

# **MANAGEMENT BIBLIOGRAPHIES & REVIEWS**

**VOLUME ONE**

Edited by Ken Elliott

# **Management Bibliographies & Reviews**

VOLUME ONE

*edited by*

Professor Ken Elliott



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## **Editorial Introduction**

The “state of the art” review is a well accepted feature of many scientific and technological subjects, and the advent of **Management Bibliographies and Reviews** is another sign of the developing maturity of a systematic approach to the study of management. The contents of this volume have been collected together for two basic purposes. For the practising manager who thinks deeply about his job, and for the teacher of management, they will act as a guide to the ever increasing mass of literature. They will also assist the research worker and librarian to get to grips with the important publications within the various sub-aspects of management.

Authors with specialist knowledge of each topic area were asked to select those aspects which they considered should receive particular attention. Following a comprehensive search of the relevant literature they compiled bibliographies which included only those contributions representing a significant advance in knowledge. In addition to books and journal papers, they paid particular attention to reports and working papers which generally only reach a limited readership. They then extracted the essence of these bibliographies for the reader who does not have specialist knowledge of the area. In this way the best of each topic area has been distilled and evaluated. The reviews enable the reader to obtain a rapid view of new developments in management thought, whilst the bibliographies pinpoint those seminal papers which will repay further attention.

No single volume can hope to reflect the totality of such a vast field as management, but **Management Bibliographies and Reviews** are intended as an ongoing venture, so that over a period of time the field will be adequately surveyed. The initial plan is for a five year cycle of coverage, with treatment of the following broad subject categories:

### **FINANCE**

Financial institutions  
Foreign exchange  
Capital markets  
Land and property  
Business formation and liquidation  
Dividend policy  
Asset analysis  
Managerial control  
Financial decision analysis  
Inflation accounting  
Conglomerates  
Insurance  
Pension funds

### **OPERATIONS MANAGEMENT**

Job design  
Work organisation  
Operations planning  
Control  
Product design and development  
Research and technology  
Materials management—inventory  
Logistics and materials handling  
Facilities planning and location  
Facilities layout and arrangement

**HUMAN RESOURCES**

Manpower planning  
Personnel selection  
Training and development  
Payment and reward systems  
Motivation and job satisfaction  
Working hours  
Labour turnover  
Industrial relations  
Leadership  
Organisational development  
Worker participation

**BUSINESS POLICY**

Corporate strategy  
Organisational planning  
Technological forecasting  
Long range planning

**MARKETING**

Marketing of commercial and social services  
International marketing  
Product development and testing  
Marketing communications  
Pricing  
Channels of distribution, retailing and wholesaling  
Marketing logistics and physical distribution management  
Fair trading and consumerism  
Marketing information systems  
Professional purchasing  
Marketing organisation and management  
Industrial marketing  
Buyer behaviour

This plan will be kept under review, and new elements will be introduced whenever new ideas produce a significant literature in the specialist journals.

This volume is the product of considerable collaboration. Without the hard work of the Editorial Advisory Board the initial ideas would not have been turned into a practicable plan. Thanks are also due to the authors who were willing to constrain their treatment of their subjects within the limits of space allocated to them. Finally my particular thanks go to Elizabeth Tupper of MCB who has transformed the individual manuscripts into a consistent and worthwhile contribution to the literature of Management.

*Professor Ken Elliott*

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# Inflation Accounting

by P. R. A. Kirkman\*

## RECENT INFLATIONARY TRENDS

In the last few years there have been many books[16, 21, 66] and articles[96, 97, 120] written about the subject of inflation, not only in the UK but in many countries overseas. This interest has been mainly due to the fact that recent annual increases in the general level of consumer prices have in many countries been the greatest for over twenty-five years, and in some cases have been the greatest ever experienced. These comparatively high rates of inflation began to develop towards the end of a decade (the 1960s) in which there had been a steady but not spectacular series of annual increases in consumer prices, which most countries had been able to restrict to an average of 4% per annum or less. In some countries, particularly in Asia and South America[123], the situation had been completely different with Brazil, probably the most extreme example of recent inflation, experiencing an average increase in consumer prices of over 40% per annum during the 1960s. The Brazilians have, however, been able to bring down their annual rate from 100% in early 1964 to less than 20% in 1972/3[32].

Most countries now maintain an index of consumer prices which should provide a realistic assessment of the average annual increase in the prices of goods and services in that country. Table I shows how consumer prices have increased in the EEC countries and the USA over the last eight years.

**Table I. Annual Percentage Increases in Consumer Prices**

	1966-7	1967-8	1968-9	1969-70	1970-1	1971-2	1972-3	1973-4
UK	2.5	4.7	5.4	6.4	9.4	7.1	9.1	16.0
Ireland	3.1	4.8	7.4	8.3	8.9	8.7	11.3	17.0
Belgium	2.9	2.8	3.7	4.0	4.3	5.5	7.0	12.7
Denmark	8.1	8.0	3.5	6.5	5.8	6.6	9.3	15.3
France	2.7	4.6	6.4	5.2	5.5	6.2	7.3	13.4
West Germany	1.7	1.5	2.7	3.8	5.3	5.5	6.9	7.0
Italy	3.7	1.4	2.6	4.9	4.8	5.7	10.8	19.1
Luxembourg	2.2	2.6	2.3	4.6	4.7	5.2	6.1	9.6
Netherlands	3.6	3.7	7.4	4.4	7.6	7.8	7.9	7.2
USA	2.9	4.1	5.4	5.9	4.3	3.3	6.2	11.0

Source: United Nations Monthly Bulletin of Statistics.

\* Senior Lecturer in Accountancy Studies, University of Exeter

It will be appreciated from Table I that in 1973/4 many countries experienced inflation in excess of 10% per annum and the UK's rate of 16% was one of the highest rates recorded outside South America. It seems probable that inflation rates in many countries may continue for some time in the region of 10% per annum, and in these circumstances accountants will have to examine very carefully their conventional methods of profit measurement, which are based in most cases on the assumption that there is a stable price-level system in existence.

### **DEFICIENCIES IN THE PROFIT AND LOSS ACCOUNT**

At one time the balance sheet was regarded by businessmen as the most important financial statement. Today most accountants would agree with the pronouncement made by the American Institute of Certified Public Accountants before the last war that a fair determination of income for successive accounting periods is the most important single purpose of the general accounting reports of a corporation. It is therefore extremely important that the measurement of business income (or profit as it is more widely called in the UK) should provide a realistic assessment of the trading performance of a business organisation.

The accountant's normal method of profit measurement involves a comparison of costs with current revenue. A critical examination of this approach has recently been produced by G. Macdonald[81]. The total revenue figure generally consists of goods sold or services provided during the period under consideration. On the other hand total costs are a mixture of current payments and amounts paid out in previous years which have been partly or wholly allocated to the current period.

Financial statements generally cover a period of one year, and it is therefore extremely important that the process of allocation should be carefully examined. One of the major problem areas in this process can be found in the depreciation of long-term assets where the life and disposal value are extremely difficult to predict. Inflation does, however, create additional difficulties. The problems in this area have recently been examined in a detailed article by H. C. Edey[42].

If it were possible to predict with some precision the life and disposal price of a long-term asset, the conventional profit and loss account would still not be really satisfactory because depreciation based on asset purchase costs of several years ago may be matched against current sales in order to assess the profit of the organisation. This area has frequently been a source of difficulty to the non-accountant who often associates depreciation with replacement finance. The needs of the non-accountant are, however, now being recognised with special books on this subject and the whole area of inflation accounting[74].

Depreciation has been the subject of many articles in specialised accounting publications, and the UK accountancy bodies have recently produced a provisional statement on accounting for depreciation[6] which has created a certain amount of controversy. There have, however, been few books devoted solely to this subject, the

usual coverage being one chapter in a book primarily concerned with more general accountancy matters. W. T. Baxter has made an outstanding contribution in this area with his book on depreciation published in 1971[25]. One of the chapters in this book is devoted to a study of changing price levels and their effect on depreciation charges.

The calculation of the actual cost of goods that have been sold produces many difficulties. In a company where stocks are low and are generally disposed of in a short period of time there are not a great number of problems, but there are many companies, especially in the manufacturing sector, where a substantial period of time elapses between the date on which raw materials are received and the date on which they are sold in completed form. During this period of time stock prices and the prices of goods in general may well have increased very significantly, and replacement costs will require much greater financial resources. By tradition, however, accountants have matched historical costs of possibly many months or years ago against the current sales revenue in order to produce a profit figure. The result in conditions of increasing prices is an inflated profit assessment, which if distributed in full to shareholders might cause severe liquidity problems when replacement goods are obtained. For example, A purchased goods for £30 which he sold six months later for £40, when the replacement cost was £35. Conventional accounting methods would show a profit of £10, and would ignore the implications of increased costs both for stocks and for other goods and services. B. Underdown[121] has described this area as "one of the weakest links in profit determination".

The solution to this problem is, however, not as easy as it might appear. Quoted companies frequently sell thousands of items each day, and it would naturally be extremely difficult to find out the replacement cost of all of these goods on the day of sale. In many cases, therefore, price index numbers would have to be used for adjustment purposes, although there are strong differences of opinion between those who feel that a general price index should be used, and those who consider that more specific index numbers must be adopted. The conflicts in this area were examined by W. T. Baxter in 1967 in a frequently quoted article in the *European Journal of Accountancy*[26].

Another criticism of the conventional profit and loss account under inflationary conditions concerns the purchasing power profit or loss that can arise through the holding of monetary assets or liabilities. This matter is generally not mentioned in traditional accounting statements, and as a result no real consideration is given to the loss in purchasing power that may come about because of the existence of say £100 held in a bank current account in a period of inflation. Conversely a bank loan or overdraft of £100 held during a period of inflation will generally have beneficial results, as the amount that will eventually have to be repaid will not have the same purchasing power as the amount originally borrowed. No indication is therefore given to businessmen that in conditions of inflation it may be more profitable to be in debt rather than to have funds in hand, so long as the money owed is effectively used.

It must not be forgotten, however, that there may be liquidity problems when large interest payments have to be made at regular intervals. The problems facing the private individual and the business organisation in deciding on debt policy have been examined in a number of articles on the subject[53, 75].

## DEFICIENCIES IN THE BALANCE SHEET

The assets shown in a business balance sheet are usually divided into two main categories, i.e. fixed and current assets. Fixed assets, e.g. property, machinery, furniture, etc. are usually shown at historical cost less any depreciation that is considered appropriate. As a result assets purchased many years apart are “added together to produce an arithmetically correct but rather meaningless total”[72]. Long-term assets that tend to appreciate in conditions of inflation, e.g. freehold property, are therefore usually shown at historical cost with little or no reference being made to the fact that current values might be much greater than costs originally incurred\*. With long-term assets that do depreciate, e.g. machinery, no references will generally be made to current replacement costs or net realisable values. Intangible assets such as goodwill are frequently ignored because of the very great difficulty in assessing the value of this asset. The sub-total provided for fixed assets is, therefore, in the vast majority of cases based on historical costs and provides little or no information about the current value of the assets employed in the business or the way in which prices have changed since assets were originally purchased.

The problems involved in the valuation of long-term business assets have been examined in many books and articles. One of the most detailed examinations of this subject is provided by E. S. Hendriksen[55] in *Accounting Theory* in a chapter entitled “Assets and their Measurement”. A more recent survey has been provided by M. E. Barrett[23]. Several articles have appeared recently in the UK accountancy press on the subject of goodwill. Perhaps the most outstanding of these was written by T. Lee[78] who has carried out a detailed examination of UK accounting practices in this area.

The information provided under the current assets and current liabilities headings is usually fairly realistic, and provides valuable material for the financial analyst who wishes to examine the liquidity situation of the business organisation. Stock (or inventory as it is usually described in the USA) and work-in-progress items do, however, have similar deficiencies to the fixed assets heading, in that stock is generally valued at the lower of historical cost or market value. In conditions of inflation this means that stock is generally valued at historical cost with little or no reference being made to the fact that costs may have changed very considerably between the date of acquisition and the date of the balance sheet. Probably the most detailed examination of this problem area is contained in an Accounting Research Study published in the

\* The UK Companies Act 1967, Section 16, does lay down that appropriate information must be provided in the directors’ report regarding any substantial differences between the book and market value of land provided that the directors consider that the difference is significant.

USA in 1973[22]. The Accountants International Study Group has also examined this subject and has provided an excellent comparative study of practices in the UK, USA and Canada[1].

The balance sheet is therefore a most inadequate document if the analyst wishes to assess the current value of the business. Many writers[110, 113] have stressed, however, that it is extremely difficult to assess current values, and some accountants fear that if this approach to accounting statements is adopted the balance sheet might become a statement largely based on personal opinions regarding valuations. In these circumstances there might be a considerable danger of fraudulent misrepresentation in accounting statements. Any suggested improvement should therefore be reasonably objective, and must be capable of being verified by company auditors and external government agencies.

### **HISTORICAL DEVELOPMENTS UP TO 1970**

The first major publication in the inflation accounting area was produced in the USA in 1936 under the title *Stabilised Accounting*[118]. The author, H. W. Sweeney, had already produced several articles on this subject[116, 117] following the completion of his doctoral thesis at Columbia University. The book did not create very much interest at that time as accountants did not consider that any significant changes in accounting methods were necessary. In retrospect, however, Sweeney can be seen to have been many years ahead of his time, as his proposals were remarkably similar to those suggested by the UK and USA accountancy bodies many years later.

Sweeney spent a considerable amount of time in Western Europe studying the ways in which French and German accountants had dealt with inflationary problems in the years following the first world war. In these two countries there were very great inflationary difficulties following both world wars and several articles have been written regarding the accounting policies that were adopted in those years[59, 60]. In the long term, however, there were few real changes and accountants soon returned to conventional accounting methods.

Interest in Sweeney's book was revived by the increased inflation that followed the second world war. There were no real examples, however, of companies introducing complete inflation accounting systems, although in the late 1940's several USA companies, e.g. United States Steel and Du Pont, tried to base depreciation charges on current replacement costs rather than historical costs. The Securities and Exchange Commission (SEC) opposed these changes because the auditors, backed by the American Institute of Certified Public Accountants (AICPA), qualified their report based on the grounds that this was not normal accounting practice. Eventually the companies involved abandoned their attempts to introduce additional depreciation into the accounts, although many businessmen felt that this was a more satisfactory method of accounting.

In 1948/9 the major accountancy bodies in both the UK and the USA issued pronouncements which recommended that members should oppose any departure

from historical cost methods. The AICPA's Committee on Accounting Procedure suggested, however, that supplementary statements adjusted for price-level changes might be issued. In January 1949 the Institute of Chartered Accountants in England and Wales (ICA)[63] published recommendation number twelve which accepted that inflationary conditions caused accounting problems, but no real guidance was provided regarding possible improvements, apart from the suggestion that special reserves might be created in which case any amounts involved should be regarded as a non-distributable reserve.

In May 1952 the ICA[62] produced another recommendation—number fifteen—which paid far more attention to the desirability of “setting amounts aside from profits to reserve in recognition of the effects which changes in the purchasing power of money have had upon the affairs of the business, particularly their effect on the amount of profit which, as a matter of policy, can prudently be regarded as available for distribution”. It was stressed, however, that such adjustments should be regarded as a transfer to reserve and not as a charge in arriving at net profit. After the issue of this statement the major UK accountancy bodies held a number of meetings to discuss this subject but no real progress was made. In 1953 the annual rate of inflation in the UK fell to a more acceptable level in the region of 3%, following rates of 9.6% and 8.8% in 1951 and 1952 respectively, and as a result the interest that had been stimulated in inflation accounting declined to a very low level.

In the USA a number of publications[12] retained academic interest in this subject although there was very little response from the business community. Perhaps the most notable contribution during this period was a detailed study by R. C. Jones[67] of the effects of general price-level changes on the profits record of nine steel companies. The results showed that over the 1940-47 period dividends, interest and taxation of \$409 million had been paid out of capital as opposed to the \$543 million surplus shown in the official accounting statements. A similar survey carried out in the UK by W. T. Baxter[27] showed that in the 1939-47 period the distributions of three steel companies exceeded inflation-adjusted profits in every year. These results were, however, not considered as particularly important by the business sector which in most cases regarded such adjustments as a theoretical exercise with little practical value.

Since these pioneering studies took place there have been a small number of similar projects, mainly in the USA. R. C. Jones[68] carried out a study of four USA companies, the results of which were published by the American Accounting Association in 1955. The latter organisation, which at that time was mainly made up of accounting academics, was keenly interested in the inflation accounting area, on which subject it had issued a statement in 1951[10] recommending supplementary accounting statements adjusted with a general price-level index.

Other case study material published during this period included a survey of a retail company produced by D. A. Corbin[39], and a study of two public utility organisations carried out by E. S. Hendriksen[56]. Interest in this subject area was not very

great, however, although it was revived to some extent by a major research study of 278 pages produced by the AICPA in 1963[13]. This publication, which is still one of the major reference books on general price-level accounting, was produced when prices in the USA were only increasing by about 2% per annum, and as a result the information provided was not really given the attention that it deserved.

In the years following the publication of the 1963 research study the AICPA was under considerable pressure to issue an authoritative pronouncement regarding the desirability of supplementary inflation-adjusted accounting statements. Eventually in 1969 an official statement was issued by the Accounting Principles Board[14] which had been created by the AICPA in 1959. The statement included the following extremely important comments:

“The Board believes that general price-level financial statements or pertinent information extracted from them present useful information not available from basic historical-dollar financial statements. General price-level information may be presented in addition to the basic historical-dollar financial statements, but general price-level financial statements should not be presented as the basic statements. The Board believes that general price-level information is not required at this time for fair presentation of financial position and results of operations in conformity with generally accepted accounting principles in the United States.”

This statement, which was a great disappointment to the advocates of general price-level accounting, did not persuade any companies to publish inflation accounting information. A number of companies did co-operate with the AICPA in the mid-1960's in order to illustrate that the 1963 proposals were practicable. The results of this study[103] were published in 1969, but no information was provided regarding the names of the companies. The fear that the disclosure of this information might affect stock exchange prices and confidence was obviously paramount at this stage, and by the end of 1974 only one USA corporation, the Indiana Telephone Corporation of Indianapolis, was consistently publishing supplementary inflation-adjusted accounting statements as suggested by the AICPA. This corporation had, however, been publishing information of this nature since 1954, usually accompanied by some detailed comments regarding the inadequacies of conventional accounting methods. T. A. Russell[106] has recently provided a valuable study of the accounting practices adopted by this organisation.

In the UK, interest in this subject was not very great in the 1960's mainly because the rate of inflation was generally confined to an annual rate in the region of 3%. In the late 1960's, however, prices began to increase rather more rapidly, and in 1968 the ICA issued a research publication entitled *Accounting for Stewardship in a Period of Inflation*[64]. This rather brief booklet, which did not necessarily represent the views of the Council of the Institute, provided some simple illustrations of general price-level accounting, and suggested that in the conventional accounts a transfer could be made to an inflation reserve based on the difference between conventional and inflation-adjusted profit figures. Once again, therefore, as in the USA, a document



had been issued with no real power behind it, and as a result there was no immediate response from the business sector. The foundation had been laid, however, for the developments that were to follow in the early 1970's.

Outside the UK and USA there were very few developments in the inflation accounting area before 1970. In Europe the major developments were in the Netherlands where it was estimated that something like 15% of the business organisations quoted on the Amsterdam Stock Exchange were using a system of accounting usually described as replacement value accounting[76, 79]. The best known company in this sector was the Philips organisation of Eindhoven. Their system of accounting, which involves the use of several specific price index numbers, has been described in accountancy articles on many occasions[19, 29, 49, 58]. Outside the Netherlands nearly all companies in major continental European countries have tended to use historical costs in their balance sheets.

In South America there were, of course, very high rates of inflation during the 1960's. In most countries the accountancy bodies are not very strong and as a result the changes that were introduced came about mainly because of government legislation. In most cases legislation was primarily concerned with fixed assets which were generally revalued with the aid of special index numbers. In such cases depreciation was generally based on the revised asset figure and as a result profits were significantly reduced. In a few cases working capital adjustments were also allowed, e.g. in Brazil, but in most cases the need for the recognition of losses and gains on monetary items was not considered. Several articles have been published on accounting in South America[123], and Brazil[9, 84] in particular, but language difficulties have created problems in a proper understanding of the South American situation.

In other countries there were a few isolated examples of companies introducing additional depreciation charges into their published accounts, but in most cases these were the exception rather than the rule, for instance, the Broken Hill Proprietary Company in Australia and the Imperial Tobacco Company of Canada. The latter company abandoned these methods in 1969, however, primarily because of public indifference, increased accounting costs, and the reaction of government bodies[102]. The number of companies actually using inflation accounting methods at the end of the 1960's was therefore pathetically small, and there is little doubt that few developments would have taken place in the early 1970's had it not been for rapidly increasing rates of inflation in most countries of the world.

## **DEVELOPMENTS IN THE 1970's**

In the UK one of the first actions of the Accounting Standards Steering Committee (ASSC), which was established in 1970, was to issue a twelve-page discussion document entitled *Inflation and Accounts*[2]. This was followed by a sixteen-page proposed statement of standard accounting practice issued in January 1973[4]. The main recommendations in this statement were: