Office Equipment							
Gestetner	31 Oct 73	−15	−25	+10	−15	+5	−35
Lamson Industries	31 Dec 72	−55	−65	+15	−5	+40	−70
Telephone Rentals	31 Dec 72	−30	−10	+10	+5	+10	−15
*Rank Organization	31 Oct 73	−10	−10	+5	−10	+50	+25
		−25	**−25**	**+10**	**−5**	**+25**	**−25**
Banks							
Barclays Bank	31 Dec 72	−5	–	+10	−30	+10	−15
Lloyds Bank	31 Dec 72	−5	–	+15	−25	–	−25
Midland Bank	31 Dec 72	−10	–	+10	−20	–	−20
National & Commercial	30 Sep 73	−5	–	+10	–	+5	+10
National Westminster	31 Dec 72	−10	–	+10	−30	+10	−15
		−5	**–**	**+10**	**−20**	**+5**	**−15**

* Company's figures. GKN split estimated.

	Year end	Percentage change in earnings: Depreciation	Stock	Other P & L	Monetary Liabilities: Short-term	Long-term	Total
Hire Purchase							
United Dominions Trust	30 Jun 73	−25	–	+20	−35	+5	−35
Mercantile Credit	30 Sep 73	−115	−5	+25	+50	+40	+5
		−70	–	+25	+5	+25	−15
Property							
Land Securities	31 Mar 73	–	–	+5	+25	+445	+475
MEPC	30 Sep 73	–	–	−10	−5	+275	+260
St. Martin's Property Corp.	31 Mar 73	–	–	+5	+30	+155	+190
		–	–	–	+20	+290	+310

METHOD OF ESTIMATION OF C.P.P. EARNINGS

The notation of Table 1 (§ 11) is continued, i.e. ρ_0, ρ_1 are the respective retail price indexes at the beginning and end of the current year. D, ${}_0S$, ${}_1S$ are current-year depreciation, stocks at the beginning of the year, stocks at the end of the year, all in historic-cost figures, and D_1, ${}_0S_1$, ${}_1S_1$ are our corresponding estimates in C.P.P. figures at the end of the year. Owing to the lack of relevant information, no distinction has been made between U.K. and oversea earnings.

Depreciation

$$D_1 = D(\rho_1/\rho_{-(k-\frac{1}{2})})$$

where k is the nearest integer to (accumulated depreciation)/D, thus giving an estimated age of assets.

Stocks

$${}_0S_1 = {}_0S(\rho_1/\rho_{-n}) \text{ and } {}_1S_1 = {}_1S(\rho_1/\rho_{-n+1})$$

where $n = {}_0S/2C$ and C (cost of sales) is taken as (turnover *minus* profit before tax *plus* interest received *less* interest paid). n is thus an estimate of the average age of stocks, and generally will lie between 0 and 1.

Loss (^{s}m) on net short-term monetary assets

$$^{s}m = {}^{s}M_0(\rho_1/\rho_0) + ({}^{s}M_1 - {}^{s}M_0)(\rho_1/\rho_{\frac{1}{2}}) - {}^{s}M_1$$

Net short-term monetary assets ^{s}M are taken as (current assets *minus* stock *minus* current liabilities including overdraft). ^{s}m will frequently be negative.

Gain (${}^1m$) *on long-term monetary liabilities*

$$ {}^1m = {}^1L_0(\rho_1/\rho_0)+({}^1L_1-{}^1L_0)(\rho_1/\rho_{\frac{1}{2}})-{}^1L_1 $$

Long-term liabilities ${}^1L$ are taken as (preference capital *plus* loans *plus* tax equalization account).

Taxation

Tax is assumed to be payable at the end of the year and hence no adjustment is required.

Adjustment for profit and loss items

Other items A are estimated as

$$ A = P+D-({}_1S-{}_0S) $$

where P is (historic) pre-tax profits.

The corresponding C.P.P. figure A_1 is given by $A_1 = A(\rho_1/\rho_{\frac{1}{2}})$.

Post-tax C.P.P. profits P'_1 are given by

$$ P'_1 = P'-(D_1-D)-({}_1S-{}_0S)+({}_1S_1-{}_0S_1)-{}^s m+{}^1m+A_1-A $$

where P' is historic post-tax profits.

If μ is the proportion of historic post-tax profits attributable to minorities, the same proportion is applied to our C.P.P. estimate. Preference dividends Δ are assumed to be paid three months before the year-end, so that the final figure E_1 for estimated C.P.P. earnings is given by $E_1 = (1-\mu)P'_1-\Delta(\rho_1/\rho_{\frac{1}{2}})$.

APPENDIX 3

Price/earnings ratios on historic and C.P.P. bases

Company	Historic earnings per share p (1)	Estimated C.P.P. earnings per share p (2)	Price 22 Feb 74 (3)	Price/earnings ratios Historic (4)	Estimated C.P.P. (5)	Estimated C.P.P. (6)
Building Materials						
Pilkington Brothers	31·2	27·4	300	10	11	11
Associated Cement	18·3	20·9	145	8	7	8
BPB	14·8	13·6	77	5	6	6
Ready Mixed Concrete	11·1	9·4	87	8	9	9
Marley	9·3	10·0	68	7	7	8
Redland	8·9	8·8	66½	7	8	8
Rugby Portland Cement	6·6	5·5	69	10	13	12
Turner & Newall	14·0	8·7	110	8	13	11
Tarmac	17·4	12·9	126	7	10	9
Contracting, Construction						
Taylor Woodrow	18·8	22·6	222	12	10	12
Wimpey, George	5·3	3·4	98	18	29	25
Electricals						
B.I.C.C.	11·6	7·2	120	10	17	14
General Electric Co.	10·8	7·1	132	12	19	16
International Computers	15·3	2·1	59	4	28	7
Plessey	9·3	5·0	97	10	19	15
General Engineering						
Birmid Qualcast	7·8	3·7	49	6	13	10
Renold	10·7	10·2	104	10	10	11
Dowty Group	9·1	4·6	95	10	21	15
Guest Keen	24·0	18·3	203	8	11	13
Tube Investments	28·0	14·3	278	10	19	15
Vickers	9·0	0·6	87	10	145	19
Hawker Siddeley	32·6	12·6	282	9	22	14
International Compair	7·5	4·0	71	9	18	13
Heavy Engineering						
Babcock & Wilcox	6·6	2·4	63	10	26	16
Simon Engineering	10·7	9·8	67	6	7	8
Steetley	8·6	5·2	75	9	14	12
Miscellaneous (capital)						
IMI	5·2	2·7	42½	8	16	12
Delta Metal	7·7	6·3	64	8	10	10
Johnson Matthey	33·0	19·1	340	10	18	14
Smiths Industries	15·6	9·2	105	7	11	9
Lead Industries	8·9	2·5	65	7	26	11
Foseco Minsep	7·7	6·6	118	15	18	18

	Historic earnings per share p (1)	Estimated C.P.P. earnings per share p (2)	Price 22 Feb 74 (3)	Price/earnings ratios Historic (4)	Estimated C.P.P. (5)	Estimated C.P.P. (6)
Household Goods						
Hoover	45·0	30·1	284	6	9	8
Light electronics etc.						
Decca	39·0	32·8	265	7	8	8
Ever Ready (G.B.)	10.4	9·4	108	10	11	12
Rediffusion	7·3	6·7	74	10	11	12
Thorn Electrical	26·0	18·2	277	11	15	14
Motors						
British Leyland	3·0	0·1	17½	6	175	13
Joseph Lucas	17·8	6·0	102	6	17	9
Associated Engineering	7·0	2·9	32	5	11	7
BBA Group	5·5	3·8	40	7	11	10
Dunlop Holdings	11·9	6·3	45	4	7	5
Food Retailing						
Cavenham	10·6	13·8	138	13	10	13
Tesco	3·4	3·4	50	15	15	17
Unigate	5·1	4·4	61	12	14	15
Breweries						
Allied Breweries	6·7	9·1	75	11	8	11
Bass Charrington	11·2	15·7	116	10	7	9
Arthur Guinness	12·8	13·7	118	9	9	10
Scottish & Newcastle	5·3	7·0	66	12	9	12
Whitbread	6·1	9·1	74	12	8	11
Entertainment, Catering						
Granada	12·2	11·6	133	11	11	11
EMI	14·2	16·4	129	9	8	9
Grand Metropolitan	10·8	24·3	76	7	3	5
Trust Houses Forte	14·5	22·9	132	9	6	6
Associated Television	8·7	9·9	61	7	6	7
Food Manufacturing						
Associated British Foods	5·0	4·3	49½	10	12	12
Brooke Bond Liebig	6·6	5·2	48½	7	9	9
Cadbury Schweppes	4·7	2·8	56	12	20	17
Ranks Hovis McDougall	6·0	5·0	41½	7	8	8
Spillers	4·2	4·4	41½	10	9	11
Unilever	33·5	19·1	330	10	17	14
Newspapers, Publishing						
Associated Newspapers	12·8	11·5	160	12	14	15

	Historic earnings per share p (1)	Estimated C.P.P. earnings per share p (2)	Price 22 Feb 74 (3)	Price/earnings ratios Historic (4)	Estimated C.P.P. (5)	Estimated C.P.P. (6)
Packaging and Paper						
Dickinson Robinson Group	8·4	5·2	79	9	15	13
Metal Box	19·3	13·9	204	11	15	13
Stores						
Boots Pure Drug	15·9	15·1	203	13	13	15
British Home Stores	14·2	14·8	234	16	16	18
Debenhams	6·4	7·7	88	14	11	11
Grattan	11·1	8·9	144	13	16	16
Great Universal Stores	16·6	12·1	192	12	16	15
House of Fraser	9·6	9·6	110	11	11	12
Marks & Spencer	11·0	12·9	221	20	17	20
W. H. Smith	28·2	28·1	371	13	13	14
U.D.S. Group	8·3	8·9	90½	11	10	12
F. W. Woolworth	5·3	5·4	58½	11	11	12
Burton Group	11·0	14·3	91	8	6	8
Textiles						
Coats Patons	6·5	3·4	55½	9	16	12
Courtaulds	19·5	15·2	103	5	7	7
Tootal	3·9	1·9	37½	10	20	14
Carrington Viyella	2·1	0·6	24½	12	41	22
Tobacco						
British American Tobacco	32·6	24·5	289	9	12	11
Gallaher	18·2	10·5	139	8	13	11
Imperial Group	7·2	9·0	73	10	8	10
Wines & Spirits						
Distillers	10·6	9·0	150	14	17	18
Chemicals						
Fisons	19·0	17·0	339	18	20	21
Glaxo	24·4	23·9	418	17	17	19
I.C.I.	15·6	8·8	228	15	26	19
British Oxygen	4·5	3·3	41½	9	13	12
Beecham Group	15·9	16·7	264	17	16	18
Reckitt & Colman	18·5	15·1	284	15	19	19
Smith & Nephew	3·0	2·3	46	15	20	18
L.R.C.	6·7	6·3	51	8	8	8
Oil						
British Petroleum	20·5	7·8	546	27	70	NA
Burmah Oil	15·6	19·4	476	31	25	29
I.C. Gas	27·8	25·4	607	22	24	25
Shell Transport & Trading	21·2	9·1	248	12	27	NA

	Historic earnings per share p (1)	Estimated C.P.P. earnings per share p (2)	Price 22 Feb 74 (3)	Price/earnings ratios Historic (4)	Estimated C.P.P. (5)	Estimated C.P.P. (6)
Shipping						
British & Commonwealth	14·8	13·6	220	15	16	16
P & O	7·3	0·8	132	18	165	88
Ocean Transport	11·0	8·9	109	10	12	12
Miscellaneous (other groups)						
Bowater Corporation	8·6	4·8	162	19	34	28
British Electric Traction	8·9	8·1	81	9	10	10
Thomas Tilling	8·6	8·0	66	8	8	9
Sears Holdings	4·8	5·3	43	9	8	10
Transport Development	4·1	3·9	47½	12	12	14
English China Clays	6·8	6·6	88	13	13	15
Reed International	23·1	20·3	210	9	10	11
Trafalgar House	11·7	23·6	53½	5	2	3
Office Equipment						
Gestetner	13·4	8·7	143	11	16	14
Lamson Industries	3·6	1·1	64	18	58	30
Telephone Rentals	8·3	7·1	107	13	15	15
Rank Organization	20·4	25·2	290	14	12	13
Banks						
Barclays Bank	33·4	27·7	305	9	11	11
Lloyds Bank	27·4	19·8	252	9	13	12
Midland Bank	37·2	29·5	312	8	11	10
National & Commercial	9·5	10·3	80	8	8	9
National Westminster	34·6	29·3	282	8	10	10
Hire Purchase						
UDT	10·2	6·6	81	8	12	10
Mercantile Credit	7·9	8·3	61	8	7	8
Property						
Land Securities	5·0	28·6	212	42	7	12
MEPC	8·2	29·8	175	21	6	10
St. Martin's Property Corp.	3·6	10·5	109	30	10	14

(1) historic earnings for latest year as shown in Appendix 2 adjusted to a 50% (nil distribution) corporation tax basis in the U.K.
(2) C.P.P. earnings estimated as in Appendix 2 with tax charges as in (1)
(4) based on (1)
(5) based on (2)
(6) based on C.P.P. profits estimated as in Appendix 2 after the application of tax on these profits on the basis of U.K. corporation tax raised from 50 to 55% (as suggested in § 42), and foreign taxes increased proportionately.

ABSTRACT OF THE DISCUSSION

Mr P. W. Parker, introducing the paper, said that the President at the beginning of his Presidential biennium had drawn some conclusions from the meeting of Alice and the Cheshire Cat. If we had taken them further along Alice's journey, they would have met the Mock Turtle who, it would be remembered, did lessons for ten hours the first day, nine hours the next and so on, and changed the subject when asked to explain what happened on the twelfth day. They had the same kind of Wonderland problems with historic-cost accounts, where in inflationary times they were attempting to measure with a constantly expanding ruler and had the same difficulty in deciding where they stood at the end.

The Companies Acts required accounts to show a 'true and fair view' and for auditors to certify accordingly. As far as the authors were aware, it was nowhere stated that such a view could be legally provided only by historic-cost accounts, but lawyers, the Inland Revenue, and until recently, accountants, had all been reluctant to depart from that concept. It was the essence of the paper that historic-cost accounts no longer provided a 'true and fair view' and indeed could give a dangerously misleading perspective.

There was little need to stress the very practical nature of the ED8 proposals, when more and more companies were giving the relevant information voluntarily, in advance of any accountancy requirements, and there was a useful difference in attitude between those companies which gave the information and those which said, 'we must get round to inflation accounting some time' or even 'we do not think it can apply to us'. The author said that it was a useful difference because such attitudes gave a valuable clue to the investor as to a management's grasp of their own affairs. It was very much the age of the consumer, and consumer protection and consumer information were political catchwords, The investor, potential or actual, was not the only consumer of more informative accounts, and the authors had made some reference also to creditors, trade unions, management, governments and the public at large, and all those, and other matters, were to be considered by the Sandilands Committee. The authors welcomed the establishment of that Committee because it gave the most realistic possibility of inflation-adjusted accounts being accepted by the Inland Revenue for taxation purposes, and that would be one of the most desirable recommendations of the Committee. It would lead to greater fairness between one company and another and between manufacturing industry and the financial sectors. Without such a recommendation the Committee's report would run a great danger of being regarded as academic rather than practical.

The authors also wanted to stress that inflation was not only a domestic problem. Most investors had been conscious, certainly over the past year or two, that it had been more important to make a wise choice of currencies, both in borrowing and investing, than to select particular shares. Of the methods available (see § 11) for current purchasing power adjustment of accounts of overseas subsidiaries, they much preferred the method that took into account the actual rate of inflation in the particular overseas country.

The authors were undecided whether or not to include §§ 32–5. Since they had written that section the Institute had discussed a paper dealing with general insurance, and that paper had covered, admittedly in a different context, some of the background to their comments. §§ 5.14–5.19 of that paper (*J.I.A.*, **101**, 217) defined a 'future claims' reserve and described some of the methods used. The authors of the present paper had assumed, perhaps wrongly, that many companies had developed more sophisticated systems using computers and that they were 'topping up' the unearned premium reserve with an additional unexpired risk reserve that paid attention to current rates of inflation. The statement in § 35 that 'the year's profit and loss account already makes allowance for the estimated effect of future inflation on current profits' required some amplification. The authors realized that the stated profit or loss figure had generally to be regarded as only an estimate, based on wide-ranging assumptions, and included any gain or loss on the run-off of previous years' claims. However, they reiterated § 32 that the problem of insurance companies was a side issue in inflation accounting. They felt that for that particular audience the paper would not be complete without some reference to those problems,

but they suggested that not too much time should be spent on them until the central issues had been fully explored.

The central issues covered a scene in which the authors believed that both accountant and actuary could play a full part. It had to be remembered that in no other part of the world had proposals for adjusting accounts for inflation reached such an advanced stage, and that their own accounting Institutes had given a magnificent lead in the matter. The authors wanted particularly to mention, in Mr Kenneth Wright's presence, the great help they had had from the library of the Institute of Chartered Accountants in England and Wales, and from Mr Westwick of that Institute's staff. He felt, as an actuary, that the Institute of Actuaries also had much to offer to the subject. The President had referred in his Presidential Address to the fact that nobody identified discounted cash flow with actuaries. It was hoped that the discussion would lead to a positive identification of actuaries with inflation accounting techniques, for after all, they had been using exactly those techniques for many years, not least in the valuation of pension funds. The President referred also to some local difficulties which had arisen between actuaries and accountants *qua* auditors. It was unusual for the joint author of a sessional paper not to be a member of the Institute but the speaker was grateful that Martin Gibbs had been prepared to undertake the task, and that their particular joint venture had been remarkably free from any of the local difficulties of which the President had spoken.

Mr J. W. Martin, opening the discussion, said that the paper dealt most topically with a very important subject. It was so important that their thoughts and opinions could only represent part of the overall attention that inflation accounting was currently receiving, rather than the only, or predominant, contribution as was often the case. It was essential to remember that when presenting their views both generally and to bodies such as the Sandilands Committee, the approach adopted had to influence those other disciplines that also had the subject under consideration. That the orderly and meaningful adjustment of company accounts to allow for inflation was now both important and urgent could not be doubted. The Confederation of British Industry, in its final report had stated: 'The problems posed by the effect on financial statements of changes in the value of money are so serious and pressing that urgent action is needed.' And yet although it could be assumed that most well-managed companies incorporated the effects of changing money values in their internal system of financial control, only a small number had, so far, decided to include any such item in their Report and Accounts. Further, although the practice was, happily, spreading, there was little uniformity in the extent and manner of that trend.

The authors had set out the basic nature of the problem clearly. Historic-cost accounts presented in money terms the consequences of numerous transactions that had taken place at different times, and at different relative monetary values. That the situation had become intolerable was a result of the current very high rate of inflation, but in principle it existed for any change in the value of money. It would have been preferable if the changes in approach that were being discussed had been implemented earlier but the speaker feared that they were faced with yet another example of sophisticated man's tendency to act only at the last moment.

The fundamental aim of any departure from historic-cost accounting should be to demonstrate to what extent the physical capital of a company was being maintained. The terms of reference of the Sandilands Committee listed six matters that should be taken into account, and the authors had repeated them. Items (i) and (ii) went to the heart of the matter and were concerned with the effects of inflation on investment, management decisions and the capital market. The remaining four items, covering a very wide area, seemed to be much less important, being areas that would react in certain ways to the new situation, once the best course had been adopted. In particular, the restraint of inflation, and the system of taxation, should have no bearing on the subject. There was ample data to show that, since the 1950s the rate of return on capital employed for private sector trading companies, and both pre-tax and post-tax profits as a share of gross national product, had fallen steadily. The speaker did not know if the long-term rate of interest, or the requirements of those other sectors which shared G.N.P. were considered

whether those returns had been too high in the past. They were certainly too low at present on any basis that assumed continued viability.

ED8 represented the considered judgment of those who had the responsibility for the maintenance and production of corporate accounts, and ought, therefore, to be the basis for the views and reactions of other bodies. The authors had found the main features of ED8 less than satisfactory and probably understated the extent to which that approach failed to deal with the real problem. The three main areas of difficulty were in the treatment of stocks, depreciation and borrowing arrangements. Stocks acquired at much lower prices in the past were used in current production and had then to be replaced at current price levels. Accumulated depreciation fell far short of the current cost of new equipment having the same productive capacity. Finally, debt might be repaid in devalued currency, having earlier been invested in assets that had appreciated. ED8 had three principal recommendations; namely, that historic cost accounting should continue to be the basis for the basic accounts, that inflation accounts should be presented as an additional statement, and that the index used for the latter should be a general index of purchasing power. Whilst ideally the speaker would aim for the extinction of historic accounts, that was not a practical approach at present and he, therefore, accepted the first two suggestions of ED8. It was the third item that led the authors and the speaker to combine in firm disagreement.

The provisional accounting standard would recommend the retail price index, on the grounds that it best reflected the expenditure pattern of the shareholder and, in addition, was up-to-date, not subject to revision, and available monthly. The last three features were certainly desirable, but not to the extent of choosing an index inappropriate in its nature, which the retail price index surely was. If they wished to be confident that the company would be able to continue to trade satisfactorily in its present form, the index used should reflect its own areas of activity and the particular effects of inflation. Conversely, the expenditure of the population, reflected in a general index, varied in real terms in weighting between different items and such indices were, therefore, not necessarily a suitable measure even of general inflation. Furthermore, the shareholder had chosen to invest in a company involved in a particular trade, and if he aimed to achieve general protection against inflation, he might hold shares in a number of other companies whose inflation accounts should reflect their areas of activity. Even the problem of revision of indices was not serious, as the effect, year by year, of revision in inflation-linked earnings was likely to be well within other subjective areas of the accounts.

The authors had discussed the treatment of monetary assets and liabilities and he agreed with their conclusion that the profits and losses resulting from management's financial decisions should be reflected in profits and earnings. A company's capital structure was very relevant to its continuing ability to trade and if, for instance, a correct tactical decision to hold cash resulted in lower earnings per share in the short term, that should be acceptable as the means to greater profits in the future.

The emergence of high earnings from a seriously illiquid position should obviously be judged with caution, but the directors would allow that position to be reflected in their dividend policy. The use of a general price index could itself confuse the matter of what part of any inflation profits could fairly be paid out in dividends as some items would be overstated and some understated in actual trading experience.

ED8 was unconvincing in some other respects. It warned against overloading accountancy resources by using too complex an approach, and yet suggested that, internally, most well-managed companies had been allowing for inflation for some time. Despite suggesting a general price index, it acknowledged that management should appreciate the effects of inflation, in detail, on costs, profits, distribution policy, dividend cover, borrowing, returns on capital and cash flow. Finally, it urged the current purchasing power basis on grounds of comparability between companies, which seemed to have little relevance, and because it would be easier to persuade companies to fall into line. That was an unambitious approach.

The authors suggested that replacement cost accounting met many of the requirements in which ED8 was deficient. In particular, it used indices that reflected the nature of the business

and assets of the company to the extent of using more than one index for any one company That clearly involved more work and greater complexity but, once the routines were established, the task should not prove too great, and the results would be worthwhile, particularly as each of depreciation stocks, long-term borrowing, short-term borrowing and 'other' items, was the most important source of inflation profit or loss to some companies, and therefore merited an index of real relevance.

The paper referred to the possibility of abuse and of greater subjectivity with replacement cost accounting. No method could be expected to avoid the efforts of those who were determined to mislead. It was difficult to imagine that the preparation and interpretation of replacement cost accounts would involve a higher subjective element than would historic-cost accounts, or even current purchasing power accounts at a time of high inflation.

The speaker found the authors' discussion of the current value approach less convincing. He accepted the theory behind it and the numerical demonstration of its application. Further, the relegation of depreciation from its title position to an anonymous part of cash flow allocation was welcome. Current value accounting was not really intended to allow for inflation and did not treat a company specifically as a going concern. Therefore, unless it could be developed along more practical lines the approach should be put aside in favour of replacement cost which should receive their attention and support.

Turning to the effect of inflation accounting on investors, Table 4 set out by sector the changes in ED8 estimated earnings, and recent movements in relative share prices. The speaker suspected that whilst some of the slight correlation between the two series represented the market's allowance for inflation accounting, rather more represented the relatively poor trading performance in recent times of those companies that were also most vulnerable to the effects of inflation. The authors appeared to expect the trends in Table 4 to continue, if inflation continued. That might happen, but it was surely possible that, if a company was in future forced to acknowledge the full effects of inflation on its overall trading position and, for the first time for many years, was seen to be taking appropriate action, then its share price performance might improve, in line with the company's improved market status. That type of improved performance would justify the move towards more realistic accounting. Certainly it was needed as investors searched for real returns from their portfolios. In some cases inflation accounting would result in higher earnings. The speaker thought that that was quite acceptable although the investor might defer a full re-rating of the company's shares until it became clear how management would react to that windfall. Conversely, if inflation earnings were sharply down, the investor had to accept a probable fall in the share price as the short-term cost of long-term recovery. The alternative was probably a slow decline to lower price levels, possibly ending in bankruptcy.

Investment analysts would welcome any extra data that emerged from inflation accounting. They would also try to estimate inflation earnings in advance, and that would involve assumptions about the rate of inflation. The speaker was sure that analysts would use a rate that reflected the company's activities and not the general experience of the economy. By implication that supported the replacement-cost approach rather than current purchasing power.

He believed that the incidence of taxation should not affect views on inflation accounting, but that did not mean that the possible effects of a certain method of inflation accounting on taxation should be ignored. He did not think that it should be automatically assumed that the share of the total tax burden borne by the private corporate sector ought to remain as at present. The present share had evolved partly as a function of substantially overstated profit levels and more realistic profits could lead to lower taxation, although that was clearly unlikely in the present social climate. If current corporate taxation was to remain unchanged in money terms, in spite of the declaration of lower profits, and earnings, there could be several outcomes. Either selling prices would rise, unwelcome in the context of containing inflation, or unprofitable plant would be closed with adverse results for employment levels, or capital investment would fall, damaging the nation's capacity to produce and employ. Thus, looking ahead more than a year or two, relatively lower taxation could be the least harmful option.

Inflation accounting could affect corporate management generally. In recent times there

had been striking examples of improvements in efficiency resulting from new developments that had had widespread effects. The reduction in labour requirements during the early seventies was such an instance. A significant move towards inflation accounting could be another such development. That was perhaps most likely to happen where the main effect was for management to be shown not to have been allowing properly for inflation. A complete reappraisal of the company's objectives and policies should produce a healthier base for shareholder, employee and society as a whole. In particular the realization in some cases that the company was not earning sufficient profit to finance even existing pension arrangements might result in dramatic changes, particularly if prices could not be raised because of competition.

There were two dominant objectives at present. The first was to move very soon towards some form of realistic inflation accounting. The authors had under-emphasized the need for action. Secondly, they should join with the Society of Investment Analysts in pressing as hard as possible, without too much concern for difficulties of detail, for the replacement cost approach. The authors had been tempted by current value accounting, but were quite clear in their rejection of the current purchasing power approach.

Mr L. W. G. Tutt, F.F.A., said that both actuarial and accountancy practice had been developed for the special case when money was stable in value and not, as would have been more logical, for the general case when money values were unstable. Some current difficulties in both professions arose from trying to generalize from the particular. When the authors referred to traditional accounting as a meaningless mixture what they regarded as meaningless arose because of a time change in currency value and the uneven impact of inflation. The supplementary statement proposal of ED8 involving more or less general application of a particular index appeared to the speaker to give inadequate regard, at least to the second of those factors, so that it could as a result also give a misleading impression.

A practical example of the need to get to grips with the uneven impact of inflation could be illustrated by reference to the article by Harper in *Public Finance and Accountancy* concerning experimental work in a local council where budgetary control was so important. The goods and services being purchased were affected by inflation, whilst resources were not completely subject to automatic adjustment because of it. The speaker felt that C.P.P. called for just as careful interpretation as historic cost, and that the C.V. development of the R.C. approach, when it had been elaborated further, might eventually prove rather more useful. Under C.V., long-term liabilities were discounted to present value raising the question of appropriate discount rates as in ordinary D.C.F. methods. It was sometimes suggested, and interestingly so in the NEDC publication *Investment Appraisal*, that in estimating the expected costs and revenues for a project, general inflation could be expected to have a similar effect on both costs and revenues, so that there was no need to build its impact into the calculation of the cash flow so long as it was discounted by the money cost of finance less the expected rate of inflation. However the speaker felt that the concept of inflation being even in its incidence and even in its extent, rarely fitted present circumstances so that after giving effect to appropriate inflation rates discounting was by rates of financial money cost.

In general commerce, taxation could not be disassociated from inflation. An inflationary policy tended not only to be accompanied by relatively high general levels of taxation, partly due to the subsidy of essential State social services and nationalized industries. It might also call for new taxes such as C.G.T. and the taxation of development gains as income, etc., which brought into taxation both real and inflationary profit. C.V. could result in broader taxation of unrealized capital gains. Thus not only did inflation have direct effects which did not cancel out, it affected taxation policy indirectly and thus superimposed even further unevenness. Therefore it was desirable that inflation accounting should give proper regard to that unevenness before historic-cost accounting was abandoned.

There was a specific reference in the paper to non-life insurance. Estimated effects of inflation should be brought into consideration when fixing provisions for unexpired risks, IBNR claims, etc. Although the authors had suggested that non-life insurance companies were in some respects a step ahead of C.P.P., such companies might in practice be stopping short of inflation

accounting unless an allied method of asset valuation was adopted which gave proper regard to inflationary effects, perhaps of an oscillatory nature, on market values.

The authors had referred to a shareholder being forced by reason of inflation and restraint to accept a reduction in real income. That was merely one example for such a reduction could become much more widespread. Moreover, continued limitation of interest rates to levels well below inflation rates could induce subsidies and further irreversible State intervention in private industry. Thus eventually the make-up of the present mixed economy would be significantly affected.

Mr H. A. R. Barnett said that his main concern about the paper was his feeling that the authors and the opener would like to see historic-cost accounting disappear completely. For a number of reasons the speaker did not think that was feasible: the people who were interested wanted to know where the 'meaningless' mixture of pounds had gone. Mr Parker had mentioned pension funds and the fact that for some time they had had both historic-cost accounts and actuarial valuations. The speaker did not think that the members of any pension fund would be happy if their annual accounts disappeared. They were interested to know what in 'meaningless' pounds they had contributed, if their's was a contributory scheme, and how many 'meaningless' pounds their employers had contributed. All that interested them in the actuarial valuation were the recommendations at the end which they hoped would indicate that the benefits were to be increased.

If the actuarial and accounting professions accepted that inflation accounting was the ideal, that was likely to give rise to the feeling that inflation would be with them for evermore. The authors expressed the feeling in §47 when they said that governments were unlikely to be able to eliminate inflation completely. That was defeatist talk. Sooner or later there would be a political party or group of any two or more political parties, which would realize the economic facts of life. There were three sacred cows which could not all co-exist: freedom from unemployment; freedom from inflation; and the right to strike. It was not for him, in a non-political meeting, to say what was the order of importance of those three, but it was certain that a future government would realize the facts that he had stated, and when that happened it was quite likely that inflation would no longer be with them, at any rate to the extent that had been seen in the past few years.

Mr P. D. Jones wondered when historic cost accounts had become distorted sufficiently to justify the authors' recommendation for their gradual abandonment; or, more specifically, at what rate of inflation did historic-cost accounts become a meaningless mixture of 'pounds' of different dates and differing values as opposed to merely a mixture of pounds of different dates and value?

The paper had made no attempt to answer that question. Indeed, the speaker could find no mention in the paper of the great service that historic-cost accounts and the accountancy profession had rendered to the investor in the U.K.—certainly since the 1948 Companies Act and possibly before. He recalled that there were still countries in Europe where there existed no consolidated sets of accounts and no generally objective principles of accounting and where, perhaps most vital of all, there was an absence of that important certificate that was seen in United Kingdom accounts, that they represented a 'true and fair view'. By that, he meant true and fair in respects other than the effects of inflation.

It seemed to him to be a most important aspect of 'good stewardship' that within reason any two chartered accountants in the U.K. would strike historic-cost accounts which bore a similarity in individual years and a parallel trend over a period of years whatever the views of the company's management. It should be remembered that investment decisions—certainly in the long term—were taken on the broad trend of figures rather than a precise increase or decrease in a company's pre-tax profits for any one year or its net assets.

The paper offered an analysis of three types of accounting; historic-cost; current purchasing power accounts as set out in ED8; and replacement cost accounting. Historic-cost accounts were reasonably well understood by users of all types, a point not to be underestimated; they were as objective as they could be made, and because they were a reflection of cash flows and a

relatively unambiguous tax system they were distorted only to a small degree by the 'imagination' of directors and managers.

Current purchasing power accounts as set out in ED8, although likely to be less understood by the public at large, also possessed those characteristics. The method of adjustment was clearly laid down and the index of inflation was a single series to be applied to all companies. Unfortunately, the resulting adjusted accounts could in no way be said to be representative of the real world. The new depreciation charge was after purely theoretical adjustment, having no regard for the actual fixed asset concerned.

Replacement-cost accounting set out to remedy that last difficulty but in so doing it placed so great an onus on the management in the selection of the relevant replacement costs, particularly in the case of assets subject to high rates of technological improvement, that the average finance director would have greater power to reveal profit at his discretion than an actuary had to release long-term life fund surplus!

Thus the dilemma thrown up by the two broad types of inflation accounting—whether to choose objectivity in the case of current purchasing power accounts at the expense of reality or vice versa. He disagreed with the authors' statement in § 18 that 'as to abuse, directors who are determined to undertake some creative accounting will find a way of doing so whatever accounting system is adopted'.

He agreed with the main features of ED8—that companies should continue to present their basic accounts in historical pounds but present shareholders of quoted companies with a suitable supplementary statement. He was far from clear how that supplementary statement should be arrived at. It should analyse, in the form of pence per share, the difference between historic-cost earnings and the inflation accounts' calculation of earnings. That difference would be analysed under the headings in Appendix II, that was, depreciation, stock, short- and long-term monetary liabilities, etc.

He asked at what level of inflation did historic-cost accounts become so seriously distorted by inflation that an intelligent investment manager or company director or creditor could not mentally adjust for the effect of inflation. Perhaps he could begin to answer the question by borrowing from atomic physics the concept of half-life. Over what length of time did the real value of money halve for a given rate of inflation? From tables they could obtain the following:

Rate of inflation	1%	2½%	5%	7½%	10%	15%	20%
Half-life in years	69	28	14	10	7	5	4

He thought that there would be general agreement that at 1% rate of inflation historic-cost accounts were vaguely right; that they were not bad at 2½%, although at 5% he began to be uneasy. At 10% he did want to try and quantify the effects of inflation.

He considered a company with static volume production in one product. Assuming that it scrapped a machine every year and replaced it with an identical new one, and that a machine lasted n years, so that the company had n machines and that the rate of cost inflation of the machine was a constant i% per annum. A few compound interest formulae provided some simple criteria for determining the importance of inflation at varying values of n and i. In view of the slow real growth of the U.K. economy, he suggested that model might have some relevance to the real world. For example, one criterion could be replacement value of the gross cost of plant divided by historic gross cost of that plant.

If the replacement depreciation was charged to allow for the rate of inflation to-date, using the method then the criterion: annual replacement depreciation divided by historic-cost depreciation, was set out in the following table:

Life of machine in years	*Rate of inflation per annum*			
	5%	10%	15%	20%
5	1·15	1·32	1·49	1·67
10	1·30	1·63	1·99	2·39
15	1·45	1·97	2·57	3·21
20	1·60	2·35	3·20	4·11

The table of net book cost (gross cost, less depreciation) would be slightly different but, typically the figures in the above table would be increased by 5% to 10%.

Clearly, those tables conclusively favoured the immediate introduction of inflation accounting if it was thought that high rates of inflation would persist for a long time. However, it was worth remembering that most companies had financed their plant by a mixture of equity and fixed-interest finance. In the balance sheet that fixed-interest capital could be considered as an offset to the quantity of fixed assets subject to the effects of inflation. Likewise, the interest on that fixed-interest finance would act as an offset to the higher depreciation charge in the profit and loss account. Consequently the net effect of inflation on a company might be less than his figures would indicate.

Appendix I revealed average rates of inflation of about 5% per annum over periods starting between 1953 and 1963, that was over 10-year to 20-year periods, and 7½% per annum over the last 5 years. However, the net effect on company earnings shown in Appendix II was perhaps less horrifying than might have been supposed. For 40% of the sample total earnings changed by less than 15%. Many of those companies which showed seriously reduced earnings appeared to have suffered principally from under-depreciation. That might be a matter of inadequate pricing policy.

He was sure that almost all sectors of the community had acquired some understanding of inflation and its effects. He could not endorse the gradual dropping of historic-cost accounts and their replacement by some form of inflation accounting without the projection of inflation rates consistently over, say, 10% per annum. He would prefer not to believe such a projection. The social and political consequences would be so serious that he rated it improbable rather than probable. If it came about it would surely bring in its train a political system such that the present uses of accounts were likely to be drastically changed. He suspected that the authors had come to accept high and continuing rates of inflation even though in most of their lifetime inflation had been at modest rates. It was significant that deflation had not been mentioned in the paper. They had overlooked some important facets of accounting. In wanting to do away with conventional historic-cost accounts they were in danger of throwing the baby out with the bath water!

Mr J. R. Hemsted said that historic-cost accounting could produce quite a variety of different answers given the same transactions. Probably they would find the same was true of C.P.P. accounting. In other words, it was not the whole truth. There was no doubt in his mind that the current value in the balance sheet was as near as could be obtained to the true value and he accepted the proposition that the best measure of profit or earnings of a company was the increase in the equity during the year measured in terms of current values. That gave a profit in money value and it was easy to convert it to real value by applying a cost-of-living index in much the same way as accounts in one currency could be converted to another.

The algebra in Appendix I helped to identify the factors contributing to the difference. That could be done readily in terms of C.P.P. and historic cost and the equation showing the relationships between profit and historic cost and profit and C.P.P. was interesting as it highlighted the fact that C.P.P. did not bring out a real profit, and historic-cost profit was not really a money profit.

Taking the current value definition of profit as the money profit and the adjusted one as the real profit, it could be concluded that historic-cost profit usually understated the money profit and might be regarded as an approximation to the real profit. The C.P.P. profit was different; it might be a better approximation to the real profit, but he did not think it was correct to describe it as real profit. That was a fairly common trap. From the paper the speaker felt that the NEDC had fallen into that trap. The proposition was that one approximation should be replaced by another which itself was not likely to be very exact.

A point mentioned in ED8 but not in the paper provided for a company to revalue stocks if the market value was below C.P.P. value, and equally if the company chose to up-value its fixed assets that was also taken into account in the C.P.P. calculations. To some extent therefore subjective elements could creep into C.P.P. bringing it nearer to current value accounting. He

did not see why they should not go the whole hog and adopt current value accounting, in preference even to the replacement cost version. That was right in the case of their own industry; C.P.P. was practically worthless when applied to insurance companies where the assets were largely in investments which were varying in value from year to year, and probably market values rather than any C.P.P. calculations would have to be relied upon, particularly for questions such as solvency margins. With many of the leading companies disclosing market values and possibly even revaluing liabilities more in line with market conditions, insurance companies themselves were moving towards current value accounting and that was where they would end up, he thought. He did not regard the move to C.P.P. worthwhile even as a half-way step.

Mr G. B. Hey said he liked the opening quotation to the paper, but felt that there must be a third possibility. He had tried hard to classify DTI returns either present or projected as either vaguely right or precisely wrong, and he could not come up with an answer, so he felt that there must be something else.

Mr Jones had said that people understood historic-cost accounts, but he disagreed. They might think they understood them; they thought they understood Rolls-Royce, but it went bankrupt.

The paper was very helpful in clearing up ideas, but much of the discussion on the subject seemed to start in the middle and, as a result, end in a muddle. It was helpful to go back to first principles. The speaker took himself as a private individual, or possibly a trader, and looked at what he was worth at the end of 1973 in terms of 1973 pounds. He then looked at what he was worth at the end of 1972 in 1973 pounds. What he was worth at the beginning of the period represented so much purchasing power, and therefore he would use a retail price index. What he was worth at the end had so much more—he hoped—purchasing power, and the increase would be his gain on the year. He would not use the word 'profit' because that was a misleading term. He was aware that there were serious problems of valuation which he would not consider yet. It seemed that the measure he had reached was the third of the authors' methods—the C.V. method.

It was the word 'profit' that got them into a muddle. Just as historic accounts were a mixture of different pounds, so profit in the terms used by accountants was a mixture of all accretions of different kinds. Some arose from ordinary trading activities, from buying, processing and selling, and some were in effect inflationary gains or dealings in options where something was bought and later sold. To give one figure for profit was simply to add up a lot of quite incompatible things. What was really wanted was an approach which measured the gain in purchasing power over a period and then analysed it into its various components, although the practical problems were formidable.

Mr J. G. Day said that as actuaries, and primarily as investors, they needed proper knowledge on which to assess shares in an inflationary age. As a matter of general equity they should support any move which ensured that taxation was more fair, in other words that taxation should be based on real profits and not purely on historical profits which may differ in real terms. The problem with inflation accounting was that either the adjustment was for an average rate of inflation or appropriate adjustments were made for different types of assets, in which case it became highly subjective. The method that had been recommended by the accountants, and would soon be shown as supplementary information by many companies, was the C.P.P. method which had been chosen on the grounds of simplicity and its ability to achieve comparability between companies. C.P.P. accounts showed how much a company had earned after keeping the value of its equity assets intact in real terms—that was adjusting its equity assets in money terms at the current rate of inflation. By their very nature C.P.P. accounts produced figures which were adjusted by an average rate of inflation and did not pretend to show precisely how each company had kept its own particular assets intact. The adjusted balance sheet figures could not be read as giving the current market values of the various assets.

The paper demonstrated how C.P.P. accounts were produced, what kind of profits they

showed and how they might be presented. However, an investor needed to look forward and he needed the information on which to assess shares assuming different rates of inflation in the future. Any information would be helpful but the more accurate the real values that could be given, then the more accurately could assessments of the future be made.

He did not think that inflation adjusted accounts were likely to lead to greater use of dividend yields as a criterion rather than earnings per share and price earnings ratios. They had been living with inflation for some years and investors had been allowing for inflation. The fact that, in future, investors might get more information and be shown some genuine attempts at inflation adjusted earnings rather than their own personal guesses would not cause investors at that stage to use dividend yields in place of earnings. Of course, political factors might lead to greater use of dividend yields.

It was ironical that they should currently be considering the subject; for many years assets had been rising steadily in value and inflation accounting would have given a far better impression of a company's progress than historic-cost accounting. However, the last few months had seen sharp inflation combined with decreasing values for many real assets, particularly property assets. That situation underlined an acute disadvantage of the C.P.P. method which adjusted all assets in money purchasing terms and did not allow for the real value of assets. Currently borrowing was a disadvantage and cash holdings were an advantage in complete contradistinction to the normal tenets of a C.P.P. faith. It underlined the need for property assets to be incorporated in accounts at a proper valuation and not at historical cost adjusted by an average rate of inflation.

In practical terms it might be unrealistic to expect the Government and the Inland Revenue to accept profit figures for taxation purposes which were either adjusted for an average rate of inflation, which might be palpably inappropriate, or which were adjusted as accurately as possible but on the subjective judgments of the directors. He could not foresee a complete jump from taxation on an historical accounting basis to a C.P.P. basis, but all support should be given to some rebate for those who suffered unfairly from taxation on an historic-cost basis.

Mr A. P. Thompson (a visitor) welcomed the paper as an extremely useful initial contribution to the understanding of the various techniques which could be used for accounting for inflation. However, the authors had said very little about the meaning of C.P.P. earnings and how they could be used by investors. The authors had given C.P.P. earnings figures and P/E ratios without reference to the rate of inflation employed in the calculation of those figures. As the adjustment from basic to C.P.P. earnings depended crucially upon the rate of inflation during the year, and the rate of inflation had fluctuated sharply over the last two years, the impact of C.P.P. accounting on different companies depended as much on their year-ends as upon their capital structures. Only a part of the picture was shown if C.P.P. earnings were given without, at the same time, stating the rate of inflation for which they had been adjusted.

Possibly the biggest problem in using C.P.P. earnings for valuing equities was the fact that, for most companies, earnings fluctuated sharply from year to year, especially when the rate of inflation changed. Indeed, if the rate of inflation rose as it was doing in the current year, to over 15%, many companies would earn no C.P.P. profits at all. That did not mean that the shares of those companies were valueless, for there should be a positive price for any asset which could maintain its real worth in a time when the value of money was depreciating rapidly. It did, however, show that the straightforward linear valuation of shares which had been carried out by use of basic P/E ratios could not be applied in the same way to C.P.P. P/E ratios. Techniques were available to solve that problem, but it was not the time to go into them. The speaker suggested that the adoption of C.P.P. earnings would make it impossible for the educated investor to use the P/E ratio in the over-simplistic manner in which it had come to be used on both sides of the Atlantic over the past 10 years.

One of the virtues of inflation accounting was that it forced investment managers to return to fundamentals in their thinking. A fundamental assumption in valuing a share on a P/E ratio or on an earnings yield was that the earnings could be maintained. In a time of rapidly increasing inflation that might be true of basic earnings because companies enjoyed the benefit

of substantial stock profits. However, it was not true of C.P.P. earnings, especially when prices and profit margins were subject to Government controls. It was no use looking at C.P.P. earnings of 1972 or 1973 and expecting them to be maintained in 1974 or 1975 if inflation continued at the present rate. The future rate of inflation had to be assessed to see what level of C.P.P. earnings the company might be expected to earn with that rate of inflation. That could then be compared with the real return on gilts.

Mr E. K. Wright (President, Institute of Chartered Accountants in England and Wales) had enjoyed the privilege of joining the actuaries at their meeting and expressed great admiration for the paper; it was one of the clearest papers on the subject that he had come across. There was no need to emphasize the importance of the proposals and he wanted to make one plea: there would be as many ideas about the manner in which the principles outlined in the paper should be carried out as there were people in the room. The idea had been a very long time growing. He had been concerned with it since 1947 and there had been periods during which there had been lulls, but for most of that time people had been working on the matter not only in the U.K. but in most of the other advanced countries of the world. No egg had yet been laid; the chicken was getting very excited at the moment, and an egg would be laid in a few weeks' time.

The chartered accountants were in no sense arrogant about ED8. They knew it was not perfect; they knew that there was much more that could be done, but a start had to be made somewhere. One example often made something much clearer than any amount of print. In 1922 a Dusseldorf hardware merchant started business with a hundred bags of nails. He was an extremely conservative person and decided to prepare monthly accounts. Inflation was proceeding at the rate of 25% per month compound. Each month he prepared his accounts on an historic-cost basis. He decided to consume only half of his profit and to plough the rest back into his business. After five or six months or so he found that he had one nail left—it had fallen out of his last bag. He changed his policy, he used the nail. He drove it into the wall and then hanged himself. That was inflation accounting!

Mr R. E. Artus (Chairman, Society of Investment Analysts) said that his Society had not entirely agreed with the accountants, except in the fundamental matter which was that the situation had now been reached where it was essential that some indication should be given to all concerned of the inadequacy of historic-cost accounts. The accountants were about to issue a provisional standard on the subject, provisional because of the existence of the Sandilands Committee which was investigating the whole field. It was provisional in that it would be improper to become more than that before the Committee report was to hand.

None the less, there were firm indications as to the way the accounting profession wished to go, not just provisionally, but when allowed to do so, permanently. It was for that reason that the Society was supporting wholeheartedly the early introduction of ED8 type of inflation accounting in the interim, still wishing to argue that that did not meet what as investment analysts they would like to see being provided. There might be some doubt yet in the accounting profession why that should be so. One of the standard examples of the benefits of consumer price adjustment to accounts was the position of an investor. It had been said that if the investment position was considered in 1972 currency and then in 1973 currency and the two adjusted, then that was what was wanted. It was, if all that was wanted was to make some judgment about having kept pace in the past with what had happened to prices. Even then he doubted if it was wholly relevant. There would be an adjustment for price movements, first of all to the income flow and particularly to the dividend and to earnings, and on the other side, to the balance sheet values. The rationale was that if the investor saw how his investment was performing in terms of maintained purchasing power, and he did not like it, he could buy something else. But that did not work for the assets side because what he saw was how the balance sheet of the company had been maintained when adjusted by a general index. It was difficult to see under what circumstances that was relevant to what he would get if he switched out. What he would get if he switched out of the company would be what he could sell for. There was no likelihood that those two figures would coincide.

Moreover, investment analysts were not primarily concerned in practice as a profession to say whether a past investment had maintained purchasing power or produced some particular rate of return. The Society, and most people in the investment field, whether actuaries, accountants or economists, basically justified their existence and the advice they gave by what they said about the future, by their ability to use their analytical techniques to make valuable predictions and to advise on the future. It was for that reason that the analysts were concentrating so heavily on having figures adjusted so that they were relevant to the question of companies being able to work efficiently at regenerating themselves for the future. That was the sense in which they believed the replacement cost approach could be developed to offer a good deal more than the consumer price index adjusted approach.

He congratulated the authors on the excellence and clarity of their paper, but thought that they had confused many people by the emphasis they had given to the current-value approach. A case for such an approach could be made without arguing the need to do so on account of adjusting for inflation. That was an alternative method for viewing what profit meant rather than a method for adjusting, particularly for the accelerated rate of price inflation which was currently a problem. It might have a great deal of merit as an alternative. None the less, the state of the argument currently was that present, and historic, traditions of accounts needed to take account of the inflationary position which had arisen; that it was urgent that something should be done; and that in practice they were talking about ways of adapting traditional practice rather than replacing it with a radically different approach. He believed that if the current value approach came to the fore it would delay something being done rather than help.

Mr L. G. Hall, in closing the discussion, welcomed most warmly the paper presented to the Institute jointly by an actuary and an accountant. It was tangible evidence of the understanding by each profession of the other's point of view and of the great opportunities for collaboration between them. Mr G. V. Bayley, in his contribution to the discussion on Mr Ford's paper (*J.I.A.* **101,** 75), set out the respective responsibilities of the actuary and the auditor in the preparation of life office accounts, and the speaker recommended everyone to study his remarks. Because it was a general truth appropriate to the present discussion as well as to that of the previous November which referred in particular to the financial disclosure of a life office's affairs, he would quote Mr Bayley's final comment which was that there was everything to be said for co-operation between actuary and auditor, but their respective responsibilities needed to be identified in such a way that neither was eroded. The converse would indeed be against the public interest.

In considering life office accounts they were in an area which was acknowledged to be the joint territory of the two professions. When they were accounting for inflation they were on what was generally accepted to be accounting ground. Before going more precisely to the particular aspects of accounting dealt with in the paper, he wanted to set out briefly his own philosophy of what accounts were all about.

Accounts were necessary to provide a true and fair view of the financial position of a company, both static, i.e. the balance sheet at a point of time, and dynamic, i.e. the profits earned over a period, normally one year. Whilst he did not challenge the whole 'true and fair view' concept, he recognized that there was no unique true and fair view, because it was subjective, and depended not only on the judgment of the individual accountant involved, but also on the expert, and again subjective, view of, for example, the financially-trained shipbuilder who valued work in progress in a shipbuilding company, or the actuary who valued the liabilities and assets of a life assurance company. The actuarial concept of value had an importance far beyond life assurance. In its simpler aspect, it was sometimes called discounted cash flow.

Properly constructed accounts assisted a shareholder or commentator, or interested member of the public, to form a quick yet fair judgment of the way in which a company was discharging its responsibilities to its shareholders, and also to its customers, its staff and the community, and to provide a warning system—the term 'early warning system' was perhaps inappropriate—if things were going wrong.

Such accounts enabled the investment analyst to judge the merits of one company against

another—comparability between companies was important yet difficult to achieve—and the ultimate outcome of the work of the analyst and its effect on the market was to channel the savings of the nation into economically rewarding fields, subject always to any social controls which might be imposed by government, or indeed by corporate good behaviour. Proper accounts, comparable from company to company and from one year to the next, were essential as a basis for taxation. The basic paradox of company accounts was that the true and fair view was subjective, not unique. The needs were for generally accepted guidelines on one hand, and clear statements of assumptions made on the other.

Realism in accounting was a vital national need as was the creation of wealth. Politicians could argue about how wealth should be shared but no one should argue about the need to create it. If a company failed to provide properly for replacement of fixed assets and, indeed, stock, before striking a figure for profits; if the Government took away in taxation so-called profits which were never really profits at all; then the nation was eating the seed corn, and deluding itself into thinking that it was making adequate provision for investment when it was doing no such thing. Everyone had to be made to see that and understand it—everyone, not just the sophisticated investment analyst—so simplicity of presentation and ease of understanding became really important objectives in any system of accounting for inflation. In very simple circumstances shown in § 20 the profit by the historic-cost method was £500, by current purchasing power accounting £400, and by replacement cost accounting £100, to say nothing of the production in §§ 23–4 of a profit of £500 by conventional accounting methods, £391 by current purchasing power accounting, £875 by current value accounting unadjusted for inflation, and £550 by current value accounting adjusted for inflation, to see not only the importance but also the difficulty of establishing one single acceptable comprehensible and realistic approach to the problem.

He particularly welcomed a comment from Mr Artus, when he said, speaking for the Society of Investment Analysts, that he was prepared to support the early introduction of ED8 as an interim measure, even though it did not meet all of what analysts required. Certainly it did not, but it was essentially the job of the analyst to develop the further material he required from the C.P.P. figures that he would have in the first place.

Mr Parker had said that the attitude of management in respect of their accounting methods was informative to investors; Mr Martin had said that realism in accounting when observed by the public would improve a company's market status. Both these comments were important and right. Mr Martin had said that profits as a share of gross national product had been falling steadily and were now too low for continued viability. That comment was disturbing but true.

Mr Thompson had done a great deal of valuable work on inflation accounting and had pointed out that the rate of inflation was vital when establishing the effect of C.P.P. on earnings and also that zero C.P.P. earnings did not necessarily mean that a share was valueless. The job of the analyst would get no easier; indeed, in an inflationary world it had become more difficult. Perhaps the most difficult task of all was assessing the future rate of inflation.

Mr Hemsted alone had spoken up strongly for current-value accounting. It had been described as an unattainable ideal and as being too subjective, but he agreed with Mr Hemsted when he had said that the best profit measure was the equity increase according to current value accounting adjusted for inflation. He disagreed equally strongly when Mr Hemsted had said that he wanted to go straight to current-value accounting in preference to C.P.P. and R.C. accounting.

Mr Day, who had been closely associated with Mr Thompson in his work, had spoken of the importance of incorporating property assets at the proper valuation, and in saying that he was making part of the case for replacement-cost accounting. He (the speaker) did not feel that it was possible to go straight there, it was up to the analysts in particular to go there from the C.P.P. figures.

He could sum up his own views by asking whether it was possible to find one form of accounting which satisfied the shareholder, the customer, the employee perhaps as represented by his trade union, the community, the Inland Revenue, the investment analyst, the accountant and

the actuary. To take only the last three and their respective needs, upbringing and disciplines, it was easy to see that replacement cost accounting, which claimed to reveal true earnings after preserving the original capital in terms of the company's own productive capability, would appeal to the analyst; that current purchasing power accounting, which was basically a record of past stewardship at current prices, would appeal to the accountant; and that current value accounting, which was effectively what was produced when the financial position of a life office or pension fund was investigated, would have an instinctive appeal for the actuary.

The analyst should consider comparability and consistency. He should be starting from current purchasing-power accounts, which achieved a considerable degree of comparability between companies, although they had their inevitable quota of subjectivity. He should be using his own analytical techniques and judgments to develop from them; sometimes perhaps with the help of enlightened companies such as Philips, the replacement-cost accounts which perhaps he wanted to use, but which inevitably were so subjective as to destroy comparability except on his own assumptions. The accountant and the actuary should consider whether current-value accounting, adjusted in accordance with current purchasing-power principles, was not the most fully comprehensive of all the forms, and the proper synthesis of their own two approaches. If it was, was it practically useful?

There were difficulties. The concept of considering, and taxing, increases of real value rather than conventional profits, or realized capital gains, was entirely logical. The danger was not in the concept, but in the difficulties and subjectivities of the calculations, and in the fear that the rates of taxation applied might be so high as to destroy investment, and so high as to imply the eating of the seed corn to which he had already referred. It was worth stating, even if it was a slight digression from the main argument, that the taxation of gains deriving from inflation was wrong in principle; that if it was extended to unrealized as well as realized gains it was worse; yet that if inflation factors were eliminated, it was logical to levy tax on unrealized as well as realized gains, and to repay it on unrealized as well as realized losses; if that were done the distorting effects of the current capital gains tax on the management of an investment portfolio would be eliminated.

He agreed with the authors that current value accounting had considerable appeal and merited further consideration. He wanted to see the two professions combine to give it that consideration, it would not be a simple or short exercise, and even if all the difficulties were solved to the satisfaction of accountants and actuaries, the problems of explaining it to the public would be very great. Meanwhile he supported the introduction as soon as was possible of current purchasing-power accounting, without necessarily dropping historic-cost accounting, combined with a major public relations exercise to explain to everybody what it was, what it did and what, because of the simplicity which was its greatest virtue, it could not do.

The President (Mr Geoffrey Heywood) in proposing a vote of thanks to the authors, said that like many others in the Hall, he welcomed the paper for a number of reasons, but particularly because it discussed a subject with which he was sure they would all have to become much more familiar in the future. Although according to the paper the Institute of Chartered Accountants —and their President had referred to it—started to consider the subject as long ago as 1947, and issued a document in 1949, it seemed that there had been a great tendency to sweep the whole concept of inflation accounting under the carpet, to regard it as an academic exercise, to assume that inflation was only a temporary phenomenon and therefore to be quite happy with an historic-cost accounting basis. As a result, very little had been done. The paper stated that to date only some 12 companies had issued the supplementary information which was recommended by ED8. In that connection, the half-life figures which Mr Jones had given were very significant, and the President agreed very much with his conclusion that at 1% inflation accounting did not matter, at 5% it became important and at 10% it was absolutely vital. The figures in Appendix 1 showed that it was from 1970 onwards that high inflation rates had become a reality.

There was no doubt that unless greater and more successful efforts to contain inflation were made all—actuaries, accountants, analysts, investment managers, and stockbrokers—would

have to pay much more attention to the subject in the future if they were to find out the true profit of a company, and if they were to arrive at its realistic balance sheet position.

Different views had been expressed on the relative merits of C.P.P., R.C. and C.V. and he did not want to say which had won from the debate which had taken place. He was surprised that the setting up of the Sandilands Committee had not been mentioned more in the discussion. He regarded that as a particularly important event and was sorry that Mr Sandilands could not have been present at the meeting. He had been asked as a guest, but his committee was having a meeting that evening and so not only could not Mr Sandilands attend, but he had been unable to send a representative. He was sure the Institute of Chartered Accountants, the Investment Analysts and the Institute of Actuaries would all be submitting evidence to that committee.

Another reason why he welcomed the paper was that it recognized that actuaries and accountants could work together successfully. He had always believed that they could, but it was very nice to see it happen with a paper such as had been presented. As Mr Hall had mentioned, there were other areas where they would have to work together in the future, for example in the field of pension fund accounts, coupled with the desirability that proper allowances should be made for pension costs in the accounts of a parent company and also in the field of life assurance, and general insurance, accounts. During his term of office he had said on more than one occasion how essential it was for actuaries and accountants to work together in all those fields, and to identify between the two professions their separate areas of responsibility. He was sure the paper had taken them down that particular road.

His task was to thank Mr Parker and Mr Gibbs for the trouble they had taken in preparing the paper, and for submitting it to the Institute. All would agree that the paper had been thought-provoking, highly topical and many speakers had said how excellent it was. It had produced a very interesting and stimulating discussion.

Mr P. M. D. Gibbs, in replying, said that it had been a great honour to have been invited to take part as a joint author in a paper presented to the Institute of Actuaries even though he was a chartered accountant. It had been a pleasure to co-operate with an actuary; he did not think that he had fallen out on very many occasions with Mr Parker, although there was one occasion when they had debated whether or not they should have a double line underneath each total. Being an accountant, Mr Gibbs always wanted a double line, but being an actuary, Mr Parker felt that one line was sufficient!

He hoped that there would be further opportunities for co-operation between the two Institutes. He had been delighted to see both Presidents in the same room at the same time. One field where he felt there was need for co-operation was in accounting for pensions, as the President had mentioned.

Turning to points raised during the discussion, he referred first to conventional accounts in a meaningless mixture of pounds. Virtually all the speakers had felt reluctant to go the whole way with the authors and abandon the accounts in a meaningless mixture of pounds. He was not quite sure why they felt this way but he would not go to the stake for it, and if they wanted their meaningless mixture of pounds they could have them, provided that he could have his inflation adjusted ones as well. He particularly liked Mr Jones's comment that it depended on the rate of inflation. If inflation was 1% the difference between the two types of accounts was trivial; if it was 10% it became very significant. That was a useful way of looking at the subject. He expected inflation to be 10% or more for some years yet, and therefore felt that there was a strong case for inflation-adjusted accounts. If he had inflation-adjusted accounts and inflation disappeared, then Mr Jones would get what he wanted, because the C.P.P. accounts, when inflation was zero, were the same as the conventional accounts.

Secondly, on replacement cost versus C.P.P., he was surprised how few speakers had gone into that point. It was not an open and shut case; the authors had rather sat on the fence by saying that in general they went along with ED8 but that for the depreciation adjustment they would rather use replacement cost. It was absolutely essential to have a comprehensive,

complete adjustment. Many of the advocates of replacement cost forgot about the enormous adjustment for the gain or loss on the net monetary position.

The speaker confessed that he had been particularly responsible for the section of the paper dealing with current value accounting. It had been a passion of his for a great many years, and he had been delighted when he had found that Mr Parker accepted it instantly. It was in line with actuarial principles, as many speakers had said. He did not think that the audience was representative; with a group of chartered accountants fewer would stand up to advocate inflation-adjusted C.V. accounts as the best possible way of presenting accounts. He had been delighted to have had the support he had had.

Like Mr Thompson, the authors were stockbrokers, and were primarily concerned with investment. He agreed with Mr Thompson that the ED8 adjustments could not be taken as static figures; one company could not be said to be minus 30% for all time. Mr Thompson had said that it depended on the rate of inflation. It did, and in his own experience it depended even more on the actual level of profits that year. For every year for every company there was a different percentage change. The authors had recalculated their figures recently, having first compiled them a year previously, and some of the companies that were originally losers had turned up as gainers the second time. It was essential to take a dynamic approach and investment analysts would have to forecast adjusted earnings in the future. It would be no good forecasting conventional earnings and saying that in the previous year the C.P.P. adjustment was −30%.

Most people agreed with the case for taxation changes. Undoubtedly the present tax system was unfair in that it over-taxed companies such as British Leyland and undertaxed those such as Land Securities. He had been asked to say something about the ability of directors to fiddle the accounts. He had left the auditing profession 15 years previously but he had thought then that it was all too easy for directors to make the accounts, within limits, show what they wanted them to show. One of the arguments for C.V. accounting was that, although it introduced an element of subjectivity, it would eliminate some of the possibilities of fiddling because that often involved adjusting items between capital and revenue.

When he had first heard about it three years previously he had thought inflation accounting was an academic exercise. As the rate of inflation had risen he had become more and more convinced that it was not an academic exercise but a vital necessity. Conventional accounts could be provided as well, but basically long-term institutional investors should be concentrating on the adjusted accounts, and it was a minor issue which particular method of adjustment was used. It could be either ED8 or replacement cost, or some combination of the two. The main point was to make some adjustment. A company should be asked: do you make adjustment for inflation in your accounts? If not, why not?