

THE UNIVERSITY OF HULL

***INFLATION ACCOUNTING IN DEVELOPING COUNTRIES:
THE CASE OF IRAQ***

being a Thesis submitted for the Degree Ph.D.
in Accounting in the University of Hull

By

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TO MY PARENTS

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ABSTRACT

This study is concerned with how to account for inflation, in financial reports within the industrial sector. The study aims to recommend an inflation accounting approach which will provide government and managements with information required for decision-making and control. Iraq has been chosen as an example for Arab countries to find out how management reacts to changes in price level in companies' accounts.

In order to achieve this object, a field study has been conducted to discover whether inflation accounting systems are well known and used in Iraqi companies. Moreover, the study examines and assesses the different accounting measurements which have been suggested for financial reports during periods of inflation.

In the light of an evaluation of different accounting methods advocated for use during inflation times, a system is recommended for use in Iraqi Industrial Companies.

This study starts with the assumption that management needs accounting information which takes into account changes in prices; is provided frequently and in enough detail; is provided on time, and is relevant to management information needs.

The study is made in several stages. The first deals with the importance and need for study of inflation accounting. The users of accounting are then considered.

Measurement methods which are used for inflation accounting in several countries are discussed. The second stage is the case study, which deals with Iraqi industrial companies. The final stage provides an assessment of the findings and draws conclusion for future practice.

This work has been carried through and completed during times of wide and great changes in polity, in expectations of national development, in our understanding of inflation and of the purpose and techniques of inflation accounting. Such changes were discussed during the examination.

ABBREVIATIONS

AAA	American Accounting Association
AICPA	American Institute of Certified Public Accountants
APB	Accounting Principles Board
ASC	Accounting Standards Committee
ASR	Accounting Series Release
ASSC	Accounting Standards Steering Committee
BSA	Board of Supreme Audit
CCA	Current Cost Accounting
CIMA	Chartered Institute of Management Accountants
COSA	Cost Of Sales Adjustment
CPI	Consumer Price Index
CPO	Central Pricing Organisation
CPP	Current Purchasing Power
CV	Current Value
Cz\$	Cruzado (Brazilian Currency)
ED	Exposure Draft
FAS	Financial Accounting Standards
FASB	Financial Accounting Standards Board
GFAAA	General Federation of Arab Accountants & Auditors
GPI	General Price Index
HC	Historical Cost
IAAG	Iraqi Accountants and Auditors Guild

IASC	International Accounting Standards Committee
IASG	Inflation Accounting Standards Group
ICAEW	Institute of Chartered Accountants in England and Wales
ICAS	Institute of Chartered Accountants of Scotland
ID	Iraqi Dinar
MWCA	Monetary Working Capital Adjustment
NCCMD	National Centre for Consultancy and Management Development
NIVRA	Nederlands Instituut Van Register Accountants
ORTN	Obrigacao Reajustavel de Tesouro Nacional (Readjustable Obligation of the National Treasury)
PSSAP	Provisional Statement of Standards Accounting Practice
SEC	Securities and Exchange Commission
SSAP	Statement of Standards Accounting Practice
UK	United Kingdom
USA	United States of America
WPI	Wholesale Price Index

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Chapter One
Problem and Methodology

1.1 Introduction

The usefulness of conventional financial reports based on the assumption of a stable monetary unit has become the subject of debate during the last two decades. It is argued that the conventional accounting reporting system does not adequately accommodate the economic reality of price changes, and that the impact of price changes on business needs to be recognised if financial reporting is to be useful for decision-making. The Institute of Chartered Accountants of Scotland suggests that present financial reports are unsatisfactory because they concentrate on (ICAS, 1988):

- 1- The past to the exclusion of the future;
- 2- Cost rather than value;
- 3- Legal form of transactions rather than their economic substance;
- 4- Profit rather than wealth.

Because they assume a stable monetary unit, most enterprises show figures in the final accounts, which are neither accurate nor realistic, because historic cost does not reflect the 'value to the business' of the assets used and owned, nor does it show the correct profit figure, or indicate the real growth of the business. Therefore, many writers have emphasised the need to adjust company accounts to reflect changes in price-levels (McRae and Dobins, 1974, p.35).

The impact of inflation on accounting has been

characterised by two distinctly different views of the problem. One view considers the problem to be solely the effect of inflation on the unit of measurement. The proponents of this view believe the remedy is to change the scale of measurement by restating historical accounting measurements in terms of units of current purchasing power. A second view is that the problem is basically related to the attributes being measured and that it is necessary to adopt some notion of current value.

1.2 Statement of the Problem

There are several types of users of financial reports who have different interests in accounting data. Most of them, as will be seen in chapter two, need current information rather than historical figures. Among these users, especially in countries which have adopted economic planning, are the government and managers of enterprises. Their interest stems from their need for figures which help them to improve economic planning, budgeting and control, decision-making, and the measurement of the performance and efficiency of enterprises. Unless the reports disclose the real position, government agencies and managers of companies cannot depend on these reports in building economic plans, setting budgets or taking corrective action. Since the stability of the monetary unit is obviously an unrealistic assumption in present circumstances (Scapens, 1981), historical cost accounting produces figures and data which are unrealistic, and therefore should not be the basis for

preparing financial reports, which are used to evaluate performance.

In developing countries with economic planning, some of which use a uniform accounting system, as in our case study, Iraq, the managers of enterprises usually represent the government. Therefore, financial reports, particularly internal reports, are regarded as an important tool for planning, controlling and decision-making. Although the need for a change in published accounts has been recognised by different bodies, it seems that only a few have realised its importance for management purposes within each company.

In fact, most studies of inflation accounting have concentrated on published accounts, and little attention has been paid to the inflation problem in management accounts. Lund, B. (1974) has emphasised the kind of information needed by managers to measure the effect of inflation, not only on profitability and shareholders' funds, but on planning, budgets, and control. As inflation has serious effects on external reporting, it also affects internal reporting for measuring profit and leads to wrong decisions. The distortions may be worse in internal reports than in external reports. Allardyce, F. says:

The same distortion that can give false comfort in reporting financial results to the public can also lead to internal complacency in judging the performance of operating units. Worse yet, it can lead to wrong decisions. (Allardyce, 1983, p.48)

This problem has been recognised by the Chartered

Institute of Management Accountants (CIMA), which acknowledged the importance of studying the effect of inflation on management accounts, saying:

Management is concerned predominantly with day to day decisions in which inflation is one of many factors to be considered. In the long term inflation becomes of great importance and plays a major role even in short term decisions. We believe it is essential to present the facts so that decisions may be properly based. (CIMA, 1974, p.195)

Managerial decisions have a major effect, not only on everything in the company, but also on national accounts and government plans, and if these decisions go wrong then business and the national economic plan will not give the expected results. Therefore, the manager needs a special kind of information to help him to make the right decision at the right time, unimpeded by the effects of inflation. In order to achieve this, these reports should be based on current cost data rather than historical costs.

1.3 Purpose of the Study

Our intention in carrying out this research is to test whether there is a need to change both financial reports and management accounts to reflect changing price-levels in developing countries. Historical information is not useful during an inflationary period, and management will receive figures that are inaccurate and irrelevant; the cost of production will be understated, profits will be overstated, and the distributed "profit" will be drawn from capital. The research will study a suitable system of inflation

accounting for use in Iraqi industrial enterprises, to facilitate better planning and more effective control under inflationary conditions. The importance of this research lies in the fact that the Iraqi government has decided to keep only the profitable enterprises in the public sector. Thus, they need a measurement procedure to determine profits, i.e. on the basis of current cost, not historical cost accounting. Finally, the research is intended to fill a gap in accounting literature regarding inflation accounting in developing countries.

First it should be explained that, as Iraq has adopted economic planning as a major tool for developing economic and social life, most economic plans start from an enterprise which is responsible for preparing production plans, budgets, cost of production, and suggested prices of goods and services; the Ministry of Planning gathers these plans for all economic sectors, then determines the economic plan either for the short-term or for the long-term. Therefore, the financial reports and management accounts are important sources for planning, both at the enterprise level and at the Ministry.

Therefore, the study has the following objectives:

- 1- To study and evaluate the existing inflation accounting methods and other regulations imposed by different interested bodies. This will be done by tracing events in the real world and developments in the theory of inflation accounting. Attention will be focused on only a

few countries, such as the UK, the USA and the Netherlands. The practical side of inflation accounting is traced by examining the development of current cost (value) accounting in the Philips company.

Moreover, there is a brief examination of the development of inflation accounting in Latin America, particularly in Brazil, which provides a contemporary example of the application of the current purchasing power method.

The strengths and weaknesses of these inflation accounting approaches are analysed and a comparison made between these four countries.

2- To study and evaluate the current method and primary aims of financial reporting in Iraq and the primary aims of these reports, and examine the need for improvement. These matters will be viewed in the context of the major historical events that have affected the practice and development of accounting in Iraq. Finally, recommendations will be made for improving inflation accounting in Iraqi industrial companies.

1.4 Methodology

Most literature has dealt with inflation accounting in developed countries and little study has been made of the problem in developing countries especially in relation to managerial accounts. This study attempts to fill this gap in the literature.

In order to collect the data needed for the empirical

study of Iraqi industries, a sample of seven Iraqi companies was chosen, from which information was sought regarding how their managers deal with inflation in their accounting. Interviews were held with a number of managers, and accountants in these companies, and with a number of ministerial representatives and accounting professionals.

The interviews were guided by a questionnaire which was prepared and presented to the interviewees in order to find out:

- Whether they feel there is need for a change from historical cost accounting to current cost accounting, on the basis that historical figures distort companies results, and if so, what inflation accounting approach is preferable from the management's and government's points of view.

- What kind of difficulties they may face, or expect to face, in applying inflation accounting, and how these difficulties can be overcome.

1.5 Organisation of the Study

The thesis is broadly divided into two main parts. The first part examines in detail how the problem of inflation affects companies' reports and distorts accounting information. The second part presents an empirical study and shows how the problem might be dealt with in management accounts in order to provide accurate accounting information for decision-making.

The thesis is divided into ten chapters. Chapter two considers the development of financial reports in general, and the needs of users of these reports. Chapters three,

four, and five deal with inflation accounting in the UK, the USA, the Netherlands (particularly the Philips company), and Brazil.

The second part of the thesis presents an empirical study of seven Iraqi industrial companies. It is necessary to present background information about the Iraqi economy and its development, and the development of accounting and financial reports in Iraq; chapter six deals with these areas. Chapter seven deals with the inflation problem in Iraq, its measurement, the elements which cause the inflation and Arab countries' proposals on inflation accounting. Chapters eight and nine relate to the interviews held with the managers and accountants of seven companies, and with ministerial representatives. The final chapter presents the summary and conclusions of the study.

Chapter Two
Financial Reporting

2.1 Introduction

This chapter deals with the evolution of financial reports, and the factors affecting them.

As a result of cultural changes, society's needs, government interference, and an increasingly competitive market, the quality and quantity of information in financial reports has become very important. Is all the information needed by different users included in the financial reports? If not, then how much information should be provided?

Developing countries have reached different stages in the evolution of financial reports. Some, like Iraq, have since early times used accounting procedures and financial reports, though in a primitive form. These countries still suffer from financial reports which are inadequate. Financial reports should be free from bias, and should represent a true and fair view. Moreover, for them to achieve maximum usefulness, the emphasis should be on economic substance rather than technical form, because they assist in the determination of financial results and enable interested parties to judge the value and the risk of their commitment to the enterprise.

2.2 Historical Background

In ancient times, certainly in the Babylonian age, there was an accounting system for expenditure and revenues, controlled by a Code of regulations. Then, in the Islamic state the subject became of more interest because of the need to control the collection and distribution of Zakat

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bankruptcy. Both the 1844 and 1855 Acts were eventually consolidated into the Joint Stock Companies Act 1856. Where the compulsory accounting requirements and auditing provisions were abandoned. This may be related to the failures of registered companies which led parliamentarians to the reluctant conclusion that legislation could not impose good accounting disclosure on company directors and that it was up to shareholders to demand from directors the information necessary for the protection of members (ibid., p.80).

However, the Act of 1856 contained provision for voluntary reporting and auditing if this was felt to be necessary (Lee.T., 1976). Because of the growing interest of the public in investment in banking and life assurance, several acts were passed specifically for them, containing accounting provisions based on the model articles of the 1856 Act, but Parliament was reluctant to impose compulsory disclosure for all registered companies. Perhaps the reluctance to make compulsory the publication of financial reports, is summed up best by Lee, G.A.:

The practices, and resistance to the introduction of compulsory publication of accounts, were symptomatic of the old entrepreneurial attitude - shared by many directors, especially of the old-established "family firms" which had been converted to companies- that a businessman's accounts were his private concern, that outsiders had no right to pry into them, and that availability of information would help his competitors. (Lee, G. 1974, p.26)

After establishment of the professional accountancy bodies, and failure of the compulsory disclosure

requirements, the 1900 Act required an annual audit for all registered companies. The Companies Act, 1900 (section 21), made the appointment of an auditor or auditors compulsory for every company registered under the Act (Dicksee, 1945, pp.16-7).

The next major statutory change in company law was made by the Companies Act 1928, which made compulsory the preparation of both a profit and loss account and balance sheet. The innovation in this Act was the formal recognition of the growing importance of holding companies. The Act defined a holding company and required disclosure in general terms of the manner in which profit and loss accounts of subsidiaries had been accounted for (Edey, 1968, p.141).

The needs of the company's investors were still given little recognition, until the Cohen Committee on Company Law Amendment, whose report, published in 1945, resulted in the Companies Act 1948 which radically changed the legal requirements for financial reporting. The main changes in the 1948 Act can be summarised as follows:

- 1- Each company had to present to its shareholders a profit and loss account and balance sheet, both of which had to be audited, and there were several schedules which contained a list of items of information which companies had to disclose.

- 2- Holding companies were required to present to their shareholders a consolidated statement for the group as a whole (Lee, T., 1976, p.29).

3- The auditors were required to be professionally qualified accountants.

From the above, it is clear that the Companies Acts have been the main factor in the development of financial reporting requirements in the UK.

The EEC has been involved in the harmonisation of accounting and reporting since the middle 1960s as a necessary part of the programme of company law harmonisation introduced consistent with the Treaty of Rome (Nobes, and Parker, 1981, ch.12). Any agreement in the EEC which takes the form of a 'directive' has the force of law throughout the Community countries, as each country has the obligation to incorporate such directives into its national law. The aim was not to produce a uniform system, but to bring about a co-ordination of existing legal requirements. A total of ten Company Law directives have been issued and developed, although not all have yet been adopted. Two have particular relevance to financial reporting and disclosure. The Fourth Directive has provided a uniform structure for the classification and presentation of information and incorporates disclosure requirements (Gray, et al, 1984, p.29).

The influence of the EEC has been reflected in the UK in the Companies Acts of 1980 and 1981. The 1980 Companies Act is divided into six parts. The first three parts of the Act enact the provisions called for by the Second Directive issued by the Council of Ministers of the EEC in 1970, concerning how to distinguish public from private companies,

and minimum capital. The 1981 Companies Act is divided into five parts. The first part enacts the detailed requirements of the Fourth Directive issued in 1971, in respect of the form and contents of companies' annual accounts, classifications, presentation, and valuation rules (Pennington, 1983, pp. 3-4).

The EEC influence in the Companies Act 1981 came from the Fourth Directive, which was concerned specifically with requirements company accounts. It involved a compromise between the legal requirements of the UK and those of other EEC members. The main elements of its provisions are two main formats for preparing the balance sheet and four profit and loss accounts.

This requirement has been influenced by EEC countries such as France and Germany (Taylor, and Turley, 1986, p.46). The Companies Act 1981, has increased disclosure, the most notable new disclosure requirement being for details of cost of sales information to be given in the profit and loss account.

The Fourth Directive also dealt with the notes to the accounts to be published; member states can relieve small and medium-sized companies of certain obligations under the Directive (Hulle, 1989, p.76). Therefore, the 1981 Act introduced classification of companies into three groups, according to size: small, medium-sized and large. Modified disclosure requirements were introduced for small and medium-sized companies.

The modifications in the Companies Act 1981 resulted from EEC membership and implementation of EEC directives, but these were modifications in the UK approach to statutory regulation of accounting disclosure rather than representing a fundamental change of approach.

The Seventh Directive of 13 June 1983 on consolidated accounts, deals with the preparation, publication and audit of consolidated accounts. The Companies Act 1985 was introduced purely with the objective of consolidating existing legislation. The main section dealing with accounting and audit requirements is part seven of the Companies Act 1985 (Taylor and Turley 1986, p.43). The UK approach is based principally on legal control as measured by equity share ownership. After adoption of the Seventh Directive, the main change to the UK approach is that group accounts will be required where a minority shareholding is accompanied by an agreement with other shareholders which gives voting control.

It is clear that EEC directives have provided a significant influence on the regulation of accounting practice in the UK, and all member states were required to change their laws to give effect to the directives by 1st January 1988, but the rules need only apply to accounts for the financial year beginning on or after 1st January 1990.

The process did not end there; consolidation and further change continued with the Companies Act 1989. Its primary purposes are to implement the EEC Seventh Directive on consolidated accounts and Eighth Directive on company

auditors.

The Company Act 1989 requires a parent company with a subsidiary undertaking not governed by the Company Act 1985 to ensure that the subsidiary keeps adequate records enabling the proper preparation of consolidated accounts, and must keep its records for three years from the date on which they were made.

With the duty to prepare group accounts, section 227 provides that if at the end of a financial year a company is a parent company, the directors shall prepare group accounts in the form of consolidated accounts (John and Denis, 1990, p.101). This, of course, complies with the requirements of the Seventh Directive.

Only a parent company has to have group accounts prepared, since the concession in the Seventh Directive granting exemption from the obligation where the company is not a parent has been applied.

According to the Company Act 1989, the directors may omit from the individual profit and loss account of the holding company those items to be disclosed in detail, including particulars of loan interest taxation, turnover and staff. Therefore, a consolidated profit and loss account will suffice provided notes show the company's profit and loss account determined in accordance with the Act (ibid., p.101).

However, most of the UK Companies Acts have concentrated on the information needs of shareholders and

investors, ignoring the needs of government agencies or society as a whole. In this regard Briston says:

An analysis of U.K. and U.S. accounting and auditing standards demonstrates that they are concerned only with the problems of corporate reporting and auditing annual statements, while the information needs of managers, of the government administration sector, and of government planners are not regarded as the concern of the accountant. (Briston, 1978, p.106)

Therefore, the accounting profession in the UK has been criticised for not sufficiently concerning itself with the requirements of accountability of the public sector and national accounts (Samuels and Oliga, 1982, p.80).

2.3 Objectives of Financial Reporting

The purpose of financial statements was defined by the American Association of Accounting (AAA), as follows:

The purpose of the statements is the expression, in financial terms, of the utilisation of the economic resources of the enterprise and resultant changes in the position of the interest of creditors and investors. Accounting is thus not essentially a process of valuation but the allocation of historical cost and revenue to the current and succeeding periods. (AAA., 1936)

The Institute of Chartered Accountants in England and Wales. issued in 1952 a statement entitled "Accounting in Relation to Changes in Purchasing Power of Money" which stated:

The primary purpose of annual accounts of business is to present information to the proprietors, showing how their funds have been utilised and the profits derived from such use. (ICAEW, 1952, para.1)

Kenley and Staibus (1972), in their study prepared for the Accountancy Research Foundation of the Australian Society, concluded that the aim of financial reporting is to provide information about the economic affairs of an entity for use in making decisions, and the entity's future cash flows should have top priority for financial accounting.

One of the most important reports on the objectives of financial statements was compiled by a group of the AICPA, and known as "The Trueblood Report". It specified twelve objectives and seven qualitative characteristics of financial reporting. In it, the group explained that the basic objectives of financial statements are to (AICPA, 1973):

- Provide information for making economic decisions.
- Serve primarily those users who have limited authority, ability, or resources to obtain information.
- Provide information useful to investors and creditors for predicting, comparing, and evaluating potential cash flows to them in terms of amounts, timing, and related uncertainty.
- Provide users with information for predicting, comparing, and evaluating enterprise earning power.
- Supply information useful in judging management's ability to utilise the enterprise's resources effectively in achieving the primary enterprise goal.
- In the case of governmental and not-for-profit organisations, to provide information useful for evaluating the effectiveness with which resources are

managed to achieve the organisation's goals.

The Trueblood Report, in general terms, held that the purpose of financial reporting is to provide economic data for enterprises, and debate has arisen over the users of financial reports, and the environment surrounding the prepares and users of the data.

The Accounting Standards Steering Committee (ASSC) in the UK stated in its discussion paper entitled "The Corporate Report" that:

The fundamental objective of corporate reports is to communicate economic measurements of and information about the resources and performance of the reporting entity useful to those having reasonable rights to such information. (ASSC, 1975)

1988 saw more research into financial reports and their objectives. There were two main reports, each one choosing a different method to tackle the impact of inflation. The first was issued by the Institute of Chartered Accountants of Scotland, "Making Corporate Reports Valuable". The report sought to identify user groups and examined ways to satisfy their needs by reforming the existing corporate reports, "and advocates a radical restructuring of the traditional corporate reporting package, using net realisable value as an alternative to historical cost accounting" (Jones, 1989, p.106).

The Scottish Committee suggests a threefold approach:

1- A number of changes should be made in accounting methods: for instance it recommends that fixed assets should

Presentation of Financial Statements. This Framework deals with the objectives and characteristics of financial reports, and defines and specifies criteria for recognition of assets, liabilities, equity, income and expenses. It points out that financial reports must provide information about the economic resources that an enterprise controls and that its capacity in the past to modify these resources " is useful in predicting its ability to generate cash and cash equivalents in the future" (Cairns, 1988, p.26).

With regard to changing prices, the framework acknowledges that their effect is often provided in the form of supplementary information, without determining a specific inflation method.

Therefore, the financial reports are the medium via which a company presents its results and financial position to users, and by which the users evaluate a company's achievement and the efficiency of its administration. In short, an important objective of financial reports is the provision of useful information to most of the potential users of that information in a form and in a time-frame that is relevant to their various needs. In order to determine what the report should contain, particularly during periods of changing prices, it is necessary first to determine who are the users of the financial reports, and what information they require to enable them to make decisions.

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2.4 Who Uses Financial Data

Accounting can be defined as the process of providing information regarding the financial activities of a business enterprise in order to enable different users of that information to make decisions about the enterprise. The satisfaction of users' needs as a basic objective of accounting, has been a major factor influencing the direction and purpose of accounting reports.

The Corporate Report defined financial information users as:

Those having reasonable rights to information concerning the reporting entity. Such rights arise from the public accountability of the entity whether or not supported by legal power to demand information. (ASSC, 1975, p.17)

The report did not specify who are users, but its definition concentrated on describing the kind of information that ought to be provided by an enterprise to users of its accounts. The users of financial reports were defined by the Trueblood Report as:

Those who have limited authority, ability, or resources to obtain information and who rely on financial statements as their principal source of information about an enterprise's economic activities. (AICPA, 1973, p.17)

The report, " Making Corporate Reports Valuable", by the Scottish Committee, viewed the regulatory authorities, investors and management as setting the context and environment of internal and external reporting. As a result, the seven user groups of the Corporate Report shrink to four groups: equity investors, loan creditors, employees and

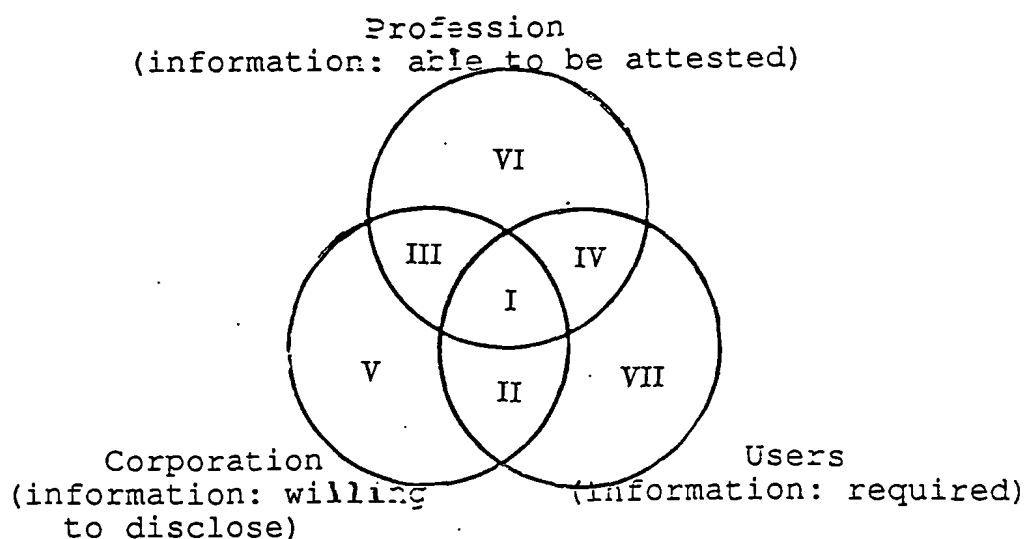
business contacts. The analyst adviser, government and general public are excluded on the grounds that analysts do not have the right to information, and that corporate reporting should not be specifically aimed at the government or the general public. Of course, this is in opposition to the recent growth of corporate social accounting with its emphasis on environmental and social issues.

The International Accounting Standards Committee Framework (IASC, 1988) identifies a variety of users of published financial reports; they include present and potential investors, employees, lenders, suppliers and other trade creditors, customers, governments and their agencies, and the public. The list does not include management because " it has access to other additional information that helps it fulfil its planning, decision-making and control responsibilities" (Cairns, 1988, p.26). Nevertheless, published financial reports should be based on the information used by management about the financial position, performance and changes in financial position of the enterprise. Therefore the users of financial information can be classified into the following groups:

- 1- Shareholders (investors)
- 2- Investment analysts and advisers.
- 3- Creditors and lenders.
- 4- Business contact group.
- 5- Employees and trade unions.
- 6- Government and official bodies.
- 7- General public.

8 - Management.

These different users of financial reports have different individual interests, which has created difficulty in agreeing on the contents of accounting and financial reports. In general, three groups can be recognised, whose interests are similar in some respects and diverge in others. Cyert and Ijiri devised a diagram to illustrate the interests of these three parties, (see figure 2.1), (Cyert, and Ijiri, 1974, Belkaoui, 1981).



- I- Agreement by three groups- disclosure is useful and can be attested.
- II- Information that corporation agrees to disclose and users consider useful, but the profession may not be prepared to support (e.g. subjective information as in financial forecasts).
- III- The corporation and profession agree but the information is useless for external decision making.
- IV- Corporation unwilling to disclose (e.g. unfavourable debt-to-equity ratios which would affect future borrowing, or reduction in reported profits affecting market price of shares).
- V- Corporation willing to disclose, but other parties not interested.
- VI- No demand for this information by users.
- VII- Information the users want, but which is not available.

Thus, from the diagram, it can be seen that there are conflicts between the contents of financial reports and the needs of different users.

2.5. *What Information is Required*

2.5.1 *Shareholders*

The term "shareholders" includes present shareholders and prospective investors. Both require information that helps in reaching share trading decisions. Arnold, J. stated that:

A major decision facing shareholders (or potential investors) in a particular company is whether to buy, hold, or to sell shares in that company. In order to make the decision, the shareholder must estimate the value to himself of owning shares in the company and compare that value with the current market price of the shares. If the value of the shares to the investor exceeds their current market value he should buy shares and vice-versa. (Arnold, 1977, pp.111-12)

This necessitates the provision of information to shareholders (actual and potential) to guide their investment decisions, and to inform shareholders of the uses to which their funds have been applied and the legality of those uses with a view to enable them to exercise legal remedies. Shareholders are interested in knowing future cash flows receipts, and the ability of a company to pay given dividends. In this respect Edey, H.C., raises the following point:

...[T]he owners of businesses are, so far as economic decisions are concerned, interested ultimately only in the amount of purchasing power committed to the investment, the future

flow of cash receipts (dividends) they expect to receive, and the potential liquidity in the form of available cash which the investment will give them at all future times. (Edey, 1963, p.1002)

A shareholder is also interested to know whether the increase in the net worth of his firm represents a real increase in purchasing power, or is merely an imaginary one due to inflation. Moreover, he wishes to know the physical capital of his firm and whether it is being maintained.

2.5.2 *Investment Analysts and Advisers*

The group of investment analysts and advisers provides information and interpretation to shareholders, creditors, and others who use financial reports. Therefore, the information needed by this group is likely to be similar to that needed by other user groups whom the information directly serves. Their requirements are that accounts should show whether a company is maintaining the value of its physical capital and that all gains should not be reported as profits. The second major requirement of this group is a reporting system which enables accounts of two or more companies to be compared (Sandilands, 1975).

2.5.3 *Creditors and Lenders*

This group includes existing and potential holders of loan stock and debentures, and providers of short and long term loans and finance. The information needs of investors and creditors are essentially the same, since both are concerned with an enterprise's ability to generate cash flows and the ability to predict, compare and evaluate the

amounts, timing, and related uncertainty of future cash flows (ACIPA, 19730).

Thus, lenders will be interested in reported data which will assist them to evaluate a company's ability to repay existing or potential debt and any interest due thereon. Information related to a company's liquidity and cash flow position is of crucial importance in that it aids lenders and creditors to estimate the risk involved with investment, the consequences of default and the probable timing of repayment.

This group is also interested in the valuation of a company's assets, because they may be in a position to establish charges over some or all of the company's assets and wish to know the value of assets covered by these charges (Sandilands, 1975).

2.5.4 Business Contact Group

Within this group we can find several sub-groups such as: customers, suppliers and industry groups, and in a different sense, competitors, as well as those who are interested in mergers or take-overs.

Customers are interested in the financial affairs of a company, so they can decide how much business to do with it. Suppliers are interested in the same sort of information as well as the company's demand for their products. The industrial group is interested in those financial reports which give them information suitable to industrial decisions.

The Confederation of British Industry determined the following five purposes for which companies use financial accounts:

- a- for financial analysis and comparison;
- b- to check the credit - worthiness of customers or suppliers;
- c- to monitor the competition;
- d- for portfolio investment, for example, by pension funds; and
- e- for research into intended mergers or acquisitions. (ibid., p.50)

2.5.5 *Employees and Trade Unions*

Employees, including existing, potential and past employees (and their representatives), need information which indicates the ability of the employer to meet wage claims and management intentions regarding employment levels, locations and work conditions. They look also for the services provided by employers, promotion prospects, and management attitude regarding staff participation in the decision-making process. Employees need information on the financial position of the company in order to ensure their future.

Trade unions need financial information for collective bargaining. They also need to assess the economic stability and vulnerability of a business, so that better decisions can be made to secure the jobs of their members.

2.5.6 *Government and Official Bodies*

This group consists of tax authorities, and government departments and agencies concerned with the various activities of companies. Central and local government

departments have a right to financial information issued by companies as these departments are the representatives of the people. The main requirement of the tax authority is data on taxable income. Accounting must provide this information and should be consistent in its application over times.

Government agencies and economic statisticians need information on business operations in order to project their activities and to forecast probable future trends. Government agencies, in order to control an industry or plan for fiscal and monetary policy, need reliable financial information.

The government's need of information was summarised by the Corporate Report as follows:

- (a) Assessing the effectiveness of the entity in achieving objectives established previously by society.
 - (b) Assessing the capacity of the entity to make future reallocation of its resources for social purposes.
 - (c) Evaluating the economic function and performance of the entity in relation to society and the national interest, and the social costs and benefits attributed to the entity.
 - (d) Attesting to compliance with taxation regulations, company law, contractual and other legal obligation and requirements.
- (ASSC, 1975, p.25)

However, in practice, the accounting system in the UK still concentrates on serving the needs of the private sector rather than the government. Therefore, the contents of financial reports will be "barely adequate for meeting the external reporting needs of the private sector, and [they are] inadequate in the field of public sector accounting,

economic planning, [national accounts], and measurement of efficiency" (Briston, 1978, p.107).

2.5.7 General Public

This group may include taxpayers, consumers and special interest groups such as political parties, researchers and other public bodies. Most of the data needed by this group are obtained through the press, government pronouncements and debates, and publication of economic statistics.

In recent years it has become clear that the objectives of a firm should not be confined to the maximisation of profit but should also meet many other social responsibilities (e.g. pollution caused by a company's activities and the social effects of a company in a particular location, and so on).

A firm is a part of society at large and should react to its needs. The public is interested in energy usage, the effective use of subsidies and contribution to charities in money or other forms. Much of this information is of a non-financial nature.

2.5.8 Management

Originally, business enterprises were mainly managed by the owners themselves since they were uncomplicated and there was little or no diversification. Today, however, businesses have become very complex and their control needs experience of a different nature. Hence the responsibility of managing their activities has been taken over by skilled agents who are entrusted to manage businesses in the

interest of owners. The success of a firm depends mainly on the ability of participants to make decisions, as well as the usefulness of the information they receive through financial reports.

Income statements and balance sheet statements can give managers a review of a company's financial position and progress, but the question still arises whether management is really interested in a company's published reports. As Purdy argues:

No good management team is going to anxiously await the preparation of financial accounts required by Companies Acts, to be told the position of the company. The final accounts, as such, would mean as much or as little to management as to anybody outside of that management... In reality, ..there is always uncertainty; hence the need for management to be interested in the external accounts-but solely to the extent of ensuring that the investing population understands and approves the company's action and performance. (Purdy, 1973, p.21)

Management not only has responsibility for accounting, but also has to put policies into operation. Therefore, in inflationary circumstances, management should know the effect of inflation on the ability of the firm to continue in business and how effectively the firm is performing its activities under such conditions. Moreover, management should also be able to determine how it will deal with the effect of inflation on its operations.

The information required by management should enable it to compare the budgeted figures with those achieved, enabling it to make better use of the resources of the company.

Management should also have adequate information on the liquidity and the cash position of the company; which in turn enables it to form an idea of the future cash flows of the company and its expected need for funds. Another requirement is to know the value of assets on alternative bases so that the potential gain from selling the assets instead of employing them within the business can be calculated.

Other areas where financial information is required by management are: credit control, maintenance policies, wages policy and negotiation, price-setting, replacement decisions, division of income and profit - sharing. Above all, the management is responsible for ensuring that these reports accurately reflect what has taken place in the business.

From the above, it may be seen that there are several users of financial reports, each of whom has different information needs, and a different relationship with the company. The financial reports cannot serve all of them in the same degree; however, they must have certain general characteristics to render them suitable for most users.

2.6 Characteristics Of Useful Information

Bevis, H.W., stressed that:

Usefulness is inherent in the full discharge of the accounting function. (Bevis, 1961, p.9)

He defined useful information as that which corresponds to the needs of users. Financial reports should present information about economics, resources, and the

performance of a firm, and provide useful data for making decisions. Therefore, useful financial reporting should have at least the following characteristics:

2.6.1 Relevance

Relevance is one of the main characteristics that financial reports should possess. Thus accountants should know when they prepare reports, who are the users, what their purpose is, and what information they need.

Clearly these requirements may change from time to time, and therefore consideration should be given to each need separately.

2.6.2 Objectivity

Objectivity means that data provided by financial accounts are not biased. Thus auditors are concerned that a company's accounts should show an unbiased "true and fair view" and are not simply based on the unsubstantiated subjective view of directors. However, it is not clear what is meant by the term "true and fair", Stamp said information should be fair to the recipients of the data provided, but surely, some fairness is also due to the producer of the data (Briston, and Fawthrop, 1971).

It is not suggested that objectivity ought to be rigidly applied to the accounts where a subjective judgement might be necessary in measuring and describing the financial position of a company. Subjective judgement already enters in a significant way into the preparation of accounts.

2.6.3 Timeliness

Information should be available to users at the time that they need it. If information is not provided at the right time, effort and cost are wasted. It is necessary to prepare and present information at the time that it is likely to be most useful.

2.6.4 Completeness

Financial reporting should give users as complete a picture of the financial position of the company as possible, and should reflect the effects of price changes on income and balance sheet statements.

2.6.5 Understandability

Users of financial reporting have different levels of ability as regards understanding accounting information. Financial reports should be as brief as is consistent with pertinence and clarity. An excessive flow of data would impede the information system and hinder the timely evaluation of more important information.

2.6.6 Comparability

Most users are looking for the accounts to give assistance in comparing financial positions and the results of activities with those of other companies in order to make informed decisions. Comparisons are also made between the profit, cash flow and balance sheet figures of one year with those of previous years.

Users are also interested in comparing the return on

investment of a given year with that of previous years and with that of other companies. Therefore, information about businesses should be presented so that:

- 1-It can be easily compared with information about the same business for different periods;
- 2-It can be easily compared with information about a different business for the same, or even a different period. (Alexander, 1986, p.65)

2.6.7 Reliability

Reliability is needed for the correct assessment by users of different activities related to the firm. Therefore, accounting information must be of such quality that confidence can be placed in it. To be reliable information must tell the truth, the whole truth and nothing but the truth, and the user must be reasonably assured of its truthfulness.

2.6.8 Economy

The preparation of financial accounts should not require a disproportionate amount of effort and expense. The cost of its preparation should be less than the value which could be obtained from the information presented. As Barton argues:

The choice of the income measurement system should be based on cost benefit analysis of each as a financial information system, and that one which furnishes the most useful information in relation to the cost of operating the system should be chosen. (Barton, 1975, p.444)

2.7 *Financial Reports in Developing Countries*

The situation in developing countries is different. Most of them are suffering from inadequate distribution of wealth, and governments try to reduce the gap between rich and poor people by redistributing resources among citizens. Therefore, many developing countries have turned to economic planning as a method of assessing the needs of each sector and its contribution (actual and potential) to economic development.

Also, in order to stimulate the economy, government takes the role of the entrepreneur, entering risky areas that private sectors are unwilling to enter, such as large industrial enterprises and infrastructure projects. Most private companies unfortunately engage in areas which make easy profit, such as land speculation. As Enthoven says:

An important aspect of capital formation is the institutional framework in which the necessary saving can be stimulated and directed into the proper channels. In many emerging countries, the traditional set-up and its administration are deficient in this respect; often much capital is exported or put into unproductive areas, such as: real estate, the building of large houses, or the hoarding of gold. (Enthoven, 1973, p.143)

In developing countries, the objective of maximisation of profit is not realised by increasing the efficiency of the economy, but by means which are harmful to the economy, such as tax evasion, price increases, and reduced quality and quantity of goods and services. The efficiency of any tax collection system substantially depends on the quality of the accounting system and administrative capabilities. In

addition, there are the problems of lack of skilled manpower, lack of experience in management, organisational procedures and accounting education.

In fact, the most important aspect of accounting practices in developing countries is that they are strongly influenced by the accounting system in the UK and the USA, and they have borrowed the education and practices of these countries. If these are used without modification, the result will be very harmful (Enthoven, 1983, p.116).

In most developing countries, the public sector is larger than the private sector and requires different data for economic decisions than those provided by accounting standards of the private sector. As a result, the developing countries need an accounting system suited to their historical, political, economic, and social condition (Belkaoui, 1988, p.193).

It is thus clear that both developed and developing countries need financial reports as a basis for economic planning, budgeting, decision-making, and assessing and controlling the performance of enterprises. Thus, financial reports can be regarded as a means of communication for different users, both internal or external.

2.8 The Need For Communication

The communication process in financial reporting is concerned essentially with transmitting messages to users and the public in general, about the financial progress of a company and its financial position, in such a

way as to achieve maximum understanding by users and consumers (Jordan, 1969). The success of a company in communicating its messages to users and consumers depends heavily on the extent to which the information communicated corresponds to the economic reality of the company's activities. The Corporate Report defined communication as:

The means of transmission and the form and presentation of the information transmitted must be selected as being relevant to the receiver. In particular the information transmitted must be understandable. (ASSC, 1975, p.43)

An accountant should be concerned to communicate the main facts about the activities of a company in such a way that it is easily understood by the public and couched in non-accounting technical terms.

Therefore, the financial reports should be concerned with the best possible ways of describing economic activities, and methods of improving the means of communicating financial reports information should be actively explored. Moreover, they should be timely and be presented frequently and regularly.

To sum up, there are certain requirements for financial reports. In the UK, financial disclosure is regulated by Companies Acts. There is an overriding requirement that the annual accounts give a true and fair view. Moreover, accounting standards issued by the profession have a major influence on financial disclosure.

In the developing countries, which have their own political, social, economic and cultural environment,

information needs differ from those of developed nations. However, the general framework of financial reports should meet the information needs of different sectors. Generally, financial reports should contain the information needed by various users, and be relevant for performance- measurement and effective and timely decision-making.

All in all, the framework of financial reports is affected by economic, political, and enviromental factors. Therefore, these factors should be taken into account in the design of financial reports for each country. As we shall see later, financial reports in the UK and the USA have been designed to serve primarily the investors, shareholders, and creditors, and most of the pronouncements of professional accountants have concentrated on that purpose, whilst in the Philips company, financial reports are designed to serve the needs, first of management and shareholders, and then investors.

In Brazil, in contrast, although there is a free market, the government controls the format of financial reports to ensure that they serve its needs, e.g. regarding taxation. In Iraq, the situation is different, because government controls most industries, and financial reports are designed primarily to serve government and national accountants, while little attention is paid to management needs. The important thing, in any society, is that the financial reports must reflect the actual results, especially in times of inflation, from which most countries, but especially developing countries, are suffering.

Chapter Three
Inflation accounting
in the U.K.

3.1 Introduction

The following chapters outline the measurement models of inflation accounting, starting with the historical background to the inflation problem, the different remedies adopted in the UK and their impact on financial reports. The subsequent chapters deal with the inflation accounting systems proposed in the USA, the Netherlands, and Brazil.

The effect of inflation on the profit and financial position of firms is complex and may involve adjustments for depreciation, cost of sales, and revaluation of fixed assets. Unless these adjustments at least are made, users of financial reports may be seriously misled about the performance of a business.

3.2 Inflation Accounting History

The usefulness of conventional financial reporting based on the assumption of a stable monetary unit has become the subject of intense debate during recent periods of high inflation, for it does not adequately accommodate the economic reality of price changes. Thus, the impact of price changes on a business needs to be recognised if financial reporting is to be useful for decision-making, setting budgets, determining costs of production and for economic planning generally. As price changes occur at a rapid pace, so does the pressure on accountants, both theorists and practitioners, to provide a reporting basis which will reflect the impact of inflation.

So far there have been two distinctly different views

of the problem. One view considers the impact of inflation on the unit of measurement, and the remedy is to restate historical accounting measurements in terms of units of Current (General) Purchasing Power (CPP). A second view is that the problem is basically related to the attributes being measured and that the cure is to eliminate reliance on transactions and historical exchange prices and to adopt some notion of current value. This view sees Current Cost Accounting (CCA) as the proper solution to the problem.

The basic ideas of both CPP and CCA were known before the 1st World War. Irving Fisher, in his book "The Purchasing Power of Money" in 1911, advocated the method of indexation as a means of overcoming the iniquities resulting from inflation when contracts are negotiated in money terms, and gave many examples from different countries of contracts that provided for the payment of money equal in value to a specified amount of a commodity or group of commodities (Tierney, 1963, pp.61-2).

The policy of indexation has subsequently been adopted by certain Latin American countries, notably Brazil. Although Fisher did not deal with inflation in accounting, he advocated the use of consumer price indices to eliminate the distortion of money in a period of inflation.

The first writer in English on inflation accounting was Middleditch, L., who wrote two articles in 1917 and 1918, the second of which dealt with the changing value of money in accounts. He argued that the central problem is to adjust

all open accounts in terms of the same monetary unit. Adjustments should be made in the profit and loss statement to restate current accounts on the books at the beginning of the period in terms of the "dollar" at the end. Fixed assets should be adjusted for balance sheet purposes, in terms of the current "dollar". The adjustment differences should be debited to an account such as "monetary fluctuation of fixed assets" and credited to a reserve on direct net worth (Middleditch, 1918, pp.116-9). Of course, these adjustments would not affect earnings available for dividends, and they ignore the other items in the balance sheet, such as inventory, monetary items and loans.

Paton, W.A. and Stevenson, R. A., in their book, "Principles of Accounting", stated that the financial reports should always show the present value of the assets used by an enterprise for production purposes, if accounting statistics are to provide the entrepreneur with information to make rational use of the economic resources at his disposal (Paton and Stevenson, 1916, p.14 & p.101). They concentrated on present values and focused only on the entrepreneur, and not other users of financial reports. Although they did not define present value, it is apparent that they meant contemporary price or valuation.

Many Germans have written on inflation accounting. For example, Schmalenbach, E., in his book "Dynamic Accounting", advocated the stabilisation of historical cost, rather than replacement cost, as a method of dealing with inflation and preferred a unit based upon a general price index applied to

historical cost values (Tweedie and Whittington, 1984, p.19).

The basic idea of Schmalenbach was to shift the emphasis of accounting from static statements, e.g. the balance sheet, to dynamic statements of changes in position, e.g. the profit and loss account. He argued that the dynamic system should be dominant because it was only by an accurate assessment of earnings that the business as a whole could be valued.

His method was to match cost to revenue within the traditional accounting framework, placing emphasis on the accuracy of the allocations to the profit and loss account, and regarding the balance sheet as a mere statement of accruals, recording sunk cost not yet allocated to the profit and loss account, rather than as a serious attempt to value the assets of the business (ibid., p.21). Furthermore, he concentrated on the quality of profit and loss account by emphasising the matching process:

The statist asks whether the addition has increased the value of the fixed assets. The dynamist asks whether the addition is to be booked as expenditure in the year of purchase or manufacture, or requires division into expenditure applicable to several years, and he has in mind not only the year in which the addition is made, but also the years to come. He treats these years as his children, not wishing to favour one to the disadvantage of another. (Schmalenbach, 1959, p.85)

Mahlberg, W. in 1921 provided the first book-length price-level-adjustment model in the literature. He saw the

effect of specific price-level changes exceeding general inflation as giving rise to unavoidable future losses that should be recognised currently. His valuation theory concerned the effect of inflation on the management of a firm (Graves, 1989, p.22). Moreover, he regarded profits during inflation as primarily a function of a manager's ability to manage monetary items and only then as his ability to manage normal operations. According to this view, income is a result of overriding monetary speculation, whereas Schmalenbach had contended that income determination was an early detection of incipient change in the operating efficiency of a firm (ibid., p.25).

Mahlberg argued that a balance sheet has two types of inflationary gains and losses, related to the nature of the assets held, and including both avoidable and unavoidable gains and losses. The avoidable gains and losses were those associated with the holding of monetary items and of non-monetary items not essential to the operations of the firm, whilst the unavoidable gains and losses were those associated with the holding of working plant and equipment and with the maintenance of stock (ibid., p.26). Mahlberg may well have provided Sweeney, with the concept of current cost/ constant dollar that led to his idea of unrealised appreciation. Mahlberg's valuation theory "perhaps provided the basis for the first conception of a holding gain, net of inflation" (ibid., p. 29).

Schmidt, F. may be regarded as the writer of the first theoretical treatise on current cost accounting. In his

article " The Importance of Replacement Value", he stated that replacement cost provides the best basis for producing financial reports for managerial purposes, or for use in planning mergers and reorganisations where the status of an enterprise as a whole is under consideration (Schmidt, 1930, p.235). He regarded replacement cost as the market price, for which one can obtain the economic good in question on the day of real or assumed replacement, i.e. actual purchase or replacement is unessential, it is only necessary that purchase could be made at the specific price at the time of evaluation (ibid., p.239). Moreover, in replacement cost accounting every change in value is to be entered in a correction account and at the same time is to be entered in the profit and loss account, and a split made between operating profit and other profits. Schmidt concentrated on capital maintenance, arguing:

Differences in value between original cost and current replacement costs have the character of value changes in capital, conditioned by changing current market prices for production goods. Therefore, they logically belong in accounting for capital and not in accounting for operations. (Schmidt, 1931, p.289)

His theory of accounting was concerned with the role of the individual firm in the national economy, and the idea that accounting practices should lead to an appropriate allocation of resources in the economy. He asserted that this would be the case only if profit were calculated by deducting from revenue the current replacement cost of the resources used in earning it :

[I]f one wishes to seize the opportunity of a situation of value differences in order to make a profitable turnover, the necessary calculation must take place at the moment the resolution is made. One must therefore compare the cost value and the sale volume as of the same day and estimate how far this value could be changed between the beginning of production and the day of sale. (Schmidt, 1930, p.236)

Schmidt identified a number of problems which are still being debated today, such as the entity view of capital maintenance, his concept of profit, and the gearing adjustment. From the technical bookkeeping point of view, Schmidt's approach shows great similarity with that of Limperg, T., in the Netherlands.

Limperg, T. argued that the profits shown by historical cost accounting are exaggerated and make credit for expansion too readily available, resulting in over-investment and continuing inflation. His idea is summarised as follows:

The value of a commodity is its realisable value or its replacement value, but always the lower of the two. As to the realisable value a distinction should be made with regard to factors of production between the direct and the indirect realisable value; of these two the higher is always relevant. (Limperg, 1964, p.141)

The main object of Limperg's system was to provide a comprehensive set of cost information which would aid management, and at the same time be appropriate to shareholders.

He regarded accounting as only one aspect of economic

activity and devised his theory of accounting as part of a wider theoretical view of business management and its role in the economy. He also shared with the German authors the basic assumption of the continuity of business.

Replacement value according to Limperg was concerned with the minimum cost of replacing the factor service, not the replacement cost of the actual factor used in production. However, his theory is a "normative theory of value; it is microeconomic - oriented although it claimed to be macroeconomic based". (Burgert, 1972, p.114).

The main difference, between Schmidt's and Limperg's views is in the concept of value. Schmidt adopted the replacement cost concept, while Limperg adopted the replacement value concept, that is, the latter was concerned with the minimum cost of replacing the factor service, not the replacement cost of the actual factor used in production.

In 1936, Henry W. Sweeney regenerated interest in inflation accounting through publication of his doctoral thesis and he is often considered as the father of price-level accounting in the USA. His work reflected his studies of accounting reports in Germany where his thinking was influenced by the works of Schmalenbach (who preferred the CPP method) and Schmidt (who advocated the CCA method).

His proposal, stabilised accounting, represented a hybrid form of price level accounting and combined the teachings of Schmalenbach and Schmidt. He looked at the

problem of general inflation as being best dealt with by the application of a general index adjustment to both the balance sheet and the income statement. He believed that capital, to be maintained intact, must be measured in terms of real command over goods and services in general, rather than in terms of the specific assets owned by the firm, as advocated by Schmidt or Limperg. (Sweeney, 1937, p.198).

Sweeney was not alone in advocating an explicit accounting recognition of general price movements. Coughenour, R.J., made his first contribution to price level literature in June 1935, and wrote another article in September 1935 which preferred the adjustment of historical cost to current value. He presented a comprehensive numerical illustration which demonstrated how adjusted figures would depart vastly from conventional measurements. (Coughenour, 1935, pp.171-97).

By the beginning of the 2nd World War, Germany and France had provided the basic work on the CPP method, while the Germans and Dutch had provided the CCA method. Sweeney had developed the concept of CPP in English - speaking countries, and had suggested combining current values of assets, specific prices and general indices.

After the 2nd World War there were two periods of rapid inflation in the UK: the first occurred during 1951 and 1952; the inflation rate increased from 2.8% to 9.1% and 6% for the years 1950, 1951 and 1952 respectively; the second began in the late 1960s, and accelerated until the end of 1977. The

inflation rates were as follows:

1972	7.1	1975	24.2
1973	9.1	1976	16.5
1974	16.0	1977	15.8

In this period, the first debate about inflation accounting began.

A number of exposure drafts and statements for debate were issued. However, the first issue of an accounting standard on the subject was in the UK in 1974. Later in the same year, CPP proposals were issued in the USA, and by the Canadian and Australian professional bodies. In 1975 a current purchasing power exposure draft was published in New Zealand and a discussion paper for South Africa came in the same year. There were also important CPP method developments in Brazil and Chile in 1974.

However, it is not the intention here to trace the history of inflation accounting, but to trace the evolution of ideas which have led to the current state of thinking on the subject. Therefore, in the next sections and chapters there is more detailed discussion of the inflation accounting systems in the UK, the USA, the Netherlands and Brazil. After discussion of these inflation systems, a comparison between them is made in order to determine which of them is appropriate for use in Iraq.

3.3 Inflation Accounting in the UK

3.3.1 Historical Background

Historical cost accounting is the method preferred by most business enterprises, and is still an accepted basis for the legal accounts of an enterprise. However, historical cost accounting has serious limitations when prices are either increasing or decreasing. These limitations include:

- 1- Reported results may be distorted as a result of the matching of current revenues with costs incurred at an earlier date.
- 2- The amounts reported in a balance sheet in respect of assets may not be realistic, up-to-date measures of the resources employed in the business.
- 3- As a result of (1) and (2), calculations to measure return on capital employed may be misleading.
- 4- Because holding gains or losses attributable to price level changes are not identified, management's effectiveness in achieving operating results may be concealed.
- 5- There is no recognition of the loss that arises through holding assets of fixed monetary value and the gain that arises through holding liabilities of fixed monetary value.
- 6- A misleading impression of the trend of performance over time may be given because no account is taken of changes in the real value of money. (ICAEW, 1988, p.6.11)

Because of these limitations, it has become widely recognised that historical cost accounts alone are unsatisfactory for different users in times of changing prices. The debate on how to account for the effects of changing prices has generally involved a choice between two methods. In the UK these methods are known as the Current Purchasing Power method (CPP), in which adjustments are made for changes in the general level of prices, and Current Cost Accounting (CCA), in which adjustments are made

for specific price changes.

3.3.2 Current Purchasing Power (CPP)

In 1968 a paper was published by the Research Foundation of the Institute of Chartered Accountants in England and Wales (ICAEW), entitled "Accounting for Stewardship in a Period of Inflation". It was influenced by the earlier writing of Sweeney (1936), and advocated a method of current purchasing power as a means to tackle the impact of inflation on the accounts (ICAEW, 1968). Three years later the ICAEW prepared a discussion paper, "Accounting for Changes in the Purchasing Power of Money", which recommended that business enterprises should continue to keep their accounts and present their financial accounts on the basis of historical cost accounting, but should prepare supplementary accounts in which all the items should be represented with values at different periods restated according to the general price-level.

Then came the publication in January 1973 of Exposure Draft No.8 (ED 8), entitled "Accounting for Changes in the Purchasing Power of Money". This proposed adoption of current purchasing power accounting for supplementary financial reports, which were to be subject to audit. The general response to ED 8 was positive. A committee organised by the Confederation of British Industry issued two reports endorsing the proposals contained in ED 8. On 21st January 1974, the government announced the setting-up of a committee under the chairmanship of F.E.P. Sandilands,

to study inflation in the UK in May 1974. While the Sandilands Committee was considering inflation accounting, the ASC approved a provisional standard, "Provisional Statement of Standard Accounting Practice No.7" (PSSAP7) pursuant to ED 8, and with the same title.

The method of converting historical figures to current pounds under CPP is to convert the balance sheets at the beginning and at the end of the year. The profit for the year is arrived at by subtracting the total equity interest at the beginning of the year from the total equity interest at the end of the year and adding back any dividends. The CPP method involves three steps (ICAEW, 1974).

First - Adjust all non-monetary items in the balance sheet by the change in the retail price index between the time of acquisition and the beginning of the year. No change is needed to monetary items because they are already expressed in terms of CPP units.

Second - All items in the converted opening balance sheet are adjusted by the change in the retail price index between the beginning and end of the year in order to express the items in the opening balance sheet in terms of the CPP unit relating to the balance sheet date at the end of the year. This process is called "updating".

Third - The difference between the total equity interest in the converted balance sheet at the beginning and end of the year, is the profit or loss for the year measured in pounds of purchasing power at the end of the year. This profit or loss can be analysed by producing a

profit or loss account including figures expressed in pounds of purchasing power for the year in the same detail as in the company's basic profit and loss account. In addition, the converted profit and loss account should contain a figure for net loss or gain in purchasing power resulting from the effects of inflation on the company's net monetary assets or liabilities. The suggestion that any gain on borrowing should appear in the profit and loss account was for two main reasons: firstly, that profitability should not be confused with liquidity, and secondly, " that it is inconsistent to exclude gains when profit has been charged with the cost of borrowing". (Tweedie and Whittington, 1984, p.83).

This method does not supply any additional information to the historical cost method, except changing the unit of measurement from mixed pounds of money to general price-level indexes. Moreover it has some serious limitations:

1- A major difficulty in the preparation of CPP supplementary accounts is the classification of items into monetary and non-monetary, as Hendriksen asserted:

The difficulty in defining monetary and non-monetary assets and liabilities arises basically because the distinction is arbitrary. Only in a very extreme case would the price of an asset change by the same percentage as the change in the general price level. On the other hand it is possible that the price of an asset or the number of dollars to be exchanged for a claim may increase or decrease by very small percentage in the relationship to the change in general price. (Hendriksen, 1982, p.212)

2- The general index is not always an appropriate measurement because not all goods and services are affected in the same way and there are differences in the relevance of the index to users. For example, for management a wholesale or industry index would seem to be preferable, while for shareholders, consumer price level may be more meaningful.

3- Restated statements under the CPP method may confuse profitability and liquidity, especially as companies willing to risk higher levels of borrowing will be able to hedge, and it may be argued that companies with few non-monetary assets are automatically in a hedged position. The statements ignore other effects on prices, such as technology, competition, and the economic environment of some companies.

4- The method neither eliminates nor discloses the effect of the current year's inflation on the profit margin on sales. Thus, as the inflation rate varies from time to time, so will the restatement results fluctuate. This is inflation itself, and it is not, we would argue, what is meant by accounting for inflation.

5- Inflation affects both income and capital. The CPP method does not show the effect of inflation on the capital funds. The result is that the holder of capital automatically suffers losses in an inflationary period, except investment in non-monetary assets.

However, the CPP method does have some advantages:

1- Statements are objective and verifiable, for if all

companies use the same index the results are auditable (Miller, 1980, p.110).

2- The CPP method is relatively easy to apply and is not too drastic a departure from the historical cost basis.

3- It aids management in the negotiation of wages by separating inflation and productivity gains, and it gives a better idea of the purchasing power needed to replace assets consumed.

The CPP method has the limited objective of showing the effect of general changes in prices on a company's final accounts. It provides little information for different users, especially to management for internal decision-making, for it simply involves a restatement of historic cost in units of the same purchasing power. In other words, the historic cost principle is not affected; only the units in which historic cost is measured are changed.

3.3.3 *Current Cost Accounting (CCA)*

There is no general agreement as to the terminology used for an accounting system in which current replacement costs are used. The most common terminology in the literature is "replacement cost accounting", but we prefer the term "current cost accounting" for three reasons: (1) the term "replacement" may imply or indicate that the company has to replace for each asset; (2) exit values are sometimes used instead of replacement cost; (3) replacement cost refers to economic replacement and not necessarily technical replacement. Therefore, throughout this thesis

"replacement cost" will be termed "current cost", which reflects the prices that would need to be paid for an asset or its use at the date of the balance sheet or the date of the use or sale if the assets were not already owned.

3.3.3.1 Sandilands Report

As explained above, during the period permitted for comment on ED 8, the government set up an independent committee of inquiry on inflation accounting. Its report, known as the "Sandilands Report", was published in September 1975, and recommended current cost accounting as a method of restating financial reports. The main features of the CCA method as used in the Sandilands Report were as follows (Sandilands, 1975, ch.13):

1- Asset valuation was based on the principle of "value to the business". This concept equates the value of an asset with the loss which would be suffered by the company if deprived of its use. Value to the business is usually current replacement cost. If replacement cost is higher than both the economic and net realisable values, then the appropriate valuation is the higher of the latter two amounts. In this context, net realisable value is the current disposal value of the asset, and economic value is the present value of expected future net inflows from the asset. Any gain or loss arising from the revaluation of fixed assets are stated in the revaluation reserves in the

stockholders' equity and do not affect net income.

2- Liabilities remain at their historic cost valuations.

3- Operating profit is reached after charging the value to the business of assets consumed during the period.

This is achieved by:-

- a cost of sale adjustment (COSA); and
- a depreciation adjustment.

4- The Sandilands Report classifies two kinds of gains; the first one is "Operating gain", which is the difference between the amount realised from a company's earnings from ordinary activities and the value to the business of the assets consumed by the company in generating these amounts. (This concept was used by Schmidt in his first article on inflation accounting). The second is "Extraordinary gain", which is the difference between the amount realised from items which do not fall into a company's normal output and their value to the business at the time of disposal.

The holding gain is the difference between the value to the company of an asset at any point in time and the original purchasing cost of that asset, after deduction of depreciation. These holding gains may be either realised or unrealised.

The Sandilands Report suggested a system combining a considerable degree of economic realism with operational simplicity, and put the case for replacement cost very well. Moreover it considered the real difference between

historical cost accounting and current value accounting and not between price level accounting and current value accounting (Edwards and Barrack, 1967, p.15).

Nevertheless, there was reaction against the Sandilands Report for ignoring the effect of inflation on monetary assets and monetary liabilities. Moreover, it did not take into account the effect of inflation on the value of the proprietor's interest in the company, and the problem of measuring this when the unit of measurement is unstable (Stamp, 1977, pp.67-8).

However, the Sandilands Report was clearly persuaded that general indices had no place in inflation accounting, and this principle was followed in all exposure drafts subsequently issued in the UK.

3.3.3.2 Exposure Draft 18

The Inflation Accounting Steering Group (IASG) was set up in January 1976, under the chairmanship of Douglas Morpeth. Its task was to produce an exposure draft on CCA based on the Sandilands Report. This group reported back to the ASC in September 1976 with proposals which were published as ED 18 in November 1976. The basic principles of this exposure draft were (IASG, 1976) (Westwick, 1980, p.363):

1- Non-monetary assets of the enterprise should be shown at their value to the business.

2- The profit and loss account should be charged with both a depreciation adjustment and a cost of sales

adjustment.

3- Revaluation surpluses should be credited to the appropriation account. They would arise mainly from the revaluation of fixed assets and from the difference between the replacement cost and the historic cost of stock consumed.

ED 18 required the presentation of information regarding current cost profit; the net surplus for the period arising from the revaluation of assets; the amount necessary to be retained in the business, as determined by the directors, and dividends.

The ED 18 proposals preferred asset-based indices for determining the value to the business of plant and equipment, rather than the industry-based indices favoured by the Sandilands Report.

Although initial reaction to ED 18 was positive, support for it quickly evaporated, and was replaced by a swarm of critical and hostile comments (Stamp, 1977, pp.83-94). The most commonly voiced criticisms revolved around the complexities of the requirements, and their inherent subjectivity (Leech, and Pratt, 1978, p.11).

In July 1977, a special meeting of the Institute of Chartered Accountants in England and Wales was convened to consider the motion: "That the members of the Institute of Chartered Accountants in England and Wales do not wish any system of current cost accounting to be made compulsory" (Westwick, 1980, p.364). The vote was 55 to 45 percent against implementation.

3.3.3.3 *The Hyde Guidelines*

A special task force of the ASC was then appointed under the chairmanship of Hyde, W. to develop interim guidelines on inflation accounting. Its proposals, known commonly as the "Hyde Guidelines" were published by the ASC in November 1977. The major change was to regard CCA as supplementary to the historical cost accounts, and from the starting point of historic cost profit to apply a series of adjustments to lead to current cost profit. It recommended that all companies should prepare a separate statement showing the financial results as amended according to the Hyde Guidelines:

- 1- The cost of sales adjustment (COSA);
- 2- The charge for depreciation on a current cost basis; and
- 3- An adjustment to account for the effects of gearing. (ASC, 1977)

The first two of these were closely allied to the methodology of ED 18. The third one was new, a gearing adjustment to allow for the gains occurring to a company financed by debt repayable in fixed monetary amounts in a period of inflation.

The gearing adjustment reflects the effect of inflation on monetary items. When the total liabilities exceed the total monetary assets, the shareholders are in a favourable position during inflationary conditions, for the loss suffered by an entity's creditors due to the erosion of the purchasing power of the monetary unit, is a gain to its stockholders. The gain is measured by the proportion of:

a) the net balance of monetary liabilities; to

b) the net balance of monetary liabilities plus the equity share capital and reserves multiplied by both COSA and depreciation adjustment.

If monetary assets are greater than the monetary liabilities and preferred stock, a gearing charge is made to the profit and loss account in an amount which equals the net balance of monetary liabilities multiplied by the percent change in the retail price index during the year.

The Hyde Guidelines dealt only with the profit and loss account and the requirement for a current cost balance sheet was dropped. This system was subject to further criticism ; first, the Hyde Guidelines did not clarify the underlying capital maintenance concept, and not everyone understood the reason for the gearing adjustment (Cox, 1979, p.56); secondly, though it claimed to take account of the gain from borrowing, it did so by reference not to the amount of debt but to the amount of profit reduction resulting from the cost of goods sold and depreciation adjustment (IASG, 1976, p.37).

3.3.3.4 Exposure Draft 24 and SSAP 16

During the period of the Hyde Guidelines, the Morpeth Committee continued its work of producing a revised exposure draft on current cost accounting, as required by the British government. The result was issued in April 1979 as ED 24, and it was intended to be applied to all listed companies and all other entities with annual turnover of 5

million pounds or more.

While the Hyde Guidelines called for supplementary current cost adjustments for the profit and loss account only, the ED 24 proposals required a current cost adjustment for the balance sheet as well. ED 24 was based on a capital maintenance concept of maintaining intact the net operating assets, i.e. to include not only physical assets but also monetary working capital. Therefore the income measurement has two steps:

First :-

The current cost operating profit which needs three adjustments to historical cost profit. These are:

- 1- a depreciation adjustment ;
- 2- a cost of sales adjustment ; and
- 3- a monetary working capital adjustment.

The Monetary Working Capital Adjustment (MWCA) is essentially a short-term adjustment for working capital which enters the calculation of current cost operating profit. In most situations monetary working capital will be the aggregate of the following items:

- Accounts receivable, prepayments and trade bills receivable, plus
- Inventories that are not subject to a COSA, less
- Accounts payable, accrued liabilities, and trade bills payable.

Second :-

An adjustment by reference to the company's gearing to

arrive at the current cost profit attributable to shareholders. The calculation of the gearing proportion is as follows:

$$\text{Gearing proportion} = \frac{\text{L}}{\text{L} + \text{S}}$$

where :

- L = average net borrowing (which includes all monetary liabilities and assets except those dealt with in the MWCA)
- S = average net shareholders funds from current cost balance sheet.

However, ED 24 was not a system for general inflation, as it did not show changes in the value to the business as a whole, nor did it directly provide for meaningful comparison between the figures for different periods, unless these figures were adjusted. Further, the issue of two sets of financial statements would cause confusion to users in general and to management and shareholders especially, most of all to shareholders who lack basic knowledge of accounting.

After one year ED 24 became SSAP 16, with only minor changes:

1- Exclusion from the scope of the standard of non-listed companies and of other companies which satisfied at least two of the following:

- turnover less than £5 million per a year;
- balance sheet less than £2.5 million on HC basis;
- average number of employees less than 250.

2- Inclusion in the MWCA of that part of overdraft and cash which fluctuated with changes in the volume of stock,

debtors and creditors.

3- Additional disclosure on :

- the maintenance of the purchasing power of the equity capital;

- the effect of inflation on comparative figures.

4- The standard required the preparation of a full set of current cost accounts.

In 1982 a motion was proposed calling for the immediate withdrawal of SSAP 16. ICAEW members voted 51.53% against withdrawal, "but compliance on SSAP 16 had fallen to below 30%, forcing suspension of its compulsory status" (Godfrey, 1985, p.37).

In June 1985, in the light of falling compliance with SSAP 16, the ASC's governing bodies suspended the mandatory status of SSAP 16 and in April 1986, the ASC made a recommendation to its governing bodies that SSAP 16 should be withdrawn (ICAEW, 1986, p.112).

3.3.4 Comparison of Individual Adjustments

The following example and table 3.1 illustrates the changes in the different proposals, from the Sandilands Report up to the SSAP 16.

Example:

Following the balance sheet and profit and loss account of company Y at year x (all amounts in £,000).

Balance Sheet					
	Year	Year		Year	Year
	X	X-1		X	X-1
Capital (3125000 share at £1 each)	3125	3125	Lands and Buildings	3250	3250
Reserves and Retained			Machines	6250	5000
Earnings	2500	1875	- Depreciation	2500	1875
Debentures	1875	1875	Stock	1000	500
Creditors	1625	1250	Debtors	1000	750
			Cash	125	500
	-----	-----		-----	-----
	9125	8125		9125	8125
	=====	=====		=====	=====

Profit and Loss Account

Sales	2500
- Cost of Goods Sold:	
purchases	1250
+ opening stock	500
- closing stock (1000)	
	<u>(750)</u>
- Depreciation	1750
- miscellaneous expenses	(625)
	<u>(500)</u>
Net profit	<u>625</u>
	=====

The following data have been available:

- depreciation of machines is 12.5% on a straight-line.
- the company started its work in the beginning of year X-3.
- the stock turnover period is three months.
- at the end of year X the market value of lands and Buildings was £10,000,000.
- at the end of year X the company bought a machine at £1,250,000.
- the indices for these years are:

	General Price	Specific Prices	
		Stock	Machines
1 / 1 / X-3	50		60
30 / 9 / X-1	95	90	
1 / 1 / X	100	100	100
30 / 6 / X	110	120	110
30 / 9 / X	120	130	
31 / 12 / X	130	150	120

i- CPP method:

- Restatement of balance sheet at the beginning year X.

Capital	6250	Lands and Buildings	6500
(100/50 x 3125)		(100/50 x 3250)	
Reserves	5151	Machines (100/50 x 5000)	10000
		- Depreciation (100/50 x 1875)	3750
			---- 6250
Debentures	1875	Stock (100/95 x 500)	526
Creditors	1250	Debtors	750
		Cash	500
	<u>14526</u>		<u>14526</u>
	=====		=====

- Updating of balance sheet at the beginning year X.
(all figures in previous balance sheet were multiplied by 130/100).

Capital	8125	Lands and building	8450
Reserves	6696	Machines	13000
		- Depreciation (4875)	
			8125
Debentures	2438	Stock	684
Creditors	1625	Debtors	975
		Cash	650
	<u>18884</u>		<u>18884</u>
	=====		=====

- Conversion of balance sheet for year X

Capital	8125	Lands and Buildings	8450
(130/50 x 3125)		(130/50 x 3250)	
Reserves *	6783	Machines [(130/50 x 5000) + 1250]	14250
		- Depreciation (130/50 x 2500)	6500
			---- 7750
Debentures	1875	Stock (130/50 x 1000)	1083
Creditors	1625	Debtors	1000
		Cash	125
	<u>18408</u>		<u>18408</u>
	=====		=====

* The amount of Reserves and Retained Earning has shown surplus for year X in £87 as follows:

Net profit from HC accounts		625
less		
Stock adjustments	(684 - 500) = (184)	
	(1083 - 1000) = 83	
		(101)
Depreciation adjustments		
	[(6500 - 4875) - 625]	(1000)
Add		

Revenues adjustments [(2500 - 1250 - 500) 130/110] - 750		136
		<u>(340)</u>
Monetary items gains **		427
		<u>87</u>
CPP profit		=====

** Monetary items gains	HC	CPP
Monetary item at 1/1/ X [(750 + 500) - (1875 + 1250)] + sales	(1875) x 130/100 2500 x 130/110	(2438) 2955
	<u>625</u>	<u>517</u>
- purchases and expenses	(1750) x 130/110	(2068)
	<u>(1125)</u>	<u>(1552)</u>
- new machines	(1250)	(1250)
	<u>(2375)</u>	<u>(2802)</u>
Add monetary at 31/12/X (1000 + 125) - (1875 + 1625)	(2375)	(2375)
		<u>(427)</u>
		=====

ii- Sandilands Reports

	Profit and Loss Account	
Net profit from HC account		625
COSA : increase in stock at the beginning [(500 x 120/100) - 500]	100	
decrease in stock at the end [1000 - (1000 x 120/150)]	200	
	<u>300</u>	
Increase in depreciation (10000 x 12.5%) - 625		625
		<u>925</u>
Current loss		<u>(300)</u>
		=====

Balance Sheet

Capital	3125	Lands and Buildings	10000
Retained Earnings (1875 - 300)	1575	Machines (5000x120/60) + 1250 - Depreciation (2500 x 120/60)	11250 5000
			<u>6250</u>
Revaluation Reserve	10175 *	Stock	1000
Debentures	1875	Debtors	1000
Creditors	1625	Cash	125
	<u>18375</u>		<u>18375</u>
	=====		=====

* Revaluation Reserve		
Lands and Buildings 10000 - 3250		6750
Machines (11250 - 6250) - (5000 - 2500)		2500
COSA		300
Additional Depreciation		625
		<u>10175</u>
		=====

iii- ED 18

Profit and Loss Account

Net profit from HC accounts		625
- COSA : increase opening stock balance		
(500 x 120/90) - 500	166	
decrease closing stock balance		
1000 - (1000 x 120/130)	78	
	<u>244</u>	
- Depreciation adjustment		
(5000 x 12.5% x 110/60) - 625	521	
	<u>(765)</u>	
Current loss		<u>(140)</u>
		=====

Balance Sheet

Capital	3125	Lands and Buildings	10000
Retained Earnings	1735 **	Machines *	11250
Revaluation Reserve	10169 **	- Depreciation (5000)	6250
		Stock (150/130 x 1000)	1154
Debentures	1875	Debtors	1000
Creditors	1625	Cash	125
	<u>18529</u>		<u>18529</u>
	=====		=====

* see Sandilands Report.

** Retained Earnings:

Current cost loss	(140)
+ Retained earnings, year X-1	1875

Total Retained earnings, year X	<u>1735</u>
	=====

Revaluation Reserve:

Additional depreciation	521
Lands and Buildings (10000 - 3250)	6750
Machines (11250 - 6250) - (5000 - 2500)	2500
Revaluation closing stock (1000 x 150/130) - 1000	154
COSA	244

Total Revaluation Reserve	<u>10169</u>
	=====

iv- Hyde Guidelines

Because this proposal does not require preparation of a balance sheet, and the figures of it will be the same as for the ED 18 balance sheet (Briston, 1980, p.47), the latter will be used for gearing adjustment purposes.

Profit and Loss Account

Net profit from HC accounts		625
Less		
COSA	244*	
+ Depreciation	521*	
- Gearing adjustment	(104)**	
	<u> </u>	(661)
Current loss		<u>(36)</u>
		=====

* As in ED 18

**
 Gearing Proportion = $\frac{L}{L + S}$

Average net borrowing (L) = (1875 + 1625) - (1000 + 125)
 = 2375

Average net equity capital
 and reserves (S) = 3125 + 1735 + 10169
 = 15029

Gearing proportion = $\frac{2375}{2375 + 15029}$
 = 0.13646

Gearing adjustment amount = 0.13646 x (244 + 521)
 = 104

v- SSAP 16

Profit and Loss Account

Net profit from HC Accounts		625
Less		
COSA	244	
+ Depreciation	521	
	<u> </u> 765	
- MWCA *	(215)	
	<u> </u> 550	
- Gearing adjustment **	(57)	
	<u> </u>	(493)
Current profit		<u>132</u>
		=====

* MWCA:		
increase and decrease in Debtors		
at 1/1/X	(750 x 120/90) - 750	250
at 31/12/X	1000 - (1000 x 120/130)	77
		----- 327
increase and decrease in Creditors		
at 1/1/X	(1250 - 120/90) - 1250	417
at 31/12/X	1625 - (1625 x 120/130)	125
		----- (542)

MWCA		(215)
		=====

** Gearing adjustment:

$$L = 1875 - 125$$

$$= 1750$$

$$S = 15029 \text{ see Hyde Guidelines}$$

$$\text{Gearing Proportion} = \frac{1750}{1750 + 15029}$$

$$= 0.1032$$

$$\text{Gearing amount} = 0.1032 \times 550 = 57$$

Balance Sheet

Capital	3125	Lands and Buildings	10000
Retained Earnings		Machines	11250
(2500 + 132)	2007	- Depreciation	(5000)
Revaluation Reserve*	9897		----- 6250
Debentures	1875	Stock	1154
Creditors	1625	Debtors	1000
		Cash	125
	-----		-----
	18529		18529
	=====		=====

$$* \text{ Revaluation Reserve} = 10169 - (215 + 57)$$

$$= 9897$$

3.3.5 Advantages and Disadvantages of CCA Method

The CCA method has many advantages

1- Statements according to the CCA method are interpretable due to the familiar monetary unit of measurement. Moreover the method provides closer approximation to real income because revenues are related to costs in common measurement unit, and income is not

Table 3.1 Comparison of Individual Adjustments

Factors	Sandilands Report	Exposure Draft 18	Hyde Guidelines	Exposure Draft 24	SSAP 16
Depreciation	It recommended that depreciation should be provided on all fixed assets, except Land, on the basis of the value to the business and suggested for each class of assets a method for valuation, and it called for publication of a series of indices by the government agencies.	It was essentially as in the Sandilands, but there was a swing from the general published indexes, to using the supplier's price list, and charges were calculated on average for the year values rather than end of the year values.	It gave more freedom to the companies to use their own method & to use a appropriate published index, even for buildings, where it was possible to use the indexes of new construction.	The valuation of Lands and buildings were to be carried out by professionally qualified persons and the current profit might include gains, or losses on disposal of fixed assets.	It was similar to the ED 24, with the addition that the use of second-hand price for current valuation was specially excluded, unless the asset was purchased in such a market.
Cost of Sales	It recommended that an adjustment should be made to the COSA's historical cost accounts, which would approximate the difference between the historic cost of sales in the averaging method.	Calculation of COSA was favoured, possibly by consideration of standard costing and price variances. Emphasis was put on obtaining exact price, or indexes purchased by the company itself. Although the method used was different from that in Sandilands Report, its gave identical results.	COSA was to be computed directly where accounting information was easily available from standard costing. Company was required to disclose by way of a note the method of computation used and the source of the indexes employed.	No single method was prescribed, but different methods were grouped into those that traced the cost of individual items by suppliers price lists or price indexes for individual stock items, and standard costing systems.	The recommended methods for calculation were identical to those given in ED 24, with the addition of the life method which was permitted on condition that stock volume was fixed and the turnover was rapid.
HMCA and Gearing Adjustment	It proposed that the majority of liabilities are already expressed at their value to the business in historic cost accounts. As all liabilities and monetary assets were shown at historic cost, it deduced that the question of gains or losses on monetary items did not arise.	There was a compromise proposal for a supplementary statement of change in the net equity interest Current cost of opening and closing net assets were adjusted in the retail price index.	It suggested that a simple adjustment in which, where monetary assets exceeded liabilities, increasing amounts would be necessary to maintain the same level of scale of operation.	It required the treatment of monetary items in the balance sheet as well as the profit and loss account. It split the treatment of monetary between trade debtors and creditors on the one hand, and longer term borrowing on the other hand.	There was no difference between ED 24 and SSAP 16. The HMCA was amended to include cash and bank overdrafts. For the gearing adjustment, liabilities were excluded from those which were in substance equity capital.
Capital Maintenance	It proposed the maintenance of the physical nonmonetary assets of company. Revenue, therefore, would be changed with the depreciation and COSA both measured on a current cost basis. Holding gains on fixed and stocks would not form part of profit but would be taken to a reserve account.	It focused on the operating capacity of the physical assets and aimed to maintain the same volume of goods and services.		Operating capability was adopted; that is, what the business is currently able to supply with its existing resources. In other words, it sought to maintain a fund of wealth for investment. Therefore, the concept seems to be closer to a proprietary view of investment than to the entity concept.	It adopted the concept of physical assets and required that the same volume of goods and services to the business be maintained.

contaminated by changes in price levels since these prices are excluded and set up in capital maintenance accounts.

2- This method measures the real effect of inflation:
a- balance sheet items reflected at current value take into account changes in specific price on these items;
b- it can also recognise the effects of technology, competition, and industry peculiarities.

3- It provides more information in that it splits the total profit into holding gains and operating profit. This permits better appraisal, and provides more useful data for decision-making purposes (Alexander, 1986, p.44).

4- By requiring holding gains to be excluded from the reported profit, it allows for a proper maintenance of operating capacity, with holding gains recognised and reported when they occur.

5- It will provide management and the users of published accounts with more realistic information on costs, profits, the value of assets, and the return on capital and on assets.

The disadvantages of the CCA are :

1- Balance sheet and income statements are defective: For balance sheets, there is no uniformity; combinations of current cost will be used, and income statements are also defective because they do not reflect changes in the purchasing power of money in the period in which they occur.

2- There are some problems in implementation and

administration. For example, CCA represents a complete departure from historical cost provision, and it needs two sets of records. Strong exception is taken by auditors to any suggestion that the CCA method should apply to small businesses, where audit cost and time will increase (Carsberg, et al, 1985, p.9).

3- It still fails to give an indication either of the current market value of most assets in their present state, or of the business as a whole.

3.3.6 Other Issued Exposure Drafts

The ASC issued Exposure Draft No 35, entitled "Accounting for the Effects of Changing Prices", in May 1984. This met widespread opposition from different accounting bodies, and was withdrawn in March 1985, ten months after being issued. ED 35 was based on the same concepts as SSAP 16, and recommended that financial statements should show the effects of changing prices on the operating capability and financing of the company by giving the following current cost information :

- adjustments for depreciation, cost of sales, monetary working capital, and gearing.
- any other material adjustment to the profit or loss on ordinary activities consistent with the current cost convention and its effect on the profit or loss on ordinary activities.
- the current cost adjustment or adjusted amount in respect of minority interests , and for extraordinary items.

- the effect of all the above current cost adjustments on the profit or loss for the financial year.

These proposals were centred on the profit and loss account and gave less emphasis to the current cost balance sheet figures. The scope of application was reduced to all public companies, and three alternatives were given for the treatment of the gearing adjustment:

- the first was identical to that of SSAP 16.

- the second type of gearing adjustment represented those parts of the other current cost adjustment and the unrealised revaluation surpluses arising in the year that may be regarded as being financed by borrowing. If operating capability is to be maintained, an amount equal to this gearing adjustment could be borrowed and the gearing ratio would remain unchanged (Alexander, 1986, p.343).

- the third was calculated by applying the rate of increase in general prices to the average net borrowing during the year.

ED 35 proposed that only one set of accounts should be produced. If the accounts were prepared under the historical cost convention the current cost information should be disclosed in a note to the accounts, and vice - versa .

Following the withdrawal of ED 35, the ASC in July 1985 issued a draft of an ED 38 (the number 38 has since been used elsewhere.), entitled " Reporting the Effects of Changing Prices on Earnings ".

The intention of this ED was to show how much of the

reported earnings would have to be set aside to maintain the financial or physical capital of the company. It would only apply to Stock Exchange or Unlisted Securities Market companies, and would make adjustments for monetary items such as monetary working capital and gearing adjustment optional. It recommended that the following adjustments be shown (ASC, 1985, p.12):

- adjustment for depreciation and COSA.
- any adjustments relating to monetary items.
- any other adjustments reflecting the effects of changing prices that are consistent with the capital maintenance concept adopted and which the directors consider appropriate to the company's circumstances.

This ED was much more flexible than previous proposals (SSAP16 and ED35) and differed in a number of respects:

- it did not require disclosure of the current costs of assets.
- it allowed companies to adopt their definition of capital maintenance.
- it made adjustments for monetary items (i.e. MWC and Gearing Adjustment) optional .

The response to these proposals was such that the ASC decided that there was no point in issuing the ideas as a formal ED , because it was already clear that not enough accountants would agree with it .

The subsequent plans of the ASC were explained thus:

1- ASC remains of the view that CCA is the best way of measuring the effect of changing price levels on the great majority of economic

entities .

2- In order to free the way for innovation and development of appropriate disclosure , ASC had withdrawn the SSAP16, and issued an official Handbook of Accounting for Changing Prices, for use as an authoritative reference work.

3- It found that companies are reluctant to disclose information about the effect of changing price level . Therefore, ASC intends to consult with the CCAB about how such a minimum disclosure requirement might be sought. (ICAEW, 1986, p.99)

Although the Solomons Report and the Scottish Research Committee were not primarily concerned with inflation accounting (see chapter two), they included suggestions for using value to the business and net realisable value respectively. The Solomons Report view is that the income measure derived from changes in the balance sheet should be adjusted for inflation to provide real financial capital maintenance (Solomons, 1989, p.22).

Inflation has imposed a severe test of historical cost accounting as a reliable basis for reporting results and financial positions of companies. Indeed it is widely considered that where a company's results and financial position are materially affected by changing prices, historical cost information alone is insufficient. In these circumstances, most professionals and accounting bodies, specially the ASC, consider the provision of information on the effect of inflation to be important.

The present situation is the result of a long period of negotiation and unavoidably bears the mark of compromise. The first step was taken by the Sandilands Committee in

1974, when the Committee rejected entirely the use of CPP indexes, thus polarising the debate by expressing outright opposition to the CPP system favoured by the professional standard - setters. Moreover, it was proposed that CCA would be the basis of the main published accounts, and from that time most ED's and standards have developed from the basic idea of the Sandilands Committee. More recently, we have had ED 18, the Hyde Guidelines, and SSAP16, " each fundamentally different from the others and none of them based upon any published field research". (Briston, 1981a, p.37).

Chapter Four
Inflation accounting in
the USA and the Netherlands

4.1 Development of Inflation Accounting in the USA

Debate over how accountants should recognise the impact of inflation has occurred intermittently in the USA for over 70 years. For instance, in 1918, Middleditch was concerned that the wholesale price index in the USA had nearly double during the 1st World War. His suggestion was that the wholesale price index be applied to financial statements in order to express them in terms of dollars of current value. A year later, Bauer suggested the use of replacement value accounting, while Sweeney later attempted to report the effect of changes in general and specific prices.

In 1947, the Institute's Committee on Accounting Procedure (a forerunner of the Accounting Principles Board, APB) considered that depreciation must be based upon current values in order to cope with rising costs. This suggestion met with disapproval as being impracticable, and pressures from industry urged reconsideration (Miller, 1980, pp.58-9) .

May in 1949 suggested the use of the LIFO method to recognise the higher costs of replacing inventories together with a depreciation charge in two parts (May,1949):

1- The customary amount based upon historical costs and credited to regular accumulation accounts;

2- An additional increment based upon the difference between the historical cost of assets that are cost - adjusted by the consumer price index at year end.

In 1951, the American Accounting Association's

Committee on Concepts and Standards Underlying Corporate Financial Statements issued supplementary statement No.2, on " Price -Level Changes and Financial Statement ". They recommended that an adjusted dollar statement should be prepared supplementary to the historical cost financial statements (AAA, 1975, p28). In 1957 they issued their statement entitled "Accounting and Reporting Standards for Corporate Financial Statements", which stated:

Supplementary data may be reported to reflect the effect of price changes in the specific assets held by the enterprise during the period, to show the effect upon the enterprise of movements in the general price level, or to achieve both purposes. Adjustment for individual price changes may be affected by determinations of replacement cost or by the use of specific indexes; adjustment for changes in the general purchasing power of money requires the use of general rather than specific price indexes. (AAA, 1957, p.539)

The American Institute of Certified Public Accountants (AICPA) issued in 1963, Accounting Research Study No.6, "Reporting the Financial Effects of Price - Level Change", (ARS No.6), which suggested that historical cost should be retained as the basis for preparation of the primary financial statements, while supplementary statements should be used to report the impact of price level changes. These restatements should be in units of purchasing power of common dollars after multiplying by the Gross National Product Implicit Price Deflator Index (GNP Deflation) (Miller, 1980, pp.60-1).

In 1969 came APB Statement No.3, "Financial Statement

Restated for General Price - Level Changes". This recommended supplementary statements which were adjusted by a general price index, using the same model as that proposed in ARS No.6, and including reporting of the gain or loss on monetary items in the income statement (AICPA, 1969). Neither of these publications required compliance, and they had no visible impact on accounting practice.

The Financial Accounting Standards Board (FASB) issued a discussion memorandum in February 1974 which followed ARS No.6 and APB No.3 in proposing supplementary reports showing the effects of general price-level changes. The FASB issued an Exposure Draft in December 1974 entitled "Financial Reporting in Units of General Purchasing Power", proposing the adoption of the general purchasing power method of accounting for inflation by USA companies for the fiscal year beginning on or after 1st January 1976.

In 1976 the Securities and Exchange Commission (SEC) issued Accounting Series Release No. 190 (ASR 190), which favoured a current cost approach. The primary objective of ASR 190 was to provide data about the current cost of inventories and productive capacity at the balance sheet date. It was applicable to large industrial firms whose inventories plus gross plant and equipment exceeded \$100 million and represented more than 10% of total assets. The data required to be shown were:

- Inventories shown at current cost.
- Cost of sales also shown at current cost of goods and services at the date of sale or service provision.

- Plant and equipment shown at their estimated current cost of the remaining productive capacity, depreciation based upon current cost and calculated by the straight - line method.

ASR 190 did not require, but permitted, disclosure of the effects of inflation on the monetary items since they could be approximated by use of various indices generally available to the statement user.

After ASR 190 was issued, the FASB withdrew its proposal for mandatory supplementary disclosure of price level adjusted financial data.

In 1978, the FASB published another Exposure Draft, "Financial Reporting and Changing Prices". This was a hybrid proposal in several respects, as companies could disclose supplementary data by using the historical cost/constant dollar and the current cost reporting methods, use of the current cost method was encouraged unless, because of the nature of the operation, a particular entity would get essentially the same results by using the historical cost/constant dollar basis. Also, the constant dollar basis might be used if it better reflected the effect of changing prices on the enterprise. All companies subject to its requirements would disclose certain supplemental information for the current year, and for the five most recent fiscal years.

Then in September 1979, the FASB issued statement No.33, "Financial Reporting and Changing Prices", which showed a

number of important changes from the proposals of the 1978 Exposure Draft. The most important feature was the removal of the choice of basis for the supplementary statement; both current cost and general purchasing power data were now required. It required companies to give supplementary information under two fundamentally different measurement approaches:

1- Historical cost / constant dollar accounting, which dealt with general inflation; and

2- Current cost accounting, which addressed the effect of specific price changes on a firm's resources (FASB, 1979, para.22).

a- Historical income from continuing operation for average current year by constant dollar measurement of the cost of sales and depreciation. Other revenues and expenses did not need to be adjusted because the FASB believed they already reflected average current dollars.

b- Purchasing power gain or loss on net monetary items using the CPI to measure general inflation. This figure was not to be included in the income from continuing operations as calculated in (a) above (ibid., para.52 and 29).

4.2 Current Cost Basis

Companies to which FAS 33 applied were required to disclose the following data:

a- Income from operations on a current cost basis.

b- Current cost accounts of inventory and property, plant and equipment at the end of the fiscal year.

c- Increase or decrease in current cost amount of inventory and property, plant and equipment, net of inflation. These figures were not to be included in the historical income from continuing operations as calculated in (a) above .

As for specific assets measurement, FAS 33 asserted:

Current cost is equal to the current replacement cost of the asset owned, adjusted for the value of any operating advantages or disadvantages of the asset owned. Current cost differs from current replacement cost in that current cost measurement focuses on the enterprise, whereas current replacement cost may be a measurement of a different asset, available for use in place of the asset owned. Current cost will be less than current replacement cost if the service potential of the asset owned is less than the service potential of the asset that would replace it. (ibid., para.99)

Therefore, the current cost of a used asset may be measured:

1- by measuring the current cost of a new asset that has the same service potential as the used asset had when it was new, and deducting an allowance for depreciation;

2- by measuring the current cost of a used asset of the same age and in the same condition as the asset owned;

3- by measuring the current cost of a new asset with a different service potential and adjusting that cost for the value of the differences in service potential due to differences in life, output capacity, nature of service, and operating costs.

Therefore the current cost for these used assets might be estimated in three ways :

1- The estimated buying price of an asset of the same description and life as the owned asset concerned.

2- The estimated buying price of a similar new asset minus the depreciation calculated according to an acceptable accounting method.

3- The estimated buying price of a new improved asset minus the operating disadvantages of the old asset, and less an allowance for depreciation.

There was no monetary working capital adjustment, and the gain or loss on net monetary items had to be disclosed although it was not to be included in income from continuing operation.

4.3 Five Year Summary

Under FAS 33, companies were required to present a summary of selected data for five years in order to aid users of financial information to assess trends. This summary included the following data, all expressed in constant dollars :

- a- Net sales and other operating revenue.**
- b- Historical cost / constant dollar information concerning;**
 - income from continuing operations
 - income per common share from continuing operation
 - net assets at fiscal year - end.
- c- Current cost information concerning;**
 - income from continuing operation
 - income per common share from continuing operation
 - net assets at fiscal year - end
 - increases or decreases in the current cost amount of inventory and property, plant and equipment,

net of inflation. (Kirkman, 1980,
pp.24-5)

- d- Other information concerning;
- net sales and other operating revenue
 - cash dividend per share
 - market price per share at year end
 - average consumer price index.

The information required by FAS 33 would be useful in four ways:

- " a- Assessment of future cash flows.
b- Assessment of erosion of operating capability.
c- Assessment of financial performance.
d- Assessment of the erosion of general purchasing power" (FASB, 1979, para. 94)

To sum up the development of inflation accounting in the USA, as in the other English-speaking countries the USA has adopted current cost accounting for financial reporting to reflect the impact of inflation.

However, CPP has not been abandoned, but is being used as an alternative and in some respects as a complement to CCA. Therefore, the gearing adjustment and monetary working capital adjustment have not undergone serious discussion in the USA. Thus, the present state of affairs in the USA has substantial future changes implicit in it. Future events will depend on complex interaction with other countries, such as the UK, which have close trading links and important cross -country holding by multinational subsidiaries: international compatibility of accounts for the purposes of consolidation is an important factor in the evolution of new forms of financial reporting (Tweedie, and Whittington, 1984, p.188).

4.4 Inflation Accounting in The Netherlands

4.4.1 Historical Background

Dutch accounting can be described as a compound of several characteristics. The most important is that the principles of business economics are developed and interpreted by Dutch accountants as practical guides for accounting and auditing.

The present state of Dutch accounting is largely attributable to the ideas and philosophy of an accountant/professor, Theodore Limperg Jr.

4.4.2 Limperg's Theory of Replacement Value

Professor Limperg is considered to be the founder of the Dutch school of replacement value accounting. He was a business economist, who emphasised the use of accounting information for decision - making and control. He drew on economic theory and deductive reasoning for justification of his system.

His theory encompassed not only financial reporting and auditing, but also management information needs and the relationship of company accounting to the regulation of the national economy. He was an early proponent of current value measurements for external reporting and as a basis for management policy - making, and argued that during inflationary periods the exaggerated profits shown by historical cost accounting made credit for expansion too readily available, which resulted in over-investment and still higher inflation (Scott, 1971, p.310).

Thus Limperg's theory of value contained the foundations of the theory of income measurement, and argued that there is, in principle, no difference between the problem of valuation and the problem of income measurement at the moment of sale and in preparing annual financial reports. His theory aims to calculate without ambiguity, the income which can be consumed (or divided) after maintaining the sources that create the income. Therefore, income recognition is placed at the point of sale, and transaction profit is measured by the excess of sales revenue over the replacement value of the good. Therefore, Limperg's income is the consumable amount. Holding gains are considered capital adjustments, and are not part of the transaction profit. Certain rules have been determined for the calculation of profit according to Limperg's theory:

- 1- There can never be a profit without a sale, so that the realisation principle is consistently adhered to;
- 2- The favourable difference between replacement value and historic cost cannot be profit, either for goods sold or for goods not yet sold;
- 3- The unfavourable difference between historic cost and replacement value is always a loss". (Burgert, 1971, p.114)

4.4.3 Current Value Accounting in the Netherlands

The practice of current value accounting in the Netherlands has a relatively long history. Since 1950, a number of the bigger corporations have applied replacement value accounting for financial and reporting.

However, there are no strict rules on the application of current value accounting in the Netherlands, though of

course, the replacement value theory, as advocated by Limperg has clearly influenced the methods applied. Nevertheless, a research project carried out by the Economic Institute of the Free University, Amsterdam, covering the period from 1st April 1967 to 11th March 1968, for all commercial and industrial Dutch companies with securities quoted on the Amsterdam Stock Exchange, found, as shown in table No.(4.1), that the valuation of fixed assets at replacement value and depreciation on that basis is the least used method (15% or 39 companies).

Three interesting reports were published during 1974 and 1975, which highlight the practical side of Dutch current value accounting. In the first of these, the Nederlands Institute Van Registeraccounting (NIVRA) reported on a survey of 129 annual accounts of quoted companies for the year 1970 - 1971. The second, by a research team from the University of Utrecht, investigated the business economic substance of the annual reports of 50 of the largest trading and manufacturing companies for the year 1972 - 1973. The third was a doctoral dissertation by Dr. J. Klaassen on the practical and theoretical aspects of current value accounting in the Netherlands (Muis, 1975, p.377).

The NIVRA investigation concluded that the number of cases in which current value accounting had actually been applied as a basis for financial reporting was modest.

The Utrecht research concluded that the 50 annual accounts complied only marginally with legal requirements,

and they failed to conform to the informational requirements of business economics. The report stated that only two out of the 50 companies applied a current value method for all relevant assets and liabilities.

Table No. 4.1

Bases of Valuation of Fixed Assets and Calculation of Depreciation in The Netherlands

Net Fixed Assets of companies (in FI m)	Methods of Evaluation								Total	
	I		II		III		IV		No	%
	No	%	No	%	No	%	No	%		
0 -10	100	64.1	27	17.3	21	13.5	8	5.1	156	60.2
10 -25	16	37.2	10	23.3	9	20.9	8	18.6	43	16.6
25 -75	12	32.4	7	18.9	7	18.9	11	29.8	37	14.3
Above 75	3	13.0	3	13.0	5	21.7	12	52.2	23	8.9
Total	131	50.6	47	18.1	42	16.2	39	15.0	259	100

In this research four methods of valuation for fixed assets were distinguished :

- I- Valuation in the balance sheet on the basis of historic cost and depreciation on this basis;
- II- Valuation in the balance sheet on the basis of historical cost, but with extra depreciation above historical cost, which is subtracted in the balance sheet from the historical cost of fixed assets;
- III- Valuation of fixed assets in the balance sheet at historical cost from which depreciation on that basis is subtracted as a charge to income. However, extra depreciation is calculated, and this sometimes has the effect of bringing original depreciation to the level of depreciation on the basis of replacement value (the extra depreciation is credited to an account belonging to equity capital).
- IV- Valuation of fixed assets at replacement value and depreciation on that basis according to Limperg's theory (De Bruin, 1970, p.15).

In Klaassen's review for the year 1971, based on personal interviews with companies, he concluded that there were major differences between theory and practice, and that this was due to the major problems of interpretation that companies had in attempting to apply current value accounting (Klaassen, 1980, p.307).

4.4.4 Replacement Value Accounting at N.V.Philips Company

Philips is one of the world's leading producers of electrotechnical equipment; approximately 90% of sales are outside the Netherlands. Philips consists of a group of two interrelated corporate structures. These are:

- N V Gemeenschappelijk Bezit Van Aandeelen Philips Gloeilampenfabrieken (N V Bezit), which holds 99.99% Philips shares, N V Philips' Gloeilampenfabrieken (N V Philips) and the participations of N V Philips.
- The United States Philips Trust (the Trust) and its participations.

Product activities are grouped into six product sectors in accordance with relationships of technology and market . These sectors are :

Product Sales 1987	%
Lighting	11.5
Consumer Electronics	29.5
Domestic Appliances	11.1
Professional Products and Systems	25.7
Components	19.0
Miscellaneous	3.2
Total	100
	=====

Philips was founded in 1891 by Gerard Philips to make Carbon filament electric lamps. By 1900 Philips was the No.3 European producer of lamps. After the 2nd World War, product divisions were set up and the basis of the present federation concept of national organisation established.

N.V. Philips has its headquarters in the Netherlands, with subsidiaries in practically every country in the World, e.g. Latin American, Africa, Asia, USA, and Europe as well (Stopford, 1980, pp.783-85).

Adoption of current value accounting by Philips and the adjustment to the system over the years has been in three stages:

- 1- The adoption of current value accounting in 1951;
- 2- Changes in the system in 1971; and
- 3- Application of the gearing concept in 1981.

From its date of establishment, Philips used the historical cost system in its financial and management accounting system, and in 1951 it changed to current value accounting for three reasons:

i) Management, at different levels, required current value data to measure performance and for managerial accounting.

ii) The profit concept at Philips is based on the notion that the business enterprise strives for continuity; to achieve this implies the obligation to maintain capital. Therefore all costs should be valued on a current basis and income should only arise if capital employed at the

beginning of a period has been maintained.

iii) Because the Philips company has several subsidiaries in different countries which have different inflation rates, it adopted a system which set forth cost on a more uniform basis.

Moreover, the desired relationship between product-costing and other features of the management information system on a current replacement value basis and its application for profit determination purposes was an important reason for the choice of this method.

Goudekot, A. summarised the method used by Philips to revalue its assets:

The replacement value is determined on the basis of the trend of the specific price levels and not of the general price levels;....Each group of assets is regularly revalued by means of index numbers. For instance, for a factory building, revaluation is on the basis of the index numbers for the cost of that type of building ; for machine tools, according to the market prices...Larger fluctuations are put though on an approximate basis as and when they arise... A department in the Philips organisation which is allied to purchasing department follows the trend in price levels; the accounting department sees to the recording of the individual items in such a way that the information required for revaluation purposes is readily available. (Goudekot, 1960, pp.38-9)

Because the Philips company has a large number and variety of fixed assets, depreciation is not calculated for each, separately, but appears as an aggregate sum. Therefore, all replacements of fixed assets during the year are equal to the total yearly depreciation. According to this policy, the capital invested in fixed assets will

relate to the total fixed assets of an average life, and then no deferred depreciation needs to be provided for. In case of decline in price levels, the procedure followed is the opposite of what is done in the case of an increase.

For inventories evaluation, standard prices are adopted for all groups of inventories, and the starting point is the price level which formed the basis for calculation of the standard prices. These standard prices are adjusted to replacement value by means of index numbers. Individual adjustments take place periodically or at greater intervals of time if there is no need to adjust (Enthoven, 1982, p.13).

Philips company used to calculate its index numbers for the main raw material, and this is one of the duties of an estimating department. The calculation of index numbers can be described as follows (ibid., p.14):

- 1- The purchasing department keeps records of the purchase prices of the raw materials on the basis of actual purchasing prices, and informs the estimating department in price changes.

- 2- On the basis of the information under (1) the estimating department has at its disposal up-to-date price records.

- 3- For its own purpose and on behalf of other departments which require current information on prices, the estimating department keeps a so-called rough price list of the major articles purchased. By means of lists of price changes which are serially numbered, these lists are kept up

to date. They contain the following information" (Goudeket, 1960, p.40) :

code number
description of the article
fixed price as at...
adjustment number...
as at.....
 price.....
 index.....

4- With regard to labour and overhead cost, the index numbers are counted on the basis of the trends for levels of wages and expenses. The changes are not calculated to the very last detail; capacity costs are given major attention.

5- For other articles which are produced by the company itself, the estimating department keeps data on standard prices and index number of, purchased articles, products of supply and machine hours of the related production unit.

Up to 1971, Philips believed that there is no profit unless the purchasing power of shareholders' equity has been maintained. This means that assets are revalued according to current value. Since part of the shareholders' equity is invested in monetary assets, the purchasing power of that part will diminish if there is a decrease in the value of currency. "For this reason, Philips calculates on the basis of the cost of living index, how many currency units represent the same purchasing power of the capital as at the beginning of the investment" (Enthoven, 1982, p.15). Thus the profit and loss account shows a result after the purchasing power of shareholders' equity has been maintained.

Several changes were made to the system in 1971 in respect of accounting for excess technological price fall, maintenance of stockholders' equity and accounting for deferred taxes.

Improvement in technology was recognised by Philips as an important factor in current value accounting. In particular, when the currency of account had remained constant in value, costs would have tended to decline. This was noticed by Philips when costs of certain products rose less rapidly than the increase in the general price level. In its annual report of 1970, it stated with regard to inventories that "changes in the replacement value are either credited or charged to Revaluation Account; reductions in value resulting from special technological improvements in our production process are charged to profit and loss account" (Philips, annual report 1970).

From 1971, the Philips company changed the above policy. It felt there was no reason to reserve additional amounts as a result of technological improvements, and any additional reserves the company was to make would have to be part of the income appropriation and not the calculation of income. However, it still calculated depreciation on the basis of current value, and charged this amount to the profit and loss account.

The main effects of changes in the principles for calculating income as of the end of 1971 were:-

1- " Up to the end of 1970 reductions in the value of inventories resulting from special technological

improvements in our production processes were charged to the income account, as of January 1, 1971, they have been changed to the revaluation surplus" (Philips, annual report, 1971, p.33).

2- Since the tax authorities do not recognise the calculation of profit on the current value, application of this principle accounts to a great extent for the existence of deferred tax liabilities. Therefore, the deferred taxes are included as liabilities at the moment of revaluation to give a fair presentation of net worth and total liabilities. Until the end of 1970 this was the situation in Philips. The change since 1971 has the effect that upon revaluation an amount is deferred as before to cover the relevant tax liabilities. As a consequence, amounts payable are no longer charged to the income account, but to the reserve which was created at the time of revaluation.

As a consequence of this change, results were, in the opinion of Philips, reflected more fairly in the successive income accounts since the amounts in any given year were no longer affected by the tax consequences of price changes in previous years.

4.4.5 Current Situation in the Philips' System

The main reasons for changing the financial policies of the Philips company in 1981 were; (1) increased interest levels; (2) the rapid rise of inflation rates, and the impact of borrowing on the financial reports. In this regard, the Philips company declared these reasons for change,

in its annual report 1981. It stated:

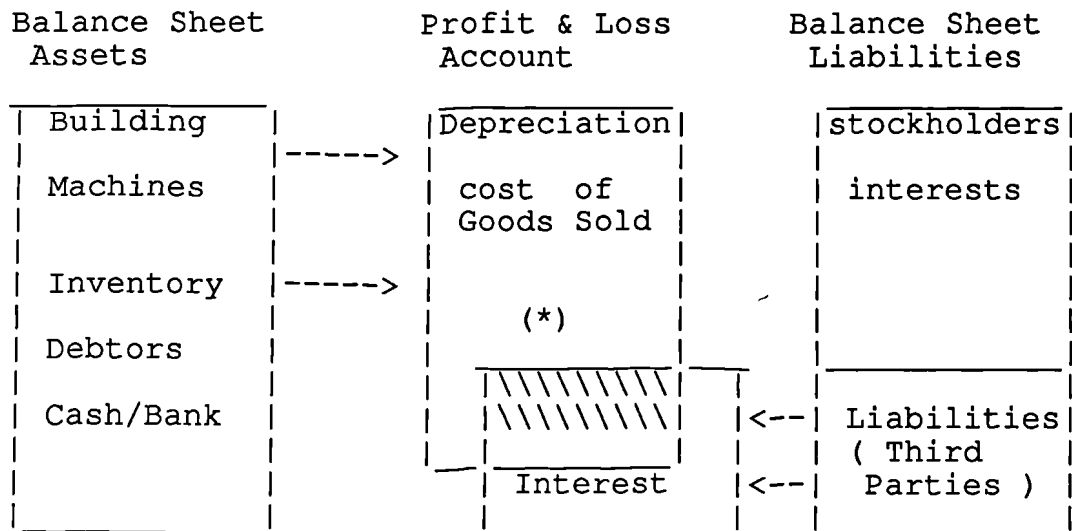
In order to continue to give a good insight into our company's financial position and the results of its operations even in an economic situation characterised by high inflation, high interest rates and great fluctuation in exchange rates we have decided to change the principles used in drawing up the financial statements. The changes are in line with new developments in the formation of opinion relating to the drawing up of financial statements. (Philips, annual report 1981,p.5)

As a result, specific attention was paid to the way in which the company was financed, whilst maintaining the principle of current value. Therefore, the impact of the equity/ debt relationship was reflected in the gearing concept, which was incorporated into the 1981 accounting reporting system. Dr. Appelo, H., who formulated this change in the Philips philosophy, stated:

One should be aware that part of the revaluable assets are not always financed with shareholders' equity. Nevertheless, the revaluation of fixed assets and stock had hitherto been charged in total to the profit and loss account during the lifetime of such revaluable assets, and also the high costs of borrowed capital... For these reasons the revaluation surplus, in so far as it is realised, is credited to results by means of a gearing adjustment, to compensate for the high interest cost. (Appelo, 1982)

From the assets side of the balance sheet, the cost of goods sold is charged to the profit and loss account. From the liabilities side of the balance sheet, the profit and loss account is debited with interest on borrowed capital which includes a premium for the erosion of this value of money.

The principle of this adjustment can be illustrated as follows (Cattela, 1983, p.39):



(*)  Excess of Revaluation.

In fact, the principles used in drawing up the financial reports of the Philips company, have changed since 1st January 1981. They aimed to ensure that even in an economic situation characterised by high inflation, the financial reports will continue to give a good insight into the company's financial position and the results of its operations. For that reason, the financial reports for 1981 took account of the way in which the company is financed in calculating profit. In principle, the fixed assets and inventories are considered to be financed with shareholders' equity. In so far as that is not the case, the difference between the amounts for depreciation and consumption of goods, calculated on the basis of current value, and the corresponding amounts calculated on the basis of historical

cost, is credited to the profit and loss account as a gearing adjustment.

The gearing adjustment is broken down into two components which are shown separately in the profit and loss account:

"- Revaluation included in costs. This is the difference between the costs based on replacement value and those based on the historical cost which is realised at the time of sale.

- Addition to the revaluation surplus realised for financing with shareholders' equity. This is the addition to the shareholders' equity which is necessary, under otherwise similar circumstances, in order to enable the financial structure to be maintained" (Philips, annual report 1981, p.41).

In this system, taxes on profits cannot be charged permanently to revaluation surplus as this would adversely affect financial structure. For this reason, since 1981, the tax on profit has been calculated in full in the profit and loss account.

The changes in the Philips company were wide-ranging. However, they were worth the effort. Philips has a very modern current value accounting system. This system can be summarised as it appears in the financial statements for the financial years 1987 and 88, which declare the principles of valuation and calculation of profit in both current value and historical cost (Philips, annual report 1987 and 1988).

4.4.6 Policies Followed in Valuation Based on C.V.

In the previous sections we referred to the general methodology applied at Philips company, and it would be useful to align those with the notes to the financial report for 1988. The principles of valuation and measurement are those which have been applied since the last changes in 1981.

a- The valuation of fixed assets and inventories, as well as depreciation, is based on current (replacement) value. The replacement value is determined by taking into consideration such factors as the use and the location of the assets, as well as the influence of technological developments. The replacement value of fixed assets is calculated using current prices for specific assets, or using price indices for categories of assets the price level development of which is determined by similar influences.

b- Changes in replacement value which have resulted from fluctuations in the local price level of fixed assets (i.e., revaluation) are charged or credited to the revaluation surplus account, in the total capital invested in fixed assets, and the amount is added to revaluation surplus and charged to the income account in order to preserve a properly balanced financial structure. Fixed assets which are manufactured in the company's own factories, such as machines, are revalued on the basis of current costs.

c- For those fixed assets and inventories not financed with shareholders' equity, a change in the

current value is included as a deferred gearing adjustment, which is credited to the profit and loss account in proportion to the depreciation of the fixed assets and consumption of the inventories concerned.

d- Deferred income taxes relating to revaluation of assets are temporally deducted from the revaluation surplus and accounted for as a deferred tax liability. Upon use and/or depreciation of the revalued assets, the related income tax is charged to income and the deferred income tax liability is revalued to the revaluation surplus account.

e- The costs of sales are calculated on the basis of current value. The costs of sales include the write downs of any inventories or fixed assets to a lower business value or net realisable value.

In addition to the current value, certain information is also given based on historical cost. The policies applied for the valuation and calculation of income based on historical cost are substantially in conformity with generally accepted accounting principles. The valuation and depreciation of fixed assets and the use of inventories are generally calculated based on purchase prices in local currencies. The FIFO method is used for the valuation of inventories and the calculation of the cost of goods sold. All other policies are the same as used in the current value approach.

In regard to the capital maintenance concept at Philips company, prior to 1971 an adjustment existed for both

productive capacity by means of current value and equity capital by a general purchasing power correction; but, as said earlier, when the maintenance of equity by general purchasing power was abandoned, the financial relationships were maintained by means of equity and debt adjustments based on the gearing concept (Enthoven, 1983, p.21).

To sum up the Philips' system, which is generally representative of the Dutch accounting system, some of the principal points are:

1- The N.V. Philips' system has been in use more than thirty five years, and all management, directors, and the investment public have been pleased with this system (ibid., p.93).

2- Philips has adopted a dynamic approach in its system, and has adapted to the changing economic and financial conditions. Thus, it has made the system appropriate for both internal and external reporting.

3- Dutch accounting and the Philips' system are based on economic science, where accounting (and auditing also) comprehensively use economic measurement criteria. The basic assumption is that accounting has to be economically useful and relevant.

4- The financial structure has changed to a large degree based on extensive debt financing. In order to avoid a double pressure, or double counting, by calculating current value over total capitalisation, an adjustment is made by Philips for those assets financed with outside funding (i.e., the gearing adjustment).

Chapter Five
Accounting For Inflation
In Brazil

5.1- Introduction

From 1945 to 1961 the Brazilian economy grew rapidly. The average annual growth rate was 7 percent, the highest rate in Latin America (Synrud, 1974, p.2). At the same time, inflation continued at an average annual rate of 20 percent, but without any obvious adverse impact on economic growth.

After 1961, the Brazilian economy seemed to collapse in a matter of months. The growth rate, which had reached 10.3 percent in 1961 declined to 5.3 percent in 1962 and to only 1.5 percent in 1963, causing an acceleration of the inflation rate which increased to 87 per cent by 1964.

After the Brazilian Military Revolution in 1964, legislation was enacted to reform business accounting principles in order to take some of the sting out of inflation. This legislation covered principally the revaluation of fixed assets and working capital (Mann, 1967, p.50).

5.2 Monetary Correction System 1951 - 1964

In order to evaluate the system of monetary correction it is necessary to evaluate the system prior to 1964, and then evaluate the system during the period 1964 to 1977.

In 1951 the Brazilian government issued tax law no. 1474, which was abolished a year later. That law introduced the monetary restatement of historical costs of fixed assets into the Brazilian accounting system. The revaluation was allowed only for those fixed assets which were acquired

before December 1946.

The reason behind this legislation was to provide companies with a realistic basis upon which an "excess profit tax" was calculated, because income tax included a progressive tax on excess profit, defined as the amount of profit exceeding a given percentage of capital. This excess profit was determined on the basis of historical cost of capital stock plus reserves, which during the period of inflation was clearly undervalued.

The main weaknesses of this law were that the depreciation amount was not based on the restated amount of fixed assets. Because the restated amount of fixed assets was not a basis for the depreciation calculation, the government alone gained from the increase in the owners' equity upon which excess profits were calculated.

In September 1956, the Brazilian government issued another tax law related to the excess profits tax, with high progressive rates from 20 percent to 50 percent on profits exceeding 30 percent of capital. The law followed the same procedures for the restatement of fixed assets which had been used in law no. 1474, but the restatement was allowed from the end of 1956 of fixed assets acquired before December 1950. Because of high rates of inflation this law did not protect firms against the excess profits tax, and the capital base upon which the return was calculated became rapidly eroded (Doupnik, 1982, p.202).

5.2.1 Law no. 3470

On 26th November 1958, law no 3470 was issued. In this law, for the first time in Brazilian legislation, the term "monetary correction" was used and the term "revaluation of fixed assets" was abandoned. The new law concentrated on the following points:

1- corrections, not just for historical cost of fixed assets, but for accumulated depreciation also;

2- recording of monetary variation due to movements in exchange rates of liabilities stated in foreign currency.

This law required the National Economic Council to prepare coefficients of correction for each of the previous two years (ibid., p.202). The net monetary correction amount was to be recorded as an increase to capital stock through the distribution of stock dividends. The reason for this procedure was the government's belief that stock dividends would encourage development in the securities market.

As in the previous legislation, this law did not allow the use of the corrected amount of fixed assets for calculating depreciation. This was because, if depreciation had been based on the revalued fixed assets, this would have reduced profit and, in turn, would have reduced income tax receipts. This law remained in force until 17th July 1964 when the new government significant changes to the system (Doupnik, 1987, p. 115).

5.2.2 *Evaluation of the System up to 1964*

The most noticeable feature of the Brazilian system was its concentration on fiscal aspects rather than improving information for management.

Thus, the laws neither made sure that the purchasing power of capital was being maintained, nor provided external users with a clear picture of enterprise performance within an inflationary period.

Because income tax increased when the profit exceeded a given percentage of capital, the government allowed companies to correct fixed assets in order to provide a realistic basis for calculating the excess profit and, in turn, reduce the total tax paid by companies. Although the legislators realised that the excess profits tax was unjust, they were not willing to give it up because it represented an important source of revenue.

Moreover, it is evident that the government was more interested in tax aspects than in the inflation accounting problem *per se*, as depreciation was still calculated on the original acquisition cost of fixed assets not on the restated amount, which would have reduced the tax due from companies.

To sum up the procedures that were adopted by the Brazilian government before 1964, they seem to have solved only two problems: first, correction was finally allowed on an annual basis; secondly, correction was allowed on accumulated depreciation and amortisation (i.e., to provide a more accurate measure of the book value of fixed assets).

However, depreciation was not allowed on the inflation-adjusted fixed assets amounts, there was no restatement of inventory, and no attempt was made to measure the purchasing power gains and losses arising from holding monetary assets and liabilities. All in all, these procedures did not eliminate the distortion in income statements during the inflationary period (ibid., pp.112-3).

5.3 *The System of Monetary Correction from 1964-77*

When the military government took over in 1964, it had to face the huge national deficit which had become uncontrollable. Therefore, it decided to establish a system of monetary correction.

The adjustment of financial instruments for price increases, was first applied in July 1964 to tax debts in an effort to increase public sector revenues (Octavio, 1969, p.162). Success with the application of monetary correction to public debts provided the monetary authorities with the necessary confidence to extend the same correction factors to private debt, which was done in July 1966. The Finance Minister explained the need for monetary correction in this way :

Once the government opted for gradualism in its fight against inflation, which meant a continuation of the rise in prices it was incumbent upon it to offer some guarantee of the preservation of capital value, while the inflation persisted, in order to stimulate savings. Hence its recourse to monetary correction. (ibid., p.163)

The new government needed to generate cash for the National Treasury, and thus issued law no.4357 on 17th July 1964, which authorised the issue of indexed treasury bonds and made compulsory the monetary correction of fixed assets by enterprises. It should be pointed out that until this time, there had been no compulsion to make a monetary correction of fixed assets and the practice was not widely adopted by Brazilian companies.

The income tax had been 10 percent of the corrected amount, but the new law reduced this to 5 percent, and required companies to purchase Treasury Bonds to a value of twice what the tax would have been. Companies were not allowed to re-sell these bonds for a period of five years. By this means, the government compelled enterprises to finance the public debt either through direct payment of tax or by giving loans to the national government through the purchase of treasury bonds. For the first time it became permissible to calculate depreciation on the monetary correction of fixed assets, though only on a portion of the corrected amount. Law no.4357 decreed that depreciation could be calculated in the year 1965 on 50 percent of the corrected amount, on 70 percent in 1966, and on the full corrected amount of fixed asset in 1967 (Doupnik, 1982, p.205).

5.3.1 Working Capital Adjustment

Also under law no. 4357 the amount needed to finance working capital was allowed to be deducted from the amount of profit subject to the excess profit tax, but not from the normal income tax. The law defined working capital as current assets plus long-term assets less liabilities, after subtraction (Comer, 1975, p. 42, and Mann, 1967, p. 51):-

a- from liabilities, debt foreign, currency or subject to indexation; and

b- from assets, all receivables held in foreign currency or subject to indexation (e.g. treasury bonds), investments in stock of other enterprises, and capital stock subscribed but not yet paid - up.

The amount required to maintain working capital was calculated by applying index coefficients to the opening amount of net working capital. The corrected amount was used for the calculation of excess profits, but did not appear in the published financial reports (Doupnik, 1987, p. 115).

The purchasing power gains or losses on monetary items were measured by multiplying total liabilities by the index coefficient (the amount added to profit has the effect of measuring the gain in purchasing power from holding liabilities) and multiplying the amount of short and long-term monetary assets by the index coefficient (the result was subtracted from holding monetary assets).

Stock was not excluded from the calculation of working capital as would have been necessary if the maintenance of working capital were solely an attempt to measure

purchasing power gains and losses. The use of historical costs would cause an understatement of cost of goods sold, and hence a fictitious profit. In turn, it appears that leaving inventory out of the calculation of working capital was an attempt to eliminate this source of fictitious profits (Altmann, 1974, p.751).

5.3.2 *Fixed Assets*

Brazilian law requires that all commercial and industrial companies revalue their fixed assets within four months of the end of their fiscal year. The revaluation is based on official indexes which are published for each calendar year.

The revaluation lags behind, as acquisitions of one year are not revalued until the second succeeding year (*ibid.*, p. 751). An example will help to illustrate the procedures required and the problem arising from it.

Assume the following assets were acquired on 1st January 1965 at Cz\$ 1000, and the following information about the indexes and inflation rate.

Year	Annual Inflation Rate	Accumulative index	
		Base 1965=100	Base 1966=100
1965	34.5	134.5	100
1966	39.2	187.2	139.2
1967	23.2	230.6	171.5
1968	25.0	288.3	214.4

The asset would appear in the balance sheet thus:

At the end of the financial year 1965 Cz\$ 1000

At the end of the financial year 1966 Cz\$ 1000

At the end of the financial year 1967 Cz\$ 1392

At the end of the financial year 1968 Cz\$ 1715

In the above example, the cumulative increase in the general price level was 188%, whilst the assets were adjusted only by 72%. Thus the inflation rate was ignored totally during the first year from acquisition. In the light of the above, the depreciation calculation on fixed assets would still be subject to monetary correction two years after the fixed asset was fully depreciated, and the asset had been written-off (Fleming, 1974, p. 59).

Between 1964 and 1977, several Decrees were issued related to the maintenance of working capital and fixed asset revaluation.

5.3.3 Decree - law no. 401

In 1968, the government issued decree no. 401, which concentrated on working capital and its maintenance. The decree gave companies the option to deduct from taxable income an amount equal to the provision for maintaining working capital from the beginning of 1969. It defined working capital as in the previous law with the significant difference that liabilities carried in foreign currencies or subject to indexation were not to be subtracted in determining the amount of liabilities to be included in the calculation of working capital.

In law no.4357, the provision for the maintenance of working capital had been set against income. Under the new

decree it was taken to a reserve for the maintenance of working capital carried in the owner's equity in the balance sheet. The decree applied to all companies and in 1969 and 1970 they were obliged to purchase indexed government bonds "Obrigacao Reajustavel de Tesouro Nacional (ORTN)" (Readjustable Obligation of the National Treasury), in an amount equal to 15% of the amount taken to the reserve in these years. The decree improved the system of inflation accounting by allowing the deduction of the provision for maintenance of working capital from normal taxable income; and excluding foreign currency and indexed liabilities from calculation of working capital.

However, there were still some limitations such as the use of opening net working capital to calculate the provision for maintenance of working capital, and exclusion of foreign currency and indexed receivables from the calculation.

5.3.4 Decree - law no.433

This decree was issued in 1969 with the declaration that the reserve for maintenance of working capital must not exceed 20% of the current year's net income (profit). Moreover, when the National Monetary Council felt it necessary to increase government tax receipts, the Minister of Finance could eliminate the use of the reserve for the maintenance of working capital. This restriction had the effect of seriously misstating net income reported in the published financial reports. Although there was nothing

to prevent firms from doing so, in practice no firm recorded a decrease in net income due to setting a figure for maintenance of working capital for financial reporting purposes greater than allowed by law. Professor Martins, E. in 1973 stated:

Due to the still close connection between balance sheet and income tax accounting, no Brazilian firm publishes or otherwise makes available income statements in which the degree of indexation is higher than that permitted by tax law. (Martins, 1973, p.11)

The use of the provision and reserve for maintenance of working capital was optional rather than mandatory, and many companies failed to establish such a reserve . In 1973, the Central Bank of Brazil determined that the monetary correction of working capital had to be classified as an appropriation of retained earnings, rather than as an expense (Doupnik, 1982, p.205).

5.3.5 Decree - law no. 1302

At the end of 1973, the military government issued another decree which dealt with two parts of the system; first the monetary correction of fixed assets to be amortised; secondly, changes in the definition of working capital.

Before this decree, two contradictory methods had been employed in the monetary correction of depreciation (Arthur Andersen, 1975, p.1). The first was that the accumulated depreciation of historical cost and accumulated depreciation of the monetary correction of historical cost were both

subject to the system of monetary correction; the second was that accumulated depreciation of historical cost was subject to monetary correction while the other was not.

The problem with this was that the amount of correction could change perpetually, and the percentage of adjusted historical cost depreciation did not reconcile with the original depreciation in several years. This decree required firms to use the first method. However, the problem of perpetual monetary correction and depreciation was not solved because the cumulative percentage of depreciation of adjusted historical cost did not match the cumulative percentage of depreciation of historical cost in certain years.

Secondly, the decree introduced a new method of calculating net working capital, in which there was no difference in the assets side from the previous system, but now only those foreign currency and indexed liabilities contracted to finance fixed assets were excluded from the liabilities side. The government's intentions in defining net working capital in this manner were to provide an incentive for business to invest in fixed capital.

The decree raised the limit on the amount of the provision for the maintenance of working capital, which was permitted as a tax deduction up to 100% of net income for the period. Therefore, any excess could not be carried forward to offset income in future periods. In 1974, the basis for calculating the reserve for working capital was the figure of opening net working capital multiplied by the

appropriate index coefficient used for the indexation of National Treasury Bonds, which was the only index employed in the Brazilian system for monetary correction.

5.3.6 Decree - law no. 1338

Working capital was redefined again in July 1974 by decree law no. 1338. This adopted a different approach, defining working capital as owner's equity less fixed assets plus investments.

Under this definition, deferred assets and liabilities were included in the calculation of working capital. Therefore, the Brazilian balance sheet according to the new definition was classified into major sections as follows (ibid., p.40-2):

1- ASSETS	2-LIABILITIES
A-	D-
- Current Assets	- Current liabilities
- cash	- accounts payable
- receivable	- short-term notes
- inventory	
- Long - Term Assets	- Long - Term liabilities
- long - term receivable	- long - term notes
	- bonds payable
B-	E-
- investment in stock of other companies	- deferred liabilities
- fixed assets	- unearned revenues
- buildings	
- land	
C-	F-
- deferred assets	- owner's equity
- prepaid expenses	- capital stock
- preoperational expenses	- retained earnings

According to previous laws, working capital was defined as (A - D), whereas according to the new decree it would be (F - B). As the assets side should equal the

liabilities side, $(F - B)$ would equal $(A + C) - (D + E)$.

Therefore, the difference between the two definitions is the calculation of both C and E, which represented deferred assets and deferred liabilities. The new decree aimed to provide a rough measure of purchasing power gains or losses on monetary items plus the fictitious profits arising from understatement of inventory. However the result becomes less clear because neither monetary items nor inventory were themselves adjusted (Doupnik, 1982, p.203).

With regard to the treatment of the provision for maintenance of working capital in financial reports, most of the previous laws had remained silent. A gain was not part of taxable income before 1975, whereas a loss could be deducted for tax purposes.

This discrepancy in procedure was corrected by the decree, which required that any gain of this nature be included in income of the current period. This was the first significant step by the Brazilian government to recognise that inflation could cause both losses and gains.

5.4 Theoretical and Practical Evaluation

The most important developments in the system of monetary correction during the period from 1964 up to 1977 were: that the depreciation expense was allowed to be calculated on the adjusted amount of fixed assets; the reserve for maintenance of working capital was permitted to be deducted in arriving at normal taxable income; and the gains from the maintenance of working capital were regarded

as a source of income and required to be added to income for taxation purposes.

There were some theoretical limitations, when the system was put into practice, such as, using the opening working capital position for calculation of reserve, which thus ignored any gain or loss arising from monetary assets acquired and liabilities undertaken during the financial period (Doupnik, 1987, p.126).

On the practice side, there was an improvement in the methodology for depreciation in the monetary correction, eliminating the possibility of this becoming perpetual. There continued, however, the vital problem of the delay in the correction of fixed assets, whereby assets which were purchased during one year were not involved in the correction system until the following year, thus ignoring the inflation rate between the date of purchase and the end of the year of purchase.

This delay in recording the correction amount was a result of the fact that the index numbers used for adjustment of fixed assets were published after the end of the year. Moreover, because of the absence of monthly indexes, fixed assets could not be adjusted from the data of acquisition up to the end of the year.

It is clear that the government emphasised tax collection, rather than good accounting theory and practice. This was noticeable in several points: for instance, the depreciation of the full amount of the revalued fixed assets

was allowed only at the beginning of 1967; the provision for maintenance of working capital was initially deductible in calculating excess profit but did not appear in the financial reports.

5.5 The Current System in Brazil

5.5.1 The Need For The New System

Brazilian companies can be broadly divided into companies held by a family and companies held by foreign corporations. Neither of these has made significant use of the Brazilian stock market to increase their capital.

The Brazilian government wished to encourage companies to increase their use of the securities market and to enhance individual savings in corporate securities. In order to create a more organised and secure equity market, the "Comissao de Valores Mobiliarios" was created in 1976. It is a regulatory body which promotes the development of a more efficient and broader based equity - securities market (Doupnik, 1987, p.117). In association with this stock exchange, a new corporation law no.6404 was passed in 1976, to create the legal structure necessary to strengthen the risk capital market in Brazil.

The law included some additional accounting requirements, such as (Brazilian Gazette, 1976):

- Disclosure of consolidated financial reports;
- Disclosure of a statement of sources and application of funds;
- Equity method accounting for investments in stock of other companies;

- Reclassification of items in the balance sheet to eliminate sections entitled Deferred Assets and deferred liabilities and so-called Compensation Account; and

- New policy for monetary correction.

5.5.2 The General Principles of The Current System

Because the law required all companies to pay dividends, it was obliged to describe income in such a way that firms did not run the risk of decapitalization. This made the removal of fictitious components of profit all the more imperative, as business enterprise now became subject to the double risk of taxation and obligatory dividend distribution.

The general principle of the new monetary correction system was stated in paragraph 185 of the law, but the methodology of the system was set out in 1977 in law no.1598. This was the first time in Brazil that inflation accounting had been given due prominence. As Latorracco, N. states:

For the first time, our legislation concerning inflation has put the accounting aspect in the primary position. (Latorracco, 1977, p.37)

The corporation law states that:

The effects from the change in the purchasing power of the national currency on the value of the elements in the balance sheet and the results of the period be considered in the financial statements. (Brazilian Gazette 1976, article 185)

In order to achieve this objective the law determined the items which required monetary correction as follows:

1- Acquisition cost of permanent assets (investments, fixed assets, and deferred charges), the balances of accumulated depreciation, amortisation, and depletion and provisions for permanent loss in value of permanent assets;

2- The balances in the owners' equity accounts;

3- The correction to be made at the year - end using an index of devaluation of the national currency recognised by the federal authorities.

The correction amount for the owner's equity, required by the law, must be directly added to those accounts, with the exception of correction of capital stock which will constitute a special capital reserve. The correction amounts for permanent assets will be directly added to those accounts with no separation between historical cost and the amount of monetary correction. The counterparts of these corrections are to be accumulated a monetary correction account whose balance shall be included in the computation of net income.

There are some differences between the new law and the previous system of monetary correction. First, the monetary correction of working capital and consequently its inherent problems, have been eliminated. Secondly, the adjustment of fixed assets includes all permanent assets. Thirdly, an adjustment of owner's equity is introduced. Fourthly, correction amounts are added directly to their

respective accounts, thereby eliminating adjunct accounts for monetary correction. Finally, the correction is required at the end of the year instead of the beginning, thereby eliminating the time lag problem (Doupnik, 1982, p.207).

The problem of which index to use was determined by the tax law of 1977, and decree law no. 1598.

The corporation law laid down official indexes to measure the devaluation of the Cruzado (Brazilian currency), while the tax authorities required the ORTN index, which is recognised for the adjustment of government bonds and other obligations which are subject to periodic indexation.

In fact, tax law has two ways of realising the new system of monetary correction. The first method requires the maintenance of a subsidiary ledger using the ORTN index as a unit of account. This procedure is demanded only of companies which had an opening balance in owner's equity of at least Cz\$ 100 million in 1977. The second method records a monetary correction directly to the accounts.

Although the mechanics of the correction process were determined in tax law, special adjustments had to be made to cover the transition from the old system to the new. The balance sheet at the end of 1977 had to be adjusted for certain items and a special monetary correction account was first shown as a separate account in owner's equity, and later capitalised. Three kinds of adjustment were required:

- 1- Any addition to fixed assets during 1977 using the average rate of inflation. This was in order to

eliminate the time lags under the old system before the first correction.

2- Using the equity method for investments, which were to be adjusted retroactively up to the end of 1977 with the adjusted basis being used for monetary correction purposes.

3- According to the new law, all items in the owner's equity section of the balance sheet are subject to monetary correction. For this purpose at the end of 1978, these accounts had first to be adjusted by the amount accumulated in special monetary correction accounts arising from (1) and (2) above.

5.5.3 *The New System in Practice*

The underlying aim of the new system, is to protect the owner's equity from erosion caused by inflation. If the owner's equity exceeds his permanent assets, a portion of capital is not protected from inflation and a loss results.

Two examples are given to demonstrate this new monetary correction approach.

Example no. 1:

A service company started its work with these assets and liabilities, no inventory and no depreciable assets.

Balance Sheet

(at beginning of the first year)

ASSETS	Cz\$	LIABILITIES	Cz\$
Cash	4800	Note payable	1600
Land	16000	capital	19200
Total	20800 =====		20800 =====

During its first year of operation, it generated revenue of Cz\$ 12800, and total expenses were Cz\$ 9600. All these financial transactions were realised in cash evenly throughout the year. The annual rate of inflation was 25% .

The monetary correction for this year amounted to Cz\$ 800.

Permanent assets (land)= 16000 x 25%	Cz\$	4000
Owner's equity (capital)= 19200 x 25%		(4800)
	Cz\$	800 =====

The journal entries to record the monetary correction procedures are :

Land	4000	
Monetary Correction	4000	
and		
Monetary Correction	4800	
Special Capital Reserve	4800	

The balance of the monetary correction account will be closed in the income statement as follows:

Income Statement

(for first year after correction)

	Cz\$
Revenues	12800
Expenses	9600
Operating Profit	<u>3200</u>
Monetary Correction	(800)
Net Profit	<u>2400</u> =====

The balance sheet after monetary correction is shown as follows:

Monetary Correction Balance Sheet
31st December 19x1

	Cz\$		Cz\$
Cash (4800+12800-9600)	8000	Note Payable	1600
Land (16000+4000)	20000	Capital	19200
		Special Capital Reserve	4800
		Retained Earning	2400
Total	<u>28000</u> =====	Total	<u>28000</u> =====

For comparison purposes with the CPP income result, assume an average rate of inflation during 19x1 of 12.5 %.

CPP Income Statement			
Revenues	12800	x 112.5%	14400
Expenses	9600	x 112.5%	(10800)
Operating profit			<u>3600</u>
Purchasing Power Gains and Losses			
Loss	Cash beginning balance	4800 x 25%	(1200)
	Increase in 19x1	3200 x 12.5%	(400)
Gain	Notes Payable	1600 x 25%	400
Net purchasing power			<u>1200</u>
Net income			<u>2400</u> =====

The debit balance of the monetary correction account

reduces operating profit by the balance Cz\$ 800. This balance is equal to the holding gain from holding monetary assets (cash 4800 - note payable 1600) x 25% = Cz\$ 800. The loss in purchasing power from the increase in cash during the year is exactly balanced by the CPP income through the increase in operating profit arising from indexation to the revenue and expenses. This only applies when all revenues and expenses are realised in monetary assets and liabilities, but if they are non-monetary items, the result from this system would be different from the CPP method. It is clear that the Brazilian system measures the loss in purchasing power of monetary items too.

This example did not show the effect of inflation and procedures of this system on inventory and fixed assets; therefore a second example will include these two items.

Example no. 2:

The increase in the general price - level was 40% and 20% by mid - year. The comparative balance sheet and income statement according to the monetary correction system is as follows:

Assets	Balance Sheet (after monetary correction)	
	End of year n-1	End of year n
Cash	Cz\$ 200	400
Accounts Receivable	800	1000
Inventory	600	1000
Fixed Assets (after correction)	1600	2240
Accumulated Depreciation (after correction)	(800)	(1344)
Total	<u>2400</u>	<u>3296</u>

Liabilities

Accounts Payable	280	440
Notes Payable	200	280
Bonds Payable	920	920
Capital Stock	800	800
Special Capital Reserve	—	320
Retained Earning (after correction)	200	536
Total	<u>2400</u> =====	<u>3296</u> =====

Income Statement

(at the end of year n, and after correction)
Cz\$

Sales		<u>6000</u>
Cost of goods sold		
inventory at beginning year n	(600)	
purchases during year n	(5200)	
inventory at the end year n	1000	
	<u> </u>	(4800)
Gross Profit		<u>1200</u>
Miscellaneous expenses	(400)	
Interest	(240)	
Depreciation	(192)	
	<u> </u>	(832)
Operating Profit		<u>368</u>
Monetary correction		(112)
Net Profit		<u>256</u> =====

According to the decree law no.1598, depreciation should be taken on the average correction value of fixed assets, instead of the beginning or ending balance. As the annual inflation rate is 40% ,then the average value of fixed assets is Cz\$ $[1600 + (1600 \times 1.4)]/2 = 1920$. The depreciation method used is a straight line at 10% per year, giving annual depreciation of Cz\$ 192.

Monetary Correction Procedures, year n		Cz\$
Fixed assets	1600 x 40%	640
Accumulated depreciation:		
initial balance	800 x 40%	(320)
yearly depreciation	192 (140 - 120)/120	(32)
Capital stock	800 x 40%	(320)
Retained earnings	200 x 40%	(80)
Reduction from operating profit		<u>112</u>
		=====

Accumulated depreciation at the end of year n		Cz\$
Balance at beginning		800
Correction	800 x 40%	320
Depreciation of year n.		192
Correction of yearly depreciation		32
Total		<u>1344</u>
		=====

Retained earnings at the end of year n		Cz\$
Balance at the beginning		200
Correction	200 x 40%	80
Net profit (year n)		256
Total		<u>536</u>
		=====

This method is similar to the current purchasing power method if all the expenses and revenues occur regularly throughout the year and the method of inventory value is FIFO. Thus, the income statement according to the CPP method for the same example is as follows at the end of year n.

Income Statement			Cz\$
(at the end of year n, after CPP adjusted)			
Sales	6000 x 140/120		7000
Cost of goods sold			
inventory, at beginning	600 x 140%	(840)	
purchasing	5200 x 140/120	(6067)	
inventory, at the end	1000 x 140/140	1000	
		-----	(5907)
Gross profit			<u>1093</u>

Miscellaneous expenses	400 x 140/120	(467)	
Interest expenses	240 x 140/120	(280)	
Depreciation	192 x 140/120	(224)	
			(971)
			<hr/>
Operating profit			122
Monetary gain			134
			<hr/>
Net profit			256
			=====
Monetary gain (Cz\$)		Restated to the	
		end of year n	
Net monetary items at			
the beginning of year n	(400) x 140%	(560)	
+ sales	6000 x 140/120	7000	
- purchasing	(5200) x 140/120	(6067)	
- Miscellaneous expenses	(400) x 140/120	(467)	
- interest expenses	(240) x 140/120	(280)	
Net monetary item at the			
end of year n	(240)	(374)	
		240	
Monetary gain			134
			=====

A comparison of CPP profit with the profit derived from the Brazilian system, shows that the two approaches give similar results.

This correspondence arises from the assumption that the final inventory is acquired at the end of year n. However, if the inventory had been acquired at a date for which the price level was different from that at the end of year, the CPP method would restate inventory at ending price level, whereas the monetary correction system would make no adjustment at all. For instance, if the ending inventory had been acquired when the general price index stood at 35%, then the cost of goods sold would be as follows:

Cost of goods sold (Cz\$)

inventory at beginning	600 x 140%	(840)
purchasing	5200 x 140/120	(6067)
inventory	1000 x 140/135	1037
		<u>(5870)</u>
		=====

The importance of Brazil's monetary correction system is that it provides profit similar to traditional CPP accounting, given the assumption that final inventory is acquired at the year - end and valued using the FIFO cost flow assumption. Nevertheless, in spite of the advantage of measuring CPP -adjusted historical cost profit, the Brazilian system suffers from several imperfections.

5.6 *Limitations of the System*

Among several merits of the Brazilian system is its simplicity. However, its simplicity does not mean that it is free from problems, such as limited information, due to the accumulation of different effects into one monetary correction account. As we see in the examples, all items adjusted are combined into one line in the monetary correction statement, and it is difficult to separate these elements in order to analyse the financial reports (Bear, and Beckerman, 1980, p.700).

Theoretically, the system is imperfect in that certain non-monetary items, such as inventory and long-term assets, are not subject to monetary correction. These items, like permanent assets, are not subject to a loss in purchasing power and should therefore be adjusted as well. As we have seen, there is an implicit correction of the beginning

balance of inventory. Discrepancies will arise between CPP accounting income and the Brazilian method when ending inventory using the FIFO valuation procedures is acquired prior to year-end and when the LIFO valuation procedure is employed. Obviously, the net effect of the correction inventory will depend upon volume and rate of turnover, and the valuation method employed. The effect of not including some non-monetary assets in the correction procedure is that the reduction from net income is greater than it otherwise would be. Since, as we shall see next, the index used for monetary correction does not effectively measure the rate of inflation, this additional decrease in income protects the business enterprise from decapitalisation (Doupnik, 1982, p.215).

5.7 Correction Indexes

The tax authorities chose to use the ORTN index for correction. Comparison of this index with other indexes shows that in the long - term it has lagged behind by a significant amount, as shown below:

Year	Wholesale price index		General price index		ORTN	
	Annual	Accum.	Annual	Accum.	Annual	Accum.
1971	21.4	268	19.5	271	22.7	277
1972	15.9	326	15.7	329	15.3	330
1973	15.5	393	15.5	396	12.8	385
1974	35.4	567	34.5	567	33.3	546
1975	29.3	762	29.4	763	24.2	703
1976	44.9	1150	46.3	1163	37.2	1001
1977	35.5	1593	38.8	1653	30.1	1333
1978	43.0	2321	40.8	2368	36.2	1851
1979	80.1	4261	77.2	4274	47.2	2773
1980	121.3	9550	110.2	9194	50.8	4232
1981	94.3	18650	95.2	18042	95.6	8373

Source: Conjuntura Economica, various issues.

The formula actually used to calculate the ORTN index does not reflect the full amount of the change in general prices during the year. The formula prescribed by law converted to an annual basis is (Doupnik, 1982, p.216):

$$V(t) = V(t-1) \times 1.0 + 0.8[I(t)/I(t-1)-1] + 0.2(0.15)$$

Where V(t) = value of ORTN index at end of year,
I(t-1) = value of wholesale price index at beginning of year.
t = month of reference.

To make matters worse, the government abandoned the above formula for calculating the ORTN index in 1979 and 1980. While the rates of increase in the wholesale price index in 1979, and 1980 were 77% and 51%, the government prefixed increases in the ORTN index of only 47%, and 51% respectively. As of 1979, ORTN reflected only 65%, and at year-end 1980 only 46% (4232/9194) of the accumulative increase in the GPI. The effects of an understatement in the ORTN index on the balance sheet are that owners' equity accounts and permanent assets are understated.

The ORTN index does not reflect the full rate of inflation because it stems from an attempt by the government to reduce the inflation feedback mechanism through which indexation has been accused of adding fuel to the inflationary fire. Beckerman, P. stated:

A period of increasing inflation tends to cause increases in inflationary expectation and uncertainty. In such a period, the public seeks to reduce its money holdings, in the form of demand deposits, in favour of index - linked financial instruments. This flight from money causes a liquidity crisis in the banking system and political pressure forces the government to help out by creating additional

money and therefore inflation. (Beckerman, 1978)

It is unfortunate that for financial report purposes the tax authorities ask that a single index should be used which does not effectively measure the inflation rate, though there is no apparent reason why financial reports could not be adjusted using an index other than the ORTN index.

5.8 Monetary Correction and the CPP Method

The net effect of the Brazilian monetary correction system is to produce something very nearly akin to the CPP method.

The main differences between this system and the CPP method are:

1- The Brazilian system uses the ORTN index for fixed assets and for net working capital.

2- "Working capital items appearing in the closing balance sheet are not restated in end-of-year currency units, the net working capital adjustment being based solely on opening balance sheet figures.

3- The fixed assets restatement begins only in the second year after acquisition.

4- Profit and loss account flows in the monetary correction System are not translated into common monetary units" (Tweedie, and Whittington, 1984, p.238).

5- The Brazilian system, in general, is less complicated than the traditional CPP method.

It is worth mentioning that the Sandilands Report

described the Brazilian system as an attempt to implement replacement cost valuation, in that the Brazilian system uses an official index which can be regarded as surrogate for specific price changes. The Sandilands Report stated:

It is sometimes assumed that the Brazilian system is in principle the same as the CPP method outlined in SSAP 7, but in our opinion it is not. The accounting remains in terms of monetary units and no attempt is made to adjust items such as sales to reflect the loss in 'purchasing power' of the currency. In our opinion the Brazilian system may be classified as a replacement cost system, based on money as the unit of measurement, replacement cost as the basis of assets valuation, and maintenance of the purchasing power of the business as the concept of capital maintenance. In this case, the replacement cost of assets is estimated by reference to a single wide - ranging index. (Sandilands, 1975, p.227)

In fact, since the date of the Sandilands Report, the Brazilian system has been reformed in a manner which makes it closer to the CPP method.

An example of each method will give a clear picture of the Brazilian system and the CPP method, and how the Brazilian system approaches the CPP method in its procedures except for the differences mentioned above.

General Example:

General Information (all figures in pounds).

1- Historical currency values

A- opening balance sheet (1986).

Inventory	100	Current Liabilities	100
Cash	200	Long-Term Debt	800
Fixed Assets	3200	Equity:	
Accumulated		Capital	1600
Depreciation	(400)	Reserves	600
	<u>3100</u>		<u>3100</u>
	=====		=====

B- closing balance sheet (1986).

Inventory	300	Current Liabilities	100
Cash	600	Long-Term Debt	800
Fixed Assets	3200	Equity:	
Accumulated		Capital	1600
Depreciation (600)		Reserves	600
		Profit and Loss	400
	<u>3500</u>		<u>3500</u>
	=====		=====

Notes:-

- General inflation rate is 25%.
- 1st January 1985 index was 85%.
- Average inflation is 110%.
- 1st January 1986 index was 100%.

Historical Income Statement

Revenues Items:	
(Sales - Purchases - Expenses)	1000
Depreciation	(200)
	<u>800</u>
Taxation	400
	<u>400</u>
Net profit	=====

CPP method

Stage (1): Restatement of balance sheet at beginning

Inventory	100	Current Liabilities	100
Cash	200	Long-Term Debt	800
	300	Equity:	
Fixed Assets	3765	Capital	1881
(3200 x 100/85)		(1600 x 100/85)	
Accu. Depreciation (470)		Reserves	814
(400 x 100/85)			
	<u>3595</u>		<u>3595</u>
	=====		=====

Stage (2): Updating of balance sheet at the beginning of the year.

Inventory	125	Current Liabilities	125
(100 x 1.25)		(100 x 1.25)	
Cash	250	Long-Term Debt	1000
(200 x 1.25)		(800 x 1.25)	
		Equity:	

Fixed Assets (3765 x 1.25)	4706	Capital (1881 x 1.25)	2351
Accumulated Depreciation (470 x 1.25)	(586)	Reserves	1019
	<u>4495</u>		<u>4495</u>
	=====		=====

Stage (3): Conversion of balance sheet at end of the year.

Inventory	300	Current Liabilities	100
Cash	600	Long-Term Debt	800
	<u>900</u>	Equity:	
Fixed Assets (3200 x 125/85)	4706	Capital (1600 x 125/85)	2353
Accumulated Depreciation (600 x 125/85)	(884)	Reserves	1469
	<u>4722</u>		<u>4722</u>
	=====		=====

Stage (4): In stage 3 there was an increase in the Reserve Account of 450 pounds (1469 - 1019). This surplus arose as follows:

Profit per historical cost accounts	400
Stock adjustment (deduct: 125 - 100) (add: 300 - 300)	(25)
	<u>375</u>
Depreciation adjustment (884 - 586) - 200	(98)
Revenue items {[Sales-purchases-expenses]125/110} - 1000	135
	<u>412</u>
Gain on monetary items (1)	38
Current Purchasing Power Profit	<u>450</u>
	=====

(1)		
Monetary item at the beginning of year		(875)
(700 x 1.25)		
+ Revenue items	(1000 x 125)/110	1137
		<u>262</u>
+ Monetary items at the end		(300)
		<u>38</u>
		=====

The Brazilian Method

(1) Closing balance sheet.

Inventory	300	Current Liabilities	100
Cash	600	Long-Term Debt	800
	<u>900</u>	Equity:	
Fixed Assets	4000	Capital	1600
(3200 x 1.25)		Capital Reserves	400
Provision for		Reserves	750
Depreciation:		Profit of Period	450
Balance	600		
Correction	150		
(600 x 25%)			
Correction of			
historical			
charge to			
P & L	50		
	<u>(800)</u>		
	<u>4100</u>		<u>4100</u>
	=====		=====

Profit and Loss Account (P & L):

Revenue items		1000
Depreciation	200	
Correction of depreciation	50	
	<u>250</u>	
Trading profit		<u>750</u>
Taxation	(400)	
Gain on correction of		
balance sheet (1)	100	
	<u>(300)</u>	
Net profit		<u>450</u>
		=====

(1)		
Gain on correction of balance sheet:		
Correction of fixed assets (4000 - 3200)		800
Correction of depreciation provision (600 x 25%)		(150)
		<u>650</u>
Correction of capital (1600 x 25%)	400	
Correction of reserves (600 x 25%)	150	
	<u> </u>	(550)
Gain on correction of balance sheet		<u>100</u>
		<u>=====</u>

It must be noted that the equivalence of net income is dependent upon the assumption that ending inventory is acquired at the end of year 1986. Furthermore, equivalence of net income will not hold when the LIFO method of valuing ending inventory is employed.

The significance of the Brazilian system is that it provides similar results to traditional CPP accounting, given the assumption that ending inventory is acquired at the end of the year and valued using the FIFO method.

5.9 Summary and Conclusion

Brazil has experimented with inflation accounting since 1951. The effectiveness of inflation accounting in Brazil has been limited, however, because of prevailing economic conditions. The procedures used to adjust for inflation in the early years were manipulated in order to continue generating revenues from the taxation of fictitious profits. The various laws altering the monetary correction procedures during this period were decree-laws or tax laws, rather than some kind of financial accounting law. Moreover, from its

inception until the last corporation law no.6404 passed in 1976, the monetary correction was always regulated by tax legislation.

The current Brazilian system for tackling the impact of inflation is better than its predecessor in that certain practical limitations are avoided, and the impact of inflation is reflected through an integrated set of adjustments. It has been seen that the new system is simple to operate, and less complicated than the traditional CPP approach, yet is capable of providing income results equivalent to more complicated systems.

This does not mean that there are no problems with the new system of monetary correction. Some difficulties relate to the mechanics of the system, and other problems are imposed by the tax authorities. For instance, non-correction of inventory and manipulation of the ORTN index will cause profit figures to be less accurate than they otherwise could be, and the net effect will depend upon several factors, some related to the company itself, such as inventory turnover and the inventory valuation method, and some related to the economy - broad factors like the inflation rate and the degree of understatement in the ORTN index. The inventory problem could be solved by requiring inventory to pass through the system like other non-monetary assets, and the ORTN problem could also be easily avoided by simply requiring the monetary correction procedure to be carried out using some other index of general price changes.

The general conclusion regarding the Brazilian monetary correction system is that there are two distinct economic objectives: the first is to provide an equitable basis for the assessment of taxes and distribution of dividends so that companies are not subject to involuntary reduction of capital; the second is to provide information useful to the users of financial reports in making investment decisions.

The current system of monetary correction was incapable of achieving either of these two objectives using the ORTN index and would not have been capable using the GPI (Summer, 1981). These two objectives can only be achieved when all non-monetary assets are valued at current cost and owner's equity accounts are adjusted according to the change in the general price - level.

The current system is not achieving its economic objectives, for these cannot be accomplished without using a system of current cost accounting. Determining the current costs of inventory is not a significant problem; the problem is the current cost of fixed assets, especially when there are technological changes. According to law no.6404 of 15th December 1976, article no.8, firms are allowed to use a system of current appraisal value accounting on a voluntary basis. In turn, Brazilian companies have the chance to protect themselves from involuntary capital reduction by the use of revaluation. The objective of appraisal needs to be considered by the government, especially when the income figures are the basis for taxation and dividend distribution.

All in all, the Brazilian system incorporates many CPP accounting adjustments, although it is not a pure CPP system in the sense of translating all items in the accounts into monetary units of a strictly equal value, i.e., purchasing power as at the same point in time.

On February 28, 1986, Brazil eliminated the indexation system as part of its new anti-inflation measures. Therefore, business enterprises in Brazil are no longer required to prepare an inflation adjustment to their financial reports.

5.10 *Other Latin American Countries*

Before discussing the experiences of other Latin American countries, it is necessary to examine the inflationary experience of these countries which typically suffer from high inflation rates. Table 5.1 gives details of annual percentage consumer price rises for several years.

Table 5.1

Consumer Price Index				
(Index Numbers 1985=100)				
Year	Brazil	Chile	Argentina	Uruguay
1985	100	100	100	100
1986	245	119.5	190	176.4
1987	808	143.2	440	288.5
1988	6325	164.3	1948	467.9

source: International Financial Statistics 1989

From the table, it is clear that these countries are suffering from high levels of inflation. Therefore, some Latin American countries have tried to adopt the government

price level adjustments on the financial reports. A survey done by Price Waterhouse, 1979, showed that Chile and Brazil applied general price level adjustments in the main financial reports, and in Argentina, it was required as a supplementary. (Price Waterhouse, 1979).

Since that survey, CPP adjustments were made compulsory for listed companies in Argentina, in 1980, and subsequently, by a law published in 1983, inflation adjusted financial reports must be published as main accounts by all companies.

As we have seen, Brazil adopted an indexation system, similar to the CPP method, to handle inflation up to 1986. Chile has followed the same system adopted by Brazil. The main difference between them is that inventory, in Chile, is revalued yearly at replacement cost, and Chilean revaluation is mandatory. Moreover, all non-monetary assets are revalued at replacement cost, at the company's option. Therefore, annual reports of fixed assets values are based on consumer price index adjustment rather than current value (Tweedie, and Whittington, 1984,p.240).

In Argentina, inflation accounting disclosure is still voluntary and supplementary, and tax relief is not dependent on consistency with the profit reported in the published accounts. Furthermore, Argentina has a national policy of indexation similar to Chile, though in Argentina, the revaluations are permitted and based on indexes issued especially for this purpose, and made in recognition of the high level of inflation which has occurred. CPP accounting is a natural concomitant of this.

Accordingly, these countries have provided an excellent demonstration of the evolution of inflation accounting practice. The important feature in most Latin American countries, it can be noted, is that the government can play an important role in controlling the effect of inflation, or at least reduce its effect, through legislation.

5.11 Comparative Study Between Four Countries

The previous sections have described the progress of inflation accounting in four countries, the USA, the UK, the Netherlands, and Brazil. Each of these countries has contributed ideas to the debate on inflation, and the views about the two methods, CPP or CCA. It has already been pointed out that there are some important differences between these countries, and an attempt will be made here to assess these.

The Netherlands pattern represents a classic example of the replacement cost method, especially in the Philips Co., which counters the arguments of those who have doubted the practicality of such a system. The UK adopted the concept of the value to the business, whereas the USA rejected the meaningful profit and loss account and balance sheet approach and was "... the first country to adopt the 'information set' style of reporting price - level adjusted [data], enabling the reader of the accounts to obtain information based on differing concepts of income - current purchasing power and current cost data all being provided" (Tweedie, and Whittington, 1984, pp.248-9).

5.11.1 DATE

USA

Although there were several issues related to financial reports and changing prices either by APB, SEC, or FASB, the standard statement was Financial Accounting Standard no. 33 issued by the FASB in 1979, although permission was given for the first disclosure of CCA information to be delayed until the issue of annual reports for period, ended on or after 25th December 1980 (FASB, 1979B, para.67).

UK

Similarly, in the UK, several Exposure Drafts have been issued within the last fifteen years, but the last standard, Statement of Standard Accounting Practice no 16 was issued by the ASC in 1980. It was withdrawn by ASC in April 1988.

Netherlands

The only official guidance in the Netherlands is a 1976 pronouncement by the Netherlands Institute Van Register Accounting (NIVRA), which reproduced as an appendix to the International Accounting Standards Committee (IASC) a discussion paper, "Treatment of Changing Prices in Financial Statements", 1976 (Tweedie and Whittington, 1984, p.365). However, the Philips Co., has practised replacement cost accounting since 1951, and has adjusted it several times, most recently in 1981 when it

introduced the gearing concept in its financial reports.

Brazil

The monetary correction system was applied in Brazil between 1951 and 1986. From that date there were several laws and decrees issued by the Brazilian Government, on how to treat the impact of a high rate of inflation on the financial reports. The last corporation Law, no.6404 of 1976, specified the current system of monetary correction in Brazil. On 28th of February 1986, the Brazilian government abandoned the indexation system.

5.11.2 Applicability

USA

FAS 33 applies to all public companies which have either: inventories, property, plant and equipment amounting in total to more than \$125 million; or total assets (after deduction of accumulated depreciation) amounting to more than \$1 billion.

UK

SSAP 16 was to apply to companies which had share or loan capital listed on the Stock Exchange, except where two of the following pertain:

- Turnover of less than 5 million pounds per year;
- Balance sheet total of less than 2.5 million pounds in the historical cost accounts; and
- Average number of employees of less than 250.

Netherlands

In contrast to the other two countries, neither the government nor the accounting institute (NIVRA) have laid down specific accounting principles to be applied, leaving greater flexibility in the application of business procedures.

Brazil

The Company Act 1976 required all Brazilian companies, regardless of type, to apply the monetary correction system from 1st January 1978.

5.11.3 Objectives

USA

The aim of tackling the impact of inflation on financial reporting is to provide better information; in particular, to help users to assess prospective cash flow, to measure the performance of the company, and to provide more helpful data on the erosion of operating capability and changes in general purchasing power (FASB, 1979B, paras. 2-5).

UK

To present useful information for management and shareholders, in particular, to assess financial viability, pricing policy, dividends, and capital structure.

Netherlands

The underlying assumption at Philips Co. and in many Netherlands companies, is that accounting

has to be economically useful and relevant. Therefore, accounting should provide information on such elements as capital formation and savings, effective allocation of resources, and other cost-benefit relationships (Enthoven, 1982, p.94).

Brazil

The major economic goals of the Brazilian Government are to reduce existing economic distortions so that the price system can once again act as an efficient resource allocation mechanism, and reduce the inflation rate without a severe depression.

5.11.4 General Concept

USA

According to FAS 33, there is a dual concept of capital maintenance. Because both CCA and CPP methods are required for the financial reports, the concepts of operating and financial capacity are used, although this information does not have to be shown in the balance sheet.

UK

The concept which was used in capital maintenance was based on operating capability and reflected the net operating assets of the business. Fixed assets should be shown at their "value to the business".

Netherlands

There is no apparent consensus on the capital maintenance concept. For profit measurement, the Dutch seem to prefer the proprietary approach, in that an indication should be given of the amount necessary to maintain shareholders' wealth in real terms (general purchasing power) (Tweedie, and Whittington, 1984, p.227 and p. 333). The Philips Co. has adopted the concept of current value accounting for preparing its financial reports.

Brazil

General price - level adjustments are required on the main financial reports, and indexation was introduced. A general index (ORTN) was effectively applied to equity capital.

5.11.5 MWC AND Gearing Adjustment

USA

There is no provision for these adjustments in FAS 33. The items involved are taken into account in the calculation of the purchasing power loss or gain on monetary items, although adjustments are made with a general price index (Kirkman, 1985, p.129).

UK

In order to measure the CCA operating profit and loss, an adjustment needs to be made to maintain monetary working capital resources, based on a specific price index. A gearing adjustment is also

required.

Netherlands

Although there is no requirement for MWCA and gearing adjustments in Dutch accounting, Philips co., has, since 1981, applied a gearing adjustment which appears in its income statement. This gearing adjustment includes two elements: (1) the realised revaluation surplus; (2) the addition to the shareholders' equity on account of financial revaluable assets with shareholders' equity, in order to maintain the actual financial structure (Philips annual report, 1986, 1987, and 1988).

Brazil

There is no direct adjustment for either MWC or gearing in the Brazilian system.

5.11.6 Profit and Loss Account

USA

This is calculated according to both the CPP and the CCA bases. Both statements have to show the depreciation on both a CCA and CPP basis. The CCA figure for depreciation should be based on the average current cost or lower recoverable amount. The purchasing power loss or gain on monetary items is required to be separately disclosed but should not be shown as part of income from continuing operations (FASB, 1986, para.32, and 40.). A gearing adjustment figure is not required.

UK

This should show a revised operating profit figure after adjustments in respect of depreciation, cost of sales, and monetary working capital. A gearing adjustment is required in arriving at profit or loss attributable to shareholders.

Netherlands

The profit and loss account in the Philips Co. is based on current value. Depreciation is calculated using fixed percentages of the replacement value on the basis of the expected life per category of asset. The cost of sales is also calculated on the basis of current value. A gearing adjustment must be shown in the profit and loss account.

Brazil

The profit and loss account uses a monetary correction system, similar to the CPP method ((see the examples)).

For tax purposes the UK and the USA still have not progressed to the point where companies are allowed to take the depreciation adjustment or other adjustments for tax purposes. This happened in the Brazilian system, and the Netherlands has not accepted the current value basis for determining income for tax purposes (Enthoven, 1982, pp. 18-9, and pp. 77-80).

The restated reports are required to be audited in the UK, the Netherlands and Brazil. The USA does not require

these reports to be audited.

The Brazilian Government has played an important role in applying the monetary correction system by issuing legislation and decrees, and indexes. In the UK, SSAP 16 in its guidance notes suggested that indexes prepared by governmental and private agencies be used in determining the current value of plant and machinery, and also suggested a method for determining current cost of sales and inventories. The UK government supports the current value accounting effort with a periodical publication entitled "Price Index Numbers for Current Cost Accounting". The USA, and the Netherlands have given no such support.

Although some countries (e.g. Brazil, UK) have tried to apply inflation accounting on their financial reports, either by government intervention or at the instigation of professional bodies, and after more than thirty years, they have ultimately abandoned any kind of inflation procedures on their financial reports. In the USA, the situation is different. A hybrid system has been used for years, and is still not compulsory for all USA companies. The Philips company has had experience with inflation since 1951, and its system has been in progress for several years. Therefore, there is little doubt that the Philips' system can be recommended for application in Iraq.

Chapter Six
Accounting Development in Iraq

6.1 Introduction

This chapter will discuss the development of accounting in Iraq and the extent to which it serves the needs of planners.

Therefore, the first section will concentrate on economic development and the factors affecting the development of accounting and financial reports. The other sections will focus on the development of accounting and the uniform accounting system in Iraq, with particular reference to accounting reports, their users, and accounting standards in Iraq. Finally, an evaluation will be made of the uniform accounting system in Iraq.

6.1.1 The Nature of the Iraqi Economy

While Iraq was still part of the Ottoman Empire, before the First World War, her economy did not differ greatly from those of her neighbours, most of which had scarcely emerged from medieval conditions. During that period, public utilities were virtually non-existent: electricity generating equipment had not been installed, there was no modern water supply, health services were inadequate, and the position was the same with regard to other services. In 1920, the newly established government took full responsibility for the development of the country's economy. It immediately started to set up basic public services, creating an extraordinary budget to finance its development activities, concentrating on capital works.

Until 1950, all industries were in the hands of the

private sector. In the early 1950s oil revenues increased rapidly as a result of the agreement between the government and oil companies to share profits equally. As a result the government saw a much wider scope for its activities and a bigger role in the development of the country. During 1951-58, four development programmes were established by the Ministry of Development and the Development Board. Most of these were very ambitious and would have had far-reaching economic effects, but although including industry for the first time, they still lacked preliminary studies of cost-estimation (World Bank, 1979, p.62).

On 14th July 1958, revolution terminated the Monarchy and established the republic of Iraq, bringing a number of changes, among them changes in the government's development administration. Law no.74 of 1959 abolished the Ministry of Development and created an Economic Planning Board, a Ministry of Planning and a Ministry of Industry. The tasks of the Planning Board were: preparation of detailed economic plans and annual plans, determination of economic, fiscal, monetary and commercial policies, and supervision of the preparation of the annual ordinary budget. The main objectives of the economic plans were to accelerate the rate of growth and the diversification of the economy in order to reduce the heavy reliance upon the oil sector.

The main characteristics of the Iraqi economy during 1951-1968 were as follows (Hasseb,1969,p.10):

- 1- The development programmes during that period

appeared to be no more than a list of unrelated projects rather than genuine economic plans (Warriner, 1962, p.127).

2- Projects were selected without the application of modern sophisticated techniques, and the government was merely concerned with establishing consumer industrial projects to satisfy the regional demand for commodities.

3- The important projects initiated in the public sector were the Bitumen Plant in Quayara, the Oil Refinery in Baghdad, the Cotton Textile Factory, and the Sugar Plant in Mosul, and the two Cement Factories at Hammam Al-Ali and Sarchinay.

4- The process of implementation of the industrial programmes was extremely slow, most of the projects included in the 1965-69 plan being projects from previous plans still under consideration.

5-The Planning Board tried to prepare investment programmes which were more sophisticated than those of the Development Board. For instance, in order to achieve an overall growth rate of 8% they decided to maintain the previous rate of the industrial sector which was 12% per annum, and to raise the rate of growth of agriculture from zero to 7.5% .

6- The government share in total investment was raised to 78%.

7- An important weakness of planning during that time was the over-emphasis on financial investment targets which had detrimental effects, because it tended to focus attention on the fulfilment of the financial rather than on

the real targets for investment.

8- The government policy in shifting the emphasis to industry played a significant role in the stagnation of the agricultural sector: despite the high expenditure of successive plans, they did not contribute directly to longer term national agricultural and industrial output.

A new stage in the development of the Iraqi economy took place following the revolution of July 17-30, 1968. The first task faced by the government was to complete the work on the five-year economic plan of 1965-69. After 1968 Iraq formulated and implemented comprehensive National Plans, aimed at achieving industrialisation and economic and social development. The overall rate of growth in Iraq and the industrial rate of growth in particular substantially increased during 1970-76. Moreover, these rates were expected to rise even more as the large projects under construction became productive.

During 1972-73, the government nationalised all foreign oil companies operating in the country. As a result, oil revenues were increased from the beginning of 1974, when the government issued its annual investment programme for the year 1974 at I.D. 1169 million. The programme was for nine months only, because the government changed the financial year, to start from the first of January instead of the first of April.

In November 1976, the government issued its second National Development Plan for the period 1976-80. This

aimed to :

1- Increase per capita income over the plan at an annual growth rate of 13.7% requiring a growth of national income at a rate of 17.2% per annum.

2- Expand the public sector in agriculture and strengthen the industrial sector as a base for the national economy.

3- Establish control by the central government over foreign and domestic trade.

4- Develop scientific research in order to create nationally-developed technology to accelerate economic development.

The main points worth noting about the period 1968-1980 are:

1- It was believed that the public sector alone was in a position to meet the long-term development needs of the country and to establish projects requiring large investment and longer periods to mature. The government tried to achieve a balanced development for different parts of the country.

2- Private sector projects manufactured a large variety of goods and were spread over most of the country.

3- Large sophisticated public sector projects were established, particularly in the engineering industries, encouraging the development of ancillary small scale industries which could best function in the private sector.

The major problem facing the Iraqi economy began in the late 1970s, when the government began to grapple

unsuccessfully with the problem of avoiding oil dependence. The government had decided to concentrate on the infrastructure, while continuing to develop the petrochemical industry. Shortages of skilled manpower became clear, and bureaucratic inefficiency began to have a serious effect on the development process. However, the government tradition of controlling expenditure to avoid debt and economic overheating was maintained until the end of the 1970s (Joffe, and Molachlan, 1987, p.190).

National income, gross domestic product and fixed capital formation according to economic sectors, have tended to fluctuate. For example, national income increased from I.D. 10321.2 million in 1982 to I.D. 12686.7 million in 1985, decreased to I.D. 11558.8 in 1986, and then increased to I.D. 13628.1 million in 1987, with an annual rate of growth of 6.4% during the period 1982-1987 (Ministry of Planning, 1988).

These fluctuations might be related to three separate factors. The war caused damage to plant and involved recurrent costs and disruption. At the same time, the international oil surplus from 1981 onwards seriously reduced revenues. Conditions were worsened by accelerating inflation rates, which rose consistently once the war began, despite official attempts at control, and despite the strong emphasis by government on local materials and products.

The current five-year plan, 1986-1990 calls for significantly less social spending, more investment in

industry and less government control over the economy. The State determines the roles of both the public and private sectors in the economic plan, with public sector projects concentrating on producing basic goods, whilst the private sector concentrates on producing consumer durables and small scale projects (National Westminster Bank, 1986, p.3). The plan's investment was estimated for year 1990 at 5837 million I.D. and its guidelines confine projects to those which rely heavily on local raw materials and either result in significant import substitution or earn foreign exchange.

However, all these plans have faced the major difficulty of planning in Iraq, namely the absence of adequate information about the economy due to shortage of qualified accountants and statisticians. Al-Rahim Salah, in his research, indicates that:

Lack of competent staff to develop accounting uniformity and fear of failure have resulted in slow progress toward purposive uniformity. However, the lack of adequately trained accounting and management personnel in Iraq can be traced to a lack of qualified educators for business in general, and accounting in particular. (Al-Rahim, 1978, p.200)

6.2 Development of Accounting and Financial Reports in Iraq

In order to understand Iraqi finance and accounting development, it is necessary to go back to the last century, when Iraq was under Ottoman rule, and the collection of taxes from companies and merchants was enforced. In 1850, the Turkish government required all Iraqis who wished to establish a company to comply with the "Ottoman Land

Commerce Act", which dealt with the issue of shares and the announcement of bankruptcy. That Act did not specify how books should be kept, nor how financial reports should be prepared, nor did it even determine the responsibility of management to the owners.

The emergence of unlimited companies in Iraq created a need for new legislation, and the "Unlimited Companies Act" was introduced in 1906. This Act dealt with the responsibility of the company to its creditors and lenders. In this Act, for the first time, this kind of company was required to issue its balance sheet, which must be a true and fair reflection of its position, but there was no mention of the profit and loss account.

After the First World War, Iraq came under the rule of the British. The General Governor of Iraq at that time issued in 1913 an act entitled the "Indian Companies Act", which dealt with different types of company, both private and public. The Act required each company to keep account books to record its financial transactions. Although the Act did not indicate the nature or number of these books, it required the presentation of an annual balance sheet endorsed by an auditor, and filing of a copy of this balance sheet with the Companies Register in the Ministry of Finance.

Moreover, the Act required the auditor to hold a meeting with the shareholders to present the balance sheet. In addition, guidelines were laid down on the

preparation of the balance sheet and its contents.

6.2.1 State Budget

The first modern attempt at a state budget in Iraq was in 1924. The first Iraqi Government issued Act no.715, which mainly concerned withdrawal and payments through the central treasury. This Act remained in force until 1940, when the government issued another Act which is still in force today. This Act dealt with the State Budget and how to record financial transactions in the State Office, and it is known as "Government Accounting".

This kind of accounting uses a cash basis to record all financial transactions relating to government, whether revenues or expenditures. The government accounting system does not distinguish between capital and current expenditure; thus, fixed assets are not shown in the government's books, and no depreciation or other non-monetary transactions are recorded.

The system provides guidelines on the preparation of the budget for each Ministry and its General State Office. This has led to the preparation of uniform financial and statistical reports, which also facilitates the training of staff in any department. The procedures for preparing the budget, however, depend on historical data of expenditure and revenue for the previous year taking into account what is expected to happen in the following year.

Two major financial reports are published by the Ministry of Finance. The first is "The Annual Report of the

Directorate General of Accounts on Government Accounts", and the second is "The Annual Report of the Directorate General of Accounts on Development Budget Accounts". In terms of their information content the reports reflect the pattern and structure of their respective budgets, though, of course, they present the outcomes rather than the budget estimate.

6.2.2 Commercial Acts

The first Commercial Act issued in Iraq after independence was Act no.60 of 1943, which abolished the 1850 Act. In the first section of the Act, Article no. 47 distinguished between two kinds of account book to be held by each trader, whether an individual or a company. These were the mandatory and the voluntary. The first kind, to be kept by all companies and merchants, were the balance and assets books which represent the total assets and liabilities of a company; the journal entry book, recording all financial transactions day-by-day within each financial year; and a book for all company correspondence. The second kind of books (voluntary) were ledger books, a cash book and a commodities book.

The Act did not indicate how the financial reports should be prepared; there was no fixed format for financial reports, and no necessity to keep a copy of them with the Companies Registrar.

In 1970, Commercial Act, no.149 was issued, and required the same books for accounting as had been laid

down by the previous Act, except that Act no.149 added ledger books to the mandatory list. In addition, the keeping of subsidiary journal books was required for the first time. However, because of lack of experienced staff in companies, lack of accounting knowledge, and the failure of the Act to distinguish between long-term and short-term assets, shareholders had difficulty in understanding the real financial position of a company.

The most recent Commercial Act was no.30 of 1984, the third chapter of which concentrated on the duties of a company, particularly in regard to commercial books. According to the Act, a company with capital in excess of I.D. 30,000 in any sector, either public, mixed, or private, has to keep two kind of books: journals and ledgers, though computers or other technical equipment may be used instead of two books.

The Act concentrates on trading transactions rather than accounting and financial reports and its main innovation is its acceptance of the use of computer systems to record financial transactions.

6.2.3 Companies Acts

The first Companies Act after independence was no.31 of 1957, which governed the procedure for establishing a company. It determined that the minimum value of each share should be I.D. 100, that the capital should not be more than one million I.D. and that the shares must be sold by the Commercial Bank. It required companies to keep a copy of

their balance sheet with the Companies Registrar.

Act no.31 required each company to have an auditor to check its financial reports, and clarified the form of the balance sheet and profit and loss account. It separated the profit and loss account into two stages. The first stage showed net profit before allocation, which represented the difference between all revenues and expenses for the financial period. The second stage represented the allowances for income tax, to pay stocks, or to pay shares, and there were other allowances such as shares of permanent profit, and adjusted profit to shareholders. The credit side, in addition to net profit, contained profit from previous year and profit from surpluses. The balance represented net profit or loss for the period, which appeared in the balance sheet.

When nationalisation took place, the government became the biggest investor, dominating the whole economy. It reduced the value of shares to one I.D. each, in order to enable many citizens to invest in a company.

Another Act, issued in 1983, determined the nature of government businesses in Iraq. Such businesses take the following forms (all these companies are private or mixed companies):

Mixed Joint Stock Company	Mixed Limited Company
Private Joint Stock Company	Private Limited Company
Partnership	Simple Company
Branch of a Foreign company	

This Act distinguished between these kinds of companies in its requirements for accounting and auditing of financial

reports. For a branch of a foreign company no standard format is required for its annual reports, but the branch must keep its records in accordance with generally accepted accounting principles. The Act requires the auditors to state whether or not its financial reports show a "true and fair view". The above companies are not required to publish any statement of financial reports. Any person may obtain an extract of information recorded in the Register of Companies on payment of a fee. Since 31st December 1984, branches of foreign companies have been audited by the Board of Supreme Audit.

Mixed companies, whether joint stock or limited companies, have to follow a uniform accounting system, and a standard format in the presentation of their annual financial reports. Moreover, they must be audited by the Board of Supreme Audit. All financial audit reports must be filed annually with the Registrar of Companies.

The other kinds of companies are not required to adopt a standard format for their annual financial reports. Currently, most large private companies follow a presentation similar to that used in the USA and the U.K., because most of the accountants working in those companies either graduated there or gained their experience working in foreign companies. The financial reports of these companies must be audited by an auditor who is licensed by the Accountants and Auditors Guild. The rules regarding publication of information are largely similar to those governing the mixed sector.

Whereas the Act required mixed companies to use the uniform accounting system, private companies need not do so. This is illogical in view of the government's desire to plan for all economic sectors, particularly since the big change in economic policy after 1986. The share of the private sector in the economic plan has increased more than 30 per cent from the total allocation. Therefore, it would be better for both mixed and private companies to follow the same accounting system as that used by the public sector.

6.2.4 Income Tax

The first Income Tax Law in Iraq to require companies to prepare profit and loss accounts, and balance sheets, was Law no. 95 of 1959. This law did not specify the principles and methods to be followed by companies, or the treatment of gains or losses arising from exceptional causes, but simply required a profit and loss account showing the true amount of profit, though how that figure was to be derived was not specified. The law also specified that the straight line depreciation method was required, and required the audit of companies' final statements by chartered accountants.

In 1982, the government replaced the Income Tax Law no.95 with no.113 of 1982, which is administered by the Financial Authority which derives its powers from the Minister of Finance. Entities that are liable to income tax at corporate rates are Joint Stock and Limited Companies incorporated in Iraq or abroad. As a general rule, the taxable income for a company is determined from the results

shown by its books.

Capital gains from the disposal of movable fixed assets are exempt from taxable income, while capital losses are non-deductible. A capital gain in this context means the excess of disposal proceeds over the written-down value of the asset concerned, so that the recovery of depreciation previously allowed for tax purposes is exempt as well as any profit over the asset's acquisition cost. Capital gains on the disposal of real estate are subject to income tax.

Regarding inventory valuation, the law states only that the "Weighted Average" is the preferred method for ascertaining cost.

Depreciation and wear and tear are deductible for tax purposes, either by the straight-line or the declining-balance method, in accordance with rates specified in the tax regulations. Depreciable assets are movable assets such as machinery and equipment; real estate is not depreciable. Under an additional article to the law, fixed assets may be revalued subject to the approval of the General Commission for Tax. No tax is payable on the revaluation surplus and subsequent depreciation based on the enhanced asset value is deductible for tax purposes. Expenditure incurred on assets in order to increase their productivity or reduce production cost is added to the value of the assets concerned for the purposes of calculating subsequent depreciation.

6.2.5 Iraqi Accountants and Auditors Guild

The Iraqi Accountants and Auditors Guild is the only national professional organisation of accountants in the country. It was established under Act no.185 of 1969 for the mutual benefit of its members as well as the promotion of accounting profession. The objectives of the Guild will be discussed in chapter nine.

It has a role in encouraging the rise of the state of the profession by maintaining the qualifications of its members. It helps the government in its objectives of achieving economic development, through the participation some of its members in certain government committees.

Moreover, it offers protection to practising accountants by restricting accounting work to those who are qualified members of the Guild, and who hold a degree in accounting. It organises conferences, and issues a periodical magazine called "Accountant". In 1987, the Guild became a member of the International Federation Committee. There are two main kinds of member: full members, who must have at least a B.A. degree in accounting, and practical members, who must either have an undergraduate diploma in accounting or have practised accounting for more than ten years.

The Guild also influences accounting through accounting education in the universities, as most members of the Guild also work in the universities. However, the Guild has not had the chance or ability to put its decisions into practice, or have them made mandatory in the companies, so

that its work is restricted.

6.2.6 State Auditing

The auditing function is a very important feature of accounting in Iraq. This is due to the power given to state auditing and its role in monitoring most of the financial activities of central government.

Company law has given the owners or directors of private sector companies the right to appoint the auditor, who will be responsible to the director of the company (Ministry of Justice, 1957, article no.208). In the public sector the auditor is appointed by the Board of Directors of the company and the state organisation. The audit report is submitted to the Board and a copy of it to the state organisation. Both reports, either in the public or in the private sector, must conform to the requirements of Companies Act no.31, article no.213 (ibid., article no.213), whereby the auditor:-

- must confirm that proper books of accounts have been kept.

- shall obtain and investigate whatever he feels necessary for such information.

- must declare that the balance sheet and profit and loss account agree with the books and the accounts have been properly prepared in accordance with the provision of the Companies Act. Moreover, he must confirm that the balance sheet represents the actual financial position and the profit and loss account represents the profit or loss for

the financial year.

- must report any illegal activities which have affected the company's financial position. Therefore, the audit report should cover all activities of the management, and the financial position of the company, reporting to the owner in the private sector, or to the employees in the public sector.

In 1968 Act no.42 established the Board of Supreme Audit, which has a direct link with the Revolutionary Command Council. A major feature of the Board is the introduction of the concept of performance and efficiency auditing. It has the primary responsibility of auditing the accounts of the public sector, though it gradually has come to cover all sectors and units, including foreign and private companies.

However, other entities also carry out auditing. There are for instance :-

- Finance Ministry Auditing. The main duties of this are to carry out regularity audit to make sure that the amount spent is within budget and correct. Usually, it is necessary to send two or more auditors to each governmental unit to examine its financial affairs. The auditing of the Finance Ministry is restricted to the area of government accounting and the government budget.

- Planning Ministry Auditing. The Ministry of Planning is authorised to supervise the financial and administrative affairs of a government unit in order to ensure the smooth

implementation of the national economic plan.

- Interior Ministry Auditing. The Interior Ministry is authorised to perform various specific auditing duties.

If these three bodies and the external auditor intervene at the same time on the same accounts, the pressure on the accounting department at the company can be considerable. Long delays can occur in getting information ready to publish and unnecessary audit work is often done, creating more cost. The auditing activities of these three bodies are unnecessary, in view of the existence of the Board of Supreme Audit, and this duplication should be eliminated.

6.3 Factors Affecting the Development of Accounting in Iraq

Several factors have affected the development of the accounting system in Iraq:

6.3.1 Accounting Culture

To understand how culture has affected the development of accounting in Iraq, it is necessary to follow the progress of accounting education.

There were no accountancy studies in Iraq before 1940. In 1940 a special school of commercial subjects was opened, concentrating on economics, book-keeping, and management. This school established two branches, one using Arabic and the other English, to teach book-keeping. The school also served an important function in teaching the double entry system for the first time in Iraq, providing evidence of the extent to which accounting education had been delayed.

Undergraduate studies were started in 1946 in the College of Commerce and Economics, which concentrated on economics and law, these being the specialisms of the staff of the college, most of whom had graduated in either economics or law.

Accounting affects and is affected by the economic system, and the development of accounting in Iraq is important in relation to the development of the economic system. In 1972, the government started to open several specialist institutes in accounting, and increased the number of colleges and commerce schools, and in 1986 the government decided to open more four colleges specialising in administration and accounting. The Supreme Audit Board established in 1970 a postgraduate programme, the "Diploma in Financial Control", and the University of Baghdad began another postgraduate course in cost accounting, which in 1982 became the M.Sc. degree in accounting. Following that, several Iraqi Universities introduced postgraduate studies in accounting, e.g. Basra, Mosul, and Al-Mustansiriyah University.

In recent years there has been a focus on accounting in general and particularly on cost accounting and their role in servicing the policy-makers with financial information. There remain major educational problems in Iraq, namely:

- **Lack of locally written textbooks.**
- **Lack of teaching of accounting at college level.**
- **Lack of qualified accounting instructors at the college level.**
- **Inadequate accounting education for managers or prospective managers. (AAA, 1976, pp.198-212)**

Moreover, most of the accountants and auditors who have higher degrees are affected by what they have learned in western countries, especially the UK and the USA. This is reflected in their attitude and their manner of teaching in the universities, and in their publications (Briston, 1978, pp. 108-9). In the last decade, some university teachers have obtained their degrees in the Soviet Union, or in other socialist countries, and have been influenced by the ideology of these countries; thus a conflict has arisen between the Western and the Eastern accounting ideologies.

6.3.2 Government Accounting

The State Accounting Act no.28 of 1940, was an extension of the Act of 1922. At that time the annual budget of Iraq was not more than 9 million pounds, and in view of this, the Act was adequate at that time. However, despite the development of the Iraqi economy, with an increase in the annual budget to more than 90 billion pounds in the 1981-86 economic plan, this system of accounting is still in use. Its advocates are very forceful and it is still taught in universities and institutes.

The main weaknesses of the government accounting system are as follows:

- It depends on the cash basis rather than the accruals basis, which means that all transactions, both expenditure and revenue, must be charged during the financial year in which they occur. In other words, the system is basically just a cash book, while, in contrast, the other accounting systems in Iraq, uniform accounting,

and commercial accounting use the accruals basis.

- It does not distinguish between capital expenditure and revenue expenditure. Thus it does not give a true and fair view for the financial report, or give information to economic planners about the capital assets used by State Offices.

There seems to be no good reason for retaining this system, especially as it is applied in some State Offices but not in others: for instance, it is applied in the Ministry of Transportation, but not in the Passengers Transportation Services Company, which is part of the Ministry. Mr Al-Siagh, claimed "...this system is specially for all non-profit State organisations" (Al-Siagh, 1977,p.19). However this view does not appear to be correct, since hospitals are applying the uniform accounting system rather than government accounting, and the Ministry of Education has applied uniform accounting for more than 10 years.

Indeed, this system has hindered the financial evaluation of those administrations which apply it; in particular, evaluation of the efficiency of a department is made difficult.

Another factor affecting the development of accounting is legislation. As we have seen in previous sections, there were many Acts, finance, company, and commercial. Most of these Acts differentiated between the public and private sectors. Perhaps that was acceptable at one time, but after

the introduction of the uniform accounting system, and in view of the requirements of national plans, there should be unification of all financial information required, whether from the public or other sectors.

Furthermore, the accounting profession and its institutions in Iraq, are unable to play an effective role in enhancing and accelerating economic development, mainly due to the lack of accounting skills, as well as to numerous shortcomings in accounting education in accounting institutions.

6.4 *The Uniform Accounting System in Iraq*

The growing role of government in planning and control of national resources, as well as the increased size of public sector organisations, led to a need for more comprehensive and uniform information. The public sector formerly used an accounting system largely similar to that used by the private sector, which provided information adequate neither to the headquarters of a company nor to economic planners. Furthermore, the government accounting system, especially the general budget, is not directly linked with the national plan. The only link is the classification in the capital budget for expenditure allocation, and for the main sources of revenues for financing projects under construction.

Thus a shift to an alternative accounting system seemed necessary, and the uniform accounting system was chosen as the alternative.

6.4.1 Background and Objectives of the Uniform Accounting System

The first attempt at unification of the accounting system in Iraq was based on the uniform code accounting system developed by the Industrial Development Centre of the Arab League, on the grounds that it was necessary to have comparable and aggregative statistical data for all Arab Countries. The following were to be the main goals:

- All Arab Countries must have the same national accounting system based on a uniform national accounting system;

- There should be uniform financial and cost accounting at the enterprise level.

The first application of uniform accounting in Arab Countries was in 1950 in Egypt, where it was introduced in order to control and supervise insurance companies. Later, in 1966, it was applied to most public companies in Egypt.

In Iraq, the first introduction was in 1972, when the State Textile Industry applied the system in its companies, after which it was applied to all companies administered by the Ministry of Industry. The system was divided into four main categories, each having a one-digit code, according to the functional and the natural classification of expenses. These categories were: assets; equities (liabilities); use of a resources (expenses); and sources (revenues). The first two categories are related to the financial position of the company, and the second two are related to operating

accounts.

The system was adopted by the Ministry of Trade and its companies from 1971, and, since the financial year 1973, the oil companies have applied a uniform accounting system. Most Ministries followed the Ministry of Industry in preparing a special uniform accounting system for their companies.

Most of these systems contained few elements of uniformity, just a description for the guidebook of accounts. Therefore, the Revolutionary Command Council issued decree no.380 in April 1979, to establish a committee to be responsible for preparing a uniform accounting system for most of the ministries. The committee took into consideration the following points:

- preparation of uniform accounting contents as most appropriate;
- connection between national accounts and the uniform accounting system;
- co-ordination between the various finance Acts and cost accounting system to determine and unify the accounting terminology.

The main advantage of the uniform accounting system is its reliance on the accrual basis and events recognition, which gives a better idea of the activities carried out by an enterprise, in comparison with the cash basis used by the government accounting system.

The uniform accounting system is considered an important step for central economic planning, which uses

accounting procedures and economic budgets in planning for both economic and social affairs. In summary the main objects of the uniform accounting system are (Board of Supreme Audit, 1985,p.11):

1- Providing information and analytical data required for planning, execution and control at different levels. The system helps in providing the statistics which are necessary for planning and control of most economic sectors.

2- Linking the accounts of economic units with national accounts. Since the national accounts depend on statistical information, the uniform accounting system will aid the provision of that data.

3- Facilitating the collection of accounting information, its storage and classification.

The system is described as uniform because it unifies (Radwan, 1977,pp.17-9):

- The financial year;
- Accounting codes
- Accounting concepts, principles, and definitions;
- Accounting and financial reports;
- Budgets.

The companies that are obliged to apply the system are those economic units that lie within the public and mixed sectors except Banks, Insurance companies, Finance companies, Government Administrations, and Ministries whose budgets depend on the General State Budget (Board of Supreme Audit, 1985, p.16). Public and mixed companies have applied

the uniform accounting system since 1982, and the Board of Supreme Audit is responsible for monitoring the system's application in these companies. Private companies which come under Companies Act no.36 of 1983, must follow the system, and the Committee of Trade Organisation is responsible for its application in these companies. However, at present, there is no application in the private sector, because of shortages in accountants and the preference of owners for the traditional accounting method for preparing financial reports.

6.4.2 Contents of Uniform Accounting System

The committee of 1979 completed the framework and contents of the uniform accounting system in March 1983, and it has been in use since 1986. It contains ten sections as follows:

Section one: general framework, divided into three main parts; assets and liabilities, sources and application of funds, and cost centres; then an analysis of these main accounts into several sub-accounts.

Section two: this explains each account in the uniform system, leaving no room for individual interpretation.

Section three: financial transactions.

Section four: books and ledgers.

Section five: financial reports.

section six: depreciation percentage and method of calculation.

Section seven: cost accounting.

Section eight: budgets.

Section nine: national accounts.

Section ten: machinery of the system; in this section the committee tried to explain the importance of computerisation and how to control the accounts. It also contains tables and examples of the requirements and output of the system.

Discussion here is focused on section five, which concerns the preparation of financial reports under the system to give a clear picture of a company's activities and its financial position, as well as to provide national accountants with suitable financial data.

The chart of the system is classified into four main accounts, which are further classified into sub-heads and to branches of sub-heads, according to the nature of the financial transaction. The general structure of the system is as follows:

Balance Sheet

Code	Account Name	Code	Account Name
1	Assets	2	Liabilities
11	Fixed Assets	21	Capital
12	Projects Under Construction	22	Reserves
13	Inventories	23	Provisions
14	Lending, long-term	24	Loans, long-term
15	Financial Investment	25	Credit Bank
16	Debtors	26	Creditors
18	Cash	28	Current Operating Account
19	Opposite Twin Account	29	Opposite Twin Account

Operation Account

Code	Account Name	Code	Account Name
3	Uses	4	Revenues
31	Salaries and wages	41	Revenue from Production Activity
32	Physical Requirements	42	Revenue from Commercial Activity
33	Services Requirements	43	Revenue from Service Activity
34	Contracts and Services	44	Revenue from Operation for others
35	Purchase for Re-sale	45	Cost of Fixed Assets Produced internally
36	Interest and Rent	46	Interest and Rent
37	Depreciation	47	Subsidies
38	Transfer Expenses	48	Transfer Revenues
39	Other Expenses	49	Other Revenues

Books of accounts are regarded as important for the system, because they are the main sources of data for the construction of accounting statements. The system regards the general Journal and the general Ledger as the main books, but companies may use other books, as necessary.

6.4.2.1 Financial Reports

Under the uniform accounting system, all companies must prepare final accounts and annual reports, their contents and principles being as formulated by the system.

Most companies prepare a quarterly "Trial Balance" which contains balances of accounts, and is sent directly to the Ministry under whose administration the company lies; some companies, however, prepare the "Trial Balance" each month.

At the end of the financial period, companies have to prepare several statements required by the system. Most of these statements provide more detailed evidence of the

financial position and profit of the companies. They are:

- Balance Sheet.
- Current Operating Account.
- Production, Trading, Profit and Loss, and Distribution Account.

6.4.2.1.1 Balance Sheet

According to the system, the balance sheet should represent fairly the final position of a company. The main components of the balance sheet are shown in table 6.1.

Valuation is confined to the historical cost concept. The fixed assets are defined as " all permanent assets either shifting, non-shifting, tangible, non-tangible, produced inside the company, or purchased from outside, and used during the company's life". Any changes made to the fixed assets which led to an increase in productive capacity must be added to the original costs and depreciated at the same rate applied to the original assets. Assets manufactured for use by the same entity must be valued at production cost, and this applies to additional items manufactured by the entity itself.

The system distinguishes between assets ready for operation and those under construction, because these costs either create new capacity or add to existing capacity. Moreover, it distinguishes between existing capital goods and capacity and current capital formation, account no.12. This account records the accumulation of all costs incurred in the formation of capital until projects are ready for

production (Al-Mustawfi and Al-Hiali, 1978,p.130). The purpose of this account is to enable the national planners to recognise the level of capital formation available for society. If the fixed assets have moved from one entity to another, this is not regarded as new investment or new capital formation, because it is merely a transfer of ownership from seller to buyer (Murquis,1980,p.160). The system regards deferred revenue expenditure as a fixed asset, because it represents the value of services helping to create production capacity; it must then be subject to depreciation for five years.

Furthermore, the system requires all entities to continue to count the depreciation amount on fixed assets which have already been totally written off, with the aim of measuring the real depreciation which has occurred during the production; this amount is added to the account, "Reserve for Rising Prices of Fixed Assets".

Depreciation provisions and other provisions are shown in the balance sheet on the liabilities side, in order to show separately all forms of financing on the liabilities side, which concentrates on financing sources either related to capital or government input. Generally, it starts from the less liquid sources, and ends with the most liquid.

However, the balance sheet still does not clearly represent the financial position of the economic unit at the reporting date, because it uses historical cost value.

Table 6.1

Balance Sheet As At 31st December 19..

No. of Statement	Code		Current Year	last Year
	1	Assets		
		Fixed Assets		
1	11	Fixed Assets (at book value)	xxx	xxx
2	118	Deferred Revenue	xxx	xxx
3	12	Projects Under Construction	xxx	xxx
4	141	Lending - Long Term	xxx	xxx
5	151	Investment- Long Term	xxx	xxx
			-----	-----
			xxx	xxx
		Current Assets		
6	13	Inventories (at cost)	xxx	xxx
6	138	Bill of Exchange for Purchasing Materials	xxx	xxx
4	142	Loans- Short Term	xxx	xxx
5	152	Investment- Short Term	xxx	xxx
7	16	Debtors	xxx	xxx
8	18	Cash	xxx	xxx
			-----	-----
			xxx	xxx
		Total Assets	-----	-----
			XXX	XXX
			=====	=====
	2	Financing Sources		
		Long~Term Sources		
	21	Capital	xxx	xxx
9	22	Reserves	xxx	xxx
10	23	Provisions	xxx	xxx
4	241	Loans	xxx	xxx
			-----	-----
			xxx	xxx
		Short~Term Sources		
10	23	Provisions	xxx	xxx
4	242	Loans	xxx	xxx
	25	Bank Loans	xxx	xxx
11	26	Creditors	xxx	xxx
			-----	-----
			xxx	xxx
		Total of Sources	-----	-----
			XXX	XXX
			=====	=====
19		Opposite Twin Accounts	xxx	xxx
			=====	=====

6.4.2.1.2 Current Operating Account

This statement is intended to be a link between the entity's financial report and social accounting. The statement is prepared after the production and trading account. It shows the distribution amount and must be consistent with the production and trading account. It is prepared in two stages, as shown in table 6.2. The first shows the differences between the current revenues and the opposite twin accounts (accounts nos. 2941-4), and the current expenses, which will represent the surplus (deficit) of current operation. The second stage contains the opposite twin accounts (debt account nos. 1941-4). If this is added to the transferred revenue, less transfer expenses, the result will be the distributable surplus (deficit). The form of this statement is as shown in the table no.6.2. (B.S.A., 1985,p.219).

6.4.2.1.3 Production, Trading, Profit and Loss, and Distribution Account

The Committee of the Board of Supreme Audit has consolidated the profit and loss account and trading and production account in one statement. This account indicates the distribution of profit through several steps, as follows:-

1- Revenues from current activities which represent all revenues of the company, such as revenue from normal activities, subsidies, revenue from financial investment, and revenue from construction,...etc.

Table no 6.2

Current Operating Statement at 31st December 19..		19x2	19x1
Acc. No			
	Current Revenues		
41 ~ 45	Revenue from Current Activities	xxx	xxx
461~ 462	Interest and Rent	xxx	xxx
47	Subsidies	xxx	xxx
2941	Differences of Imputed Rent	xxx	xxx
2942	Differences of Imputed Interest	xxx	xxx
2943	Valuation Differences of finished Inventory	xxx	xxx
2944	Valuation Differences of Finished Goods Purchased for Sale	xxx	xxx
		xxx	xxx
	Current Expenses		
31	Salaries and Wages	xxx	xxx
32	Physical Requirements	xxx	xxx
33	Services Requirements	xxx	xxx
34	Contracts and Services	xxx	xxx
35	Goods Purchased for Re-sale	xxx	xxx
36	Interest and Rent of Land	xxx	xxx
37	Depreciation	xxx	xxx
384	Taxes and Duties	xxx	xxx
		xxx	xxx
Surplus (Deficit), (current operation)	(stage one)	xxx	xxx
Surplus (Deficit) from stage one		====	====
1941	Differences of Imputed Rent	xxx	xxx
1942	Differences of Imputed Interest	xxx	xxx
1943	Valuation Difference of Finished Inventory	xxx	xxx
1944	Valuation Differences of Finished Goods Purchased for Re-sale	xxx	xxx
		xxx	xxx
463 ADD	Revenue from Financial Investment	xxx	xxx
48	Transfer Revenue	xxx	xxx
49	Other revenues	xxx	xxx
38 Less	Transfer Exp.(except acc. no 384)	xxx	xxx
39	Other Expenses	xxx	xxx
	Distributable Surplus (Deficit)	xxx	xxx
	(second stage)	====	====

2- Subtract from (1) above, the cost of production and production services, and difference of unfinished goods in inventory at cost. The result will be net cost of production. Then add difference of finished goods in inventory to obtain net cost of current activities.

3- Subtract from the current activities surplus, the cost of marketing services. The result is production and trading surplus (or deficit).

4- Deduct the cost of administration and financial services in order to arrive at the current operating surplus.

5- In order to arrive at the amount which is available for distribution, there must be added transfer revenues and other revenues, and transfer expenses and other expenses deducted.

6- Distribution of profit is according to "Distribution of profit Law no.56 of 1982" at these percentage:-

- 15% expansion reserves.
- 80% treasury share.
- 5% employment share.

This statement is shown in table no.6.3.

6.4.2.2 Sources and Uses of Funds Statement

The system requires companies to prepare a statement showing the sources and application of funds during the financial period. This enables management to have a clear picture of the financial position of the company, and indicates to the national accountant the main sources of

Table No.6.3

		Production, Trading, Profit and Loss, and Distribution Statement At 31st December 19..	
Acc. No		19x2	19x1
41 ~ 45	Revenues from Ordinary Activities	xxx	xxx
	Deduct Cost of Ordinary Activities		
5	Production Cost	xxx	xxx
6	Services Production Cost	xxx	xxx
	Changes in Unfinished Goods Inventory (at cost)	xxx	xxx
Less	Revenue from Production Wastages	xxx	xxx
	Net Production Cost	xxx	xxx
35	Goods Purchased for Re~sale	xxx	xxx
	Changes in Finished Goods Inventory	xxx	xxx
	Changes in Inventory of Purchased Goods for Re~sale	xxx	xxx
	Net Cost of Ordinary Activities	xxx	xxx
	Surplus (Deficit) Of Ordinary Activities	xxx	xxx
Less 7	Surplus (Deficit) from above Selling Costs	xxx	xxx
	Surplus (Deficit) of Production and Trading	xxx	xxx
46	Interest and Rent	xxx	xxx
47	Subsidies	xxx	xxx
Less 8	Administration and Finance	xxx	xxx
	Surplus (Deficit) of Current Operations	xxx	xxx
Add 48	Transfer Revenue	xxx	xxx
49	Other Revenue	xxx	xxx
		xxx	xxx
Less 38	Transfer Expenses	xxx	xxx
39	Other Expenses	xxx	xxx
		xxx	xxx
	Surplus (Deficit)	xxx	xxx
		=====	=====
	Surplus Distributed as follows: (according to percentages of profit distribution law)		

funds for each sector and the ways in which they are utilised.

Uniform accounting divides the statement into three main groups on each side. On the uses side, there are capital uses, capital transfers, and net changes in financial assets. On the other side, there are self financing, capital transfers, and net changes in liabilities and loans. Table no. 6.4 illustrates this.

6.4.2.3 Budgeting system

The uniform accounting system classifies the budgeting system into three main categories:

1- The physical budgets which reflect the quantity of sales, production, human resources and stock. These budgets provide the framework of the budgetary control system, and are an important standard for measuring and evaluating performance by comparing actual results with those planned.

2- The financial budgets which reflect the monetary value of the physical budgets, except the capacity budget. They also include budgets of expenditure, investments, and finance and, from these budgets, a company can build other budgets such as production, trading, and profit and loss account.

3- Cash budgets which reflect cash movements.

The system sets out the general principles for preparing these budgets:

- **Comprehensiveness:** the system has designed the budgets in such a form as to cover most of the activities of

Table no 6.4

Sources and Application of Funds

USES		REVENUES	
A- Capital Uses		A- Self Financing	
- Fixed Assets	xx	- Increase in Reserves	xx
- Taxes and Duties	xx	- Depreciation	xx
- Increase in Inventory	xx	- Surplus Undistributed	xx
- Projects Under Construction	xx	- Other Provisions	xx
	xx		xx
B- Capital Transfers		B- Capital Transfers	
- Purchases of Used Fixed Assets	xx	- Increase in Capital	xx
- Cost of Purchasing Land	xx	- Fixed Assets Sold	xx
- Annual Losses	xx	- Decrease in Projects Under Construction	xx
- Decrease in Reserve and Allowances	xx	- Decrease in Inventory	xx
	xx	- Decrease in Financial Investment	xx
			xx
C- Net Changes in Financial Assets		C- Net Changes in Liabilities	
- Decrease in long term loans	xx	- Decrease in long term loans	xx
- Decrease in short term loans	xx	- Decrease in short term lending	xx
- Decrease in bank loans	xx	- Decrease in Duties	xx
- Decrease in creditors	xx	- Increase in long term loans	xx
- Increase in long term lending	xx	- Increase in short term loans	xx
- Increase in short term lending	xx	- Increase in bank loans	xx
- Increase in debtors	xx	- Increase in creditors	xx
- Increase in cash and bank	xx	- Decrease in cash and bank	xx
	xx		xx
	-----		-----
	XXX		XXX
	=====		=====

the economic sectors.

- Flexibility: the system lays down the basic requirements, and if a company wants to add more budgets or sub-budgets it may do so.

- Forecasts: the budget should depend upon past results and estimates of the future by government or by management.

- Implementation: the budget schedules contain columns for comparing the actual ratios with those planned to give indicators to management, planners, and government agencies of budget performance.

- Financial and Cost Accounts: most of the classifications in the budget schedules represent financial accounts reflecting total values, leaving the analysis of these values to cost accounts which are prepared by the company as necessary.

- Participation: the uniform accounting system depends on co-ordination among different departments at different levels, starting from the people responsible for executing the budgets and plans, up to the top management.

- The schedules concentrate on the time-factor as a basis for analysis and comparison. Therefore, budgets must be divided into separate months, and then quarters.

The uniform accounting system sets out the number of budgets each company must prepare. There are 18 main budgets and about 16 sub-budgets, to enable either management or government agencies to measure and evaluate the performance of an individual company or sector, and also

to help management to make decisions on a sound basis.

However, this system needs a large number of staff to complete the budgets, analyse the variances, and collect the historical or current data. Therefore, most companies do not prepare half of these budgets, as revealed by the empirical study, but focus on the sales, production, purchasing, cash, and the physical requirements budgets.

The important thing is that no attention is paid, either by government or by the Board of Supreme Audit, to following-up the execution of these budgets. Even though the Ministry of Industry asks the companies to prepare comparison reports monthly, most companies do so quarterly, or yearly in the case of variances reports.

6.4.3 *Costs and Uniform Accounting System*

Cost accounting is concerned with measuring the cost of the factors of production at a company (labour, material, and services), and the operating costs in different processes. It analyses inputs, and classifies them according to the company's main functions. The uniform accounting system categorises these functions in five main cost centres, each of which is given a number.

Although the uniform accounting system is designed for financial accounting purposes, it contains the general framework for cost accounting. It provides a connection between financial accounts and cost accounts through the analysis accounts (uses accounts), and the reallocation of these accounts onto cost centres for comparing the costs of

the activities of a company with those planned. Table 6.5 shows the analysis accounts and their allocation to the costs centres (ibid., pp.375-80).

The total of the current operating account must correspond to the total costs which are allocated to the cost centres after adding the goods purchased for re-sale account.

Table 6.5

Allocation of analysis accounts to cost centres

Code	Elements Costs	Costs Centres *				
		5	6	7	8	9
31	Salaries & Wages	531	631	731	831	931
32	Physical Require- ments	532	632	732	832	932
33	Services Require- ments	533	633	733	833	933
34	Services & Contracts	534	634	734	834	934
35	Goods Purchased for Re-sale is not included here, but it appears in the profit & loss account					
36	Interest & Rents	536	636	736	836	936
37	Depreciation	537	637	737	837	937
38	Transfer Expenses	538	638	738	838	938
39	Other Expenses	539	639	739	839	939
	Total	xxx	xxx	xxx	xxx	xxx

* Cost Centres are

- (5) production centre (6) production service centre
- (7) marketing centre (8) administration centre
- (9) capital operation centre.

There are two main weaknesses in table 6.5:

1- Because the imputed interest account is an opposite account, it does not appear in the table and is not allocated on the cost centres.

2- The table does explain that interest cannot be allocated to the cost centres, because it is financial expenditure, and is thus allocated to the administration and financial centre only.

Thus, the uniform accounting system lays down the basis of allocating the costs of service centres to the production cost centres. It uses the step-down method, and recommends that the unit cost must include both the direct and indirect costs. However, the system leaves the companies to choose the base on which to allocate indirect production costs.

The uniform accounting system does not specify the cost reports to be used, leaving these for the companies to design. Of course, this has led to each company devising its own cost reports, so that it is difficult for the national accountant and the Ministry of Industry to unify these reports. Moreover, some companies may prepare three or four cost reports while others prepare only one or two reports (as will be seen in the empirical study).

6.4.4. *National Accounts and Uniform Accounting System*

The importance of national accounts has increased in view of the country's attempt to plan for economic and social development. National accounts are considered to be important strategic tools because they highlight the role of each sector within the whole economy. Then, from the national accounts can be calculated the growth rate of national income, and of different sectors, and the weak and

strong points in the economy determined. Moreover, national accounts constitute a tool for controlling economic plans through comparison between the actual and planned activities (ibid., p.468).

The uniform accounting system is designed as a tool for national accounts, for enterprises and also for the economy as a whole. Moreover, it plays a major role in evaluating companies, but not a perfect role because the system still depends on historical cost, while the national accounts depend on current value information.

Financial reports prepared according to the uniform system are a major source of information for the compilation of national accounting statistics in Iraq. They provide the following data:

- Increase in physical inventories.
- Intermediate goods.
- Value added and its components.
- Imputed interest on invested capital.
- Purchases of imported goods.
- Sources and uses of funds.

This information is useful, not only for assessing the efficiency of the management of an enterprise, but also for securing data required the compilation of national accounts.

6.5 Users of Financial Reports in Iraq

The need for disclosure of financial information is different in a free market with different kinds of ownership, than in a planned economy with public ownership. In the latter, government policy and the degree of intervention in industry affect the shape and contents of financial reports. In addition, the government owns most

enterprises and controls the market, and is thus an important user of financial reports. Therefore, the government designs the information system in such a way as to provide it with the information it needs. However, that is not to say that there are no other users, such as management, and shareholders (in the mixed and private sectors).

Users of financial reports in Iraq can be divided into three main groups according to the different sectors of the economy, which are the public, mixed, and private sectors.

1- Public sector:

This sector represents all enterprises owned by government either directly or indirectly. Within this sector, users of financial reports could be:

- Management of public enterprises.
- Ministry of Industry.
- Central Statistical Organisation (National Accounts Department).
- Ministry of Finance (Budgets Department for enterprises which use the uniform accounting system).
- Ministry of Finance (Accountancy Department for Administration which use government accounting).
- Ministry of Finance (Treasury Department).
- Board of Supreme Audit.

2- Mixed sector:

Because this sector is shared between government and individual owners, users of financial reports in this sectors will be a mixture of both, as follows:

- Board of management.
- Shareholders.
- Registrar of Companies.
- The Ministry which is responsible for a given enterprise (e.g. Industry, Agriculture,...).
- Ministry of Finance (Income Taxes Department).
- Central Statistical Organisation.
- Board of Supreme Audit.

3- Private sector:

Although this sector involves private owners, the government is the major user of its financial reports, because the government determines the sector's share in the economic plan; thus it needs information about each company in this sector. The main users of financial reports in this sector are:

- Shareholders (or Owner of company).
- Register of Companies.
- Central Statistical Organisation.
- Ministry of Finance (Income Taxes Department).

Therefore, the users of financial reports for different sectors are management, government regulatory bodies, and owners (shareholders).

However, each of these users requires information for different purposes.

6.5.1 Management

The success of any enterprise is dependent on the ability of its management to make the right decisions. In order to do this, management needs information to enable it to assess the company's activities, and to compare actual results with what was planned.

It also needs information about liquidity and its ability to meet its short term liabilities. Financial transactions between companies are mainly carried out in cash (through banks); therefore the purchasing department in a company needs at least daily information about the cash

balance to carry out its tasks.

Management also needs information about the quantity and quality of production, the efficiency of each cost centre, the number of employees in each department, and their wages, and the percentage of raw material used in a given production unit. Moreover, management has certain objectives, set either by government or by itself; it therefore needs to know what has been achieved and what has yet to be accomplished.

6.5.2 Government Agencies

To control the prices of goods and services, government depends on the cost of production reports of companies. The Central Pricing Organisation, before its dissolution, required companies to supply it with cost of production information, and any other information needed to determine the prices of goods.

Now that the Ministry of Industry has become responsible for endorsing prices determined by the companies themselves, it needs more information, such as the share of each company in the total Ministry plan and the share of the Ministry in gross production.

The Ministry of Planning, through the Central Statistical Organisation, needs information as to the quantity and value of major commodities produced, number of small industrial establishments, employees, wages, inventories, production, cost of goods sold, and value of inputs, outputs and sales. All these data are summarised

from the financial reports of companies. The Ministry of Finance needs financial information for taxation, government expenditure, and the state budget.

The Registrar of Companies also needs a copy of financial reports, for most companies have to send a copy of their financial reports to the Registry of companies, which in turn consolidates them and checks whether the capital is in accordance with legislation.

The Board of Supreme Audit is also among the users of financial reports. In addition to its responsibility to audit all companies' financial reports and to declare its opinion of them, it has to determine the efficiency of a company, and present its report to the company's management and then to the Ministry of Industry. It needs to judge whether these financial reports have reflected a true and fair view, and been prepared according to the requirements of the uniform system, government accounting, or the Companies Act.

6.5.3 Shareholders

In the mixed and private sectors, shareholders need financial information to determine in which company to invest. They need information about profitability, dividends and capital maintenance. Moreover, they need to know the liquidity of the company and its financial position.

The banks, generally, do not have the same interest as the other users in the financial reports of companies, even when a company has a loan from a bank. This may be because

the bank's decision to give a loan is dependent on the security provided. Moreover, a bank loan has priority over other debts and must be repaid on the due date.

6.6 *Accounting Standards in Iraq*

The auditor's report for any Iraqi enterprise includes the phrase, "all accounts and financial reports are compiled according to acceptable accounting principles and accounting conventions". However no such principles and conventions have been formally laid down, although general phrases are found in the Acts of the Board of Supreme Audit.

However, the uniform accounting system tries to unify concepts and rules for preparing accounts. It might be regarded as an application of accounting standards, for it classifies accounts, declares the method of inventory pricing and valuation, specifies the financial reports to be prepared by companies, and determines the basis on which depreciation is calculated.

6.7 *Evaluation and Summary*

Accounting practices in Iraq have been transferred from other nations through several channels such as trade, industry, culture and education. Since Iraq has moved to a planned economy, there have been steps both to protect the private sector and to increase its contribution to the economy. Therefore, several Acts have been issued to enable government to obtain the financial information needed for economic planning, with links between macro and micro accounting. However, accounting has developed slowly in

relation to economic development.

The most important development in accounting has been the application of the uniform accounting system since 1972, which has made accounting information available to the economic planner.

Although the uniform accounting system has several merits, it might be argued that there are some weakness in the system:

- It does not distinguish between companies in respect of their size, nature of production and services, and profit-making or non-profit-making status. A small company prepares the same number of financial reports and budgets as a large company, which of course will be more costly and create an increased burden on the accounting staff.

- It is designed primarily to serve national accounting requirements rather than those of the company. Therefore, most managers complain that they require some information not provided by the system, such as the analysis of financial ratios, flexible budgets, cost estimates, and standards for performance evaluation. Thus, accountants have to prepare financial reports according to the requirements of the uniform system and at the same time to serve the needs of management, a problem which is exacerbated by the lack of accounting manpower and skills.

- National accounts need financial information at current value such as Gross Domestic Product, Capital Formation, Value Added, and Current Operating Account (finished goods, inventory at current value), yet the system

still insists on the preparation of financial reports on the historical cost basis.

- The system has failed to consider the calculation of production or services costs. It is left for each company to design its own costing system. The result is that differences in costs of production occur between different companies, even within the same industry.

- The system ignores inflation accounting, although at that time the committee finished its work (1981) inflation in Iraq was more than 11%. The last committee of the Board of Supreme Audit, which finished its work and issued its book of the uniform accounting system in 1985, also omitted any pronouncement on inflation accounting.

- Although the system deals with the budgetary system, and is regarded as an important tool for planning and control, it does not explain how to analyse variances, or to measure performance.

- It does not include an account for customs duty for fixed assets and goods imported. The customs duty office presents a statement of the total customs duty on fixed assets imported and sends it to the national accountant. This of course leads to understatement of the actual cost of those fixed assets.

- The exclusion of the imputed rent account from the allocation of costs to the costs centres will lead to the incorrect calculation of the cost of production. Moreover, the interest account (account no.361), is charged to the

administration cost centre, and not allocated among all cost centres.

- The production, trading, and profit and loss account includes, on the revenue side, the value of fixed assets produced inside the company (account no.45), while their costs are not shown on the costs side of the account. This of course, is not correct, and the system should exclude the cost and revenue of all fixed assets produced inside the company from that account.

- Production should be charged with direct and indirect production costs, production services costs, administrative costs, and marketing costs. However, if we examine the production, trading, and profit and loss account (table 6.3), we find that the unit cost is calculated from:

- 1- direct production cost + indirect cost of production cost.
- plus
- 2- services production costs.

- The uniform accounting system ignores the transfer prices for products flowing from one company to another within the same sector or among different sectors.

An example of this is found in the petroleum industry sector, where no private companies exist, and all the economic units are managerially amalgamated to represent a functionally integrated industry for exploration, production, refining, transportation, and distribution. The main problem is how to determine the cost of crude oil, whether an actual production cost or an opportunity cost for

revenue lost.

However, the system is regarded as an important step toward unifying the financial reports in all sectors, enabling the national accountant to prepare the national accounts, and giving acceptable information to both managers and government, on which to base their decisions for planning and control of the economy.

Chapter Seven
Inflation Accounting
In Iraq

7.1 Introduction

In Iraq, the government plays an important role in the economy, in order to achieve the twin objectives of full employment and a high level of economic growth. It has generally intervened directly in the development process, providing investment funds and carrying out investment in the manufacturing sector. Thus, its traditional functions of providing defence, education, health, social services, and infrastructure have been extended. On the other hand, shortages of skilled labour, building, and raw materials, have contributed to a general rise in prices.

Other factors include for goods and services, and changes in the money supply, since money is demanded as the economy becomes more sophisticated. In addition, there has been imported inflation, because Iraq imports most of its raw materials and tools, machines, and other productive equipment from various countries, many of which are already affected by inflation.

7.2 Measurement of Inflation in Iraq

Although the Iraqi government aims to have stable prices for most consumer goods and services, the price trend is unstable. A huge increase began in 1973, when the foreign oil companies were nationalised. As revenues increased, public expenditure increased likewise, and there was no equilibrium between these increases and the GDP. Thus there was an increased demand for goods and services and insufficient supply.

The increase in prices as measured by the relevant indices in Iraq for the period 1960-1988 is shown in table 7.1 and the following charts.

The consumer price index (CPI) covers ten main commodity groups. In each group there are several items, giving 236 in total, the weights for which were derived from the "Family Budget" survey of 1971-72. The price index is a "Laspeyres Index", i.e. a weighted aggregate index: each price is weighted by the quantity of the item produced or the number of units purchased or consumed (Mendenhall and Beaver, 1986, p.625). For the collection of the data on prices, ten main markets were chosen in Baghdad, while two main markets were chosen in each administrative area. Price data were collected on the 3rd, 9th, 15th, 21st, and 27th day of each month (Ministry of Planning, 1974).

Although the data collected were comprehensive in terms of geographical area and population covered, and were collected regularly, the survey is not without weakness. The weights were calculated over fifteen years ago. The increase in incomes that has taken place since then means that the index does not reflect the spending pattern of the population as accurately as it should. Furthermore, the prices taken at the markets are based on "official prices", so that the index shows official wishes, which do not reflect the actual market prices (Shalash 1983, p.75). However, there is no other comprehensive and precise index for all Iraq's markets.

Table 7.1

Inflation Rates In Iraq

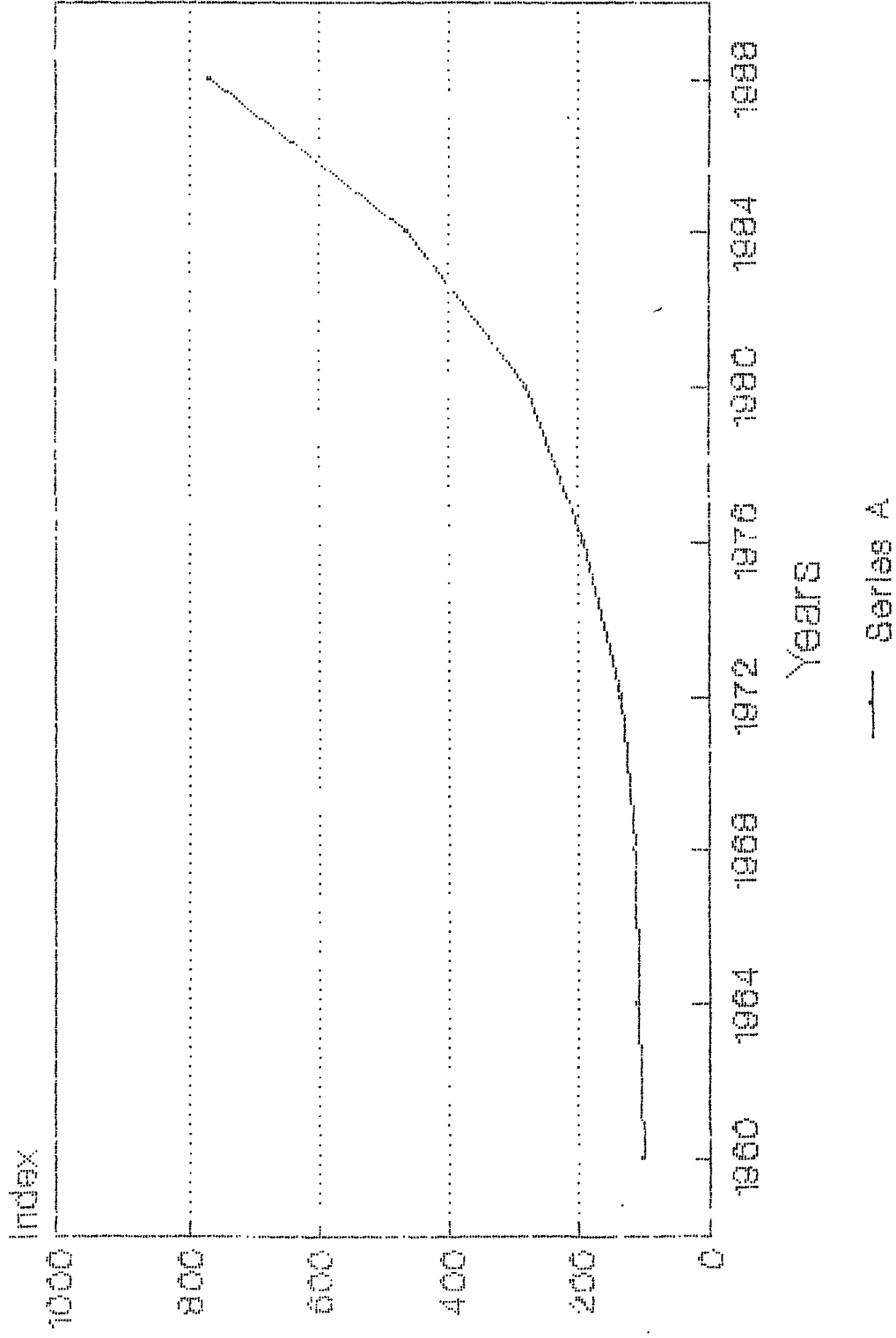
For CPI, WPI, GDP def., and FCF def., from 1960 - 88

Years	CPI		WPI		GDP def.		FCF def.	
	Index	%	Index	%	Index	%	Index	%
1960	100.0	--	100.0	--	100.0	--	100.0	--
1961	101.0	1.0	99.4	-0.6	96.8	-3.2	98.7	-1.3
1962	102.2	1.2	97.0	-2.4	98.8	2.1	98.1	-0.6
1963	106.5	4.2	104.7	7.9	100.5	1.7	97.9	-0.4
1964	106.3	-0.2	106.8	2.0	113.2	12.6	101.6	4.0
1965	105.8	-0.5	103.5	-3.1	110.4	-2.5	101.0	-0.6
1966	108.0	2.1	103.0	-0.5	115.9	5.0	104.6	3.6
1967	111.4	3.1	110.6	7.4	124.0	7.0	106.6	1.9
1968	114.0	2.3	105.4	-4.7	121.9	-1.7	108.2	1.5
1969	120.4	5.6	108.2	2.7	116.0	-4.8	109.3	1.0
1970	125.7	4.4	118.6	9.6	124.1	7.0	112.8	3.2
1971	130.2	3.6	126.3	6.5	129.8	4.6	115.8	2.7
1972	137.0	5.2	121.3	-4.0	134.6	3.7	115.8	0.0
1973	144.3	5.3	127.0	4.7	145.1	7.8	117.6	1.6
1974	155.5	7.8	142.9	12.5	183.2	26.3	119.6	1.7
1975	170.4	9.6	157.7	10.3	194.4	6.1	120.8	1.0
1976	192.2	12.8	175.7	11.4	222.9	14.7	135.7	12.3
1977	209.7	9.1	187.4	6.7	249.3	11.8	144.9	6.6
1978	219.4	4.6	197.2	5.2	298.4	19.7	151.2	4.3
1979	242.6	10.6	218.0	10.5	474.8	59.1	164.3	8.7
1980	281.8	16.2	253.2	16.1	665.2	40.1	210.1	27.9
1981	313.9	11.4	283.8	12.1	476.9	-28.3	308.7	46.9
1982	383.3	22.1	343.1	20.9	533.7	11.9	344.8	11.7
1983	430.1	12.2	387.7	13.0	528.3	-0.7	285.2	-17.3
1984	463.6	7.8	414.8	7.5	611.3	15.7	237.8	-16.6
1985	505.3	9.0	453.4	8.8	630.8	3.2	224.0	-5.8
1986	555.8	10.0	496.5	9.5	592.9	-2.9	204.1	-8.9
1987	633.6	14.0	557.0	14.2	637.3	7.5	119.8	-41.3
1988	769.2	21.4	664.5	19.3	n.a		n.a	

Source:-

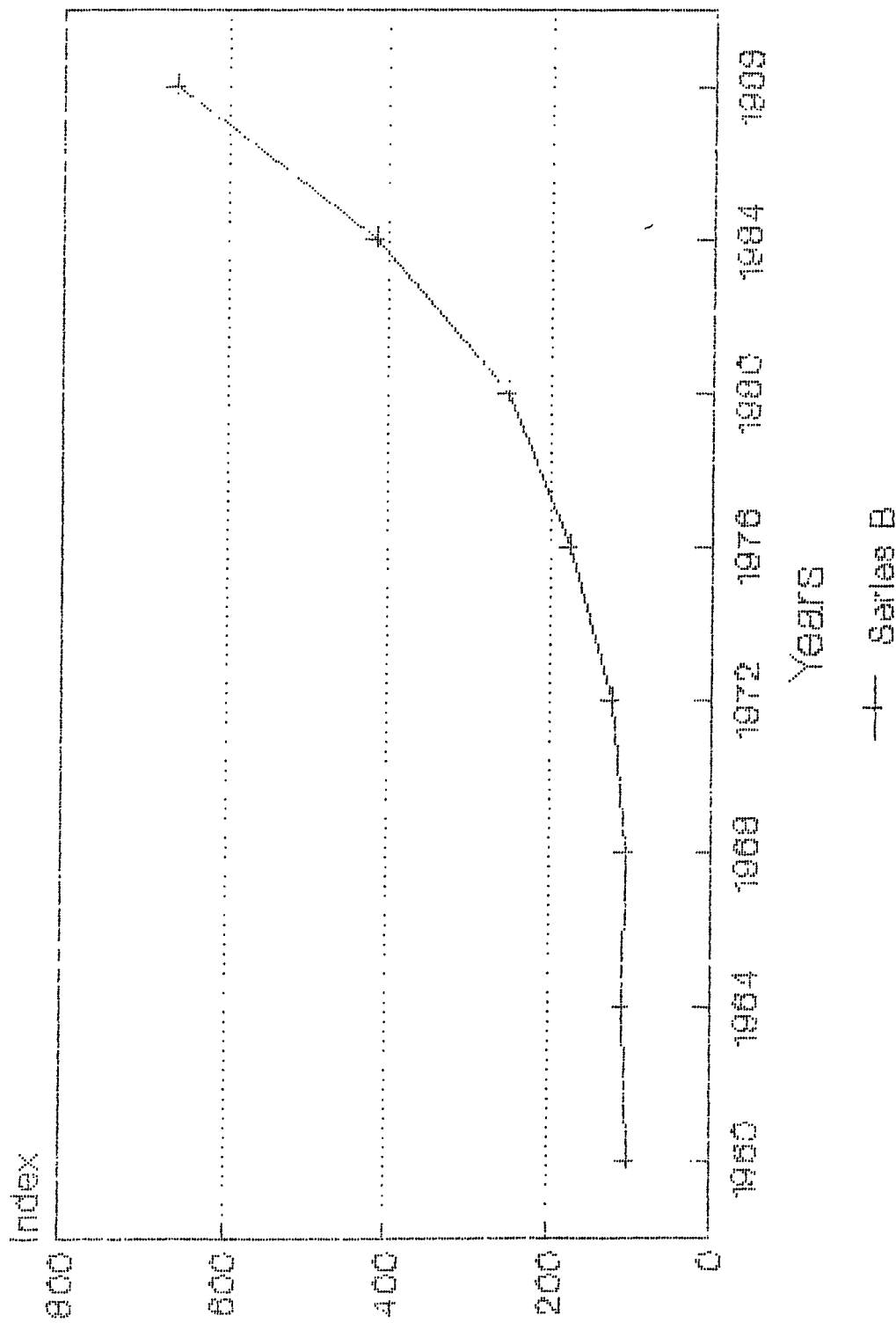
- Ministry of Planning, Annual Abstract of Statistics,
Iraq, Selected years.

Development of CFI in Iraq from 1950 to 1998



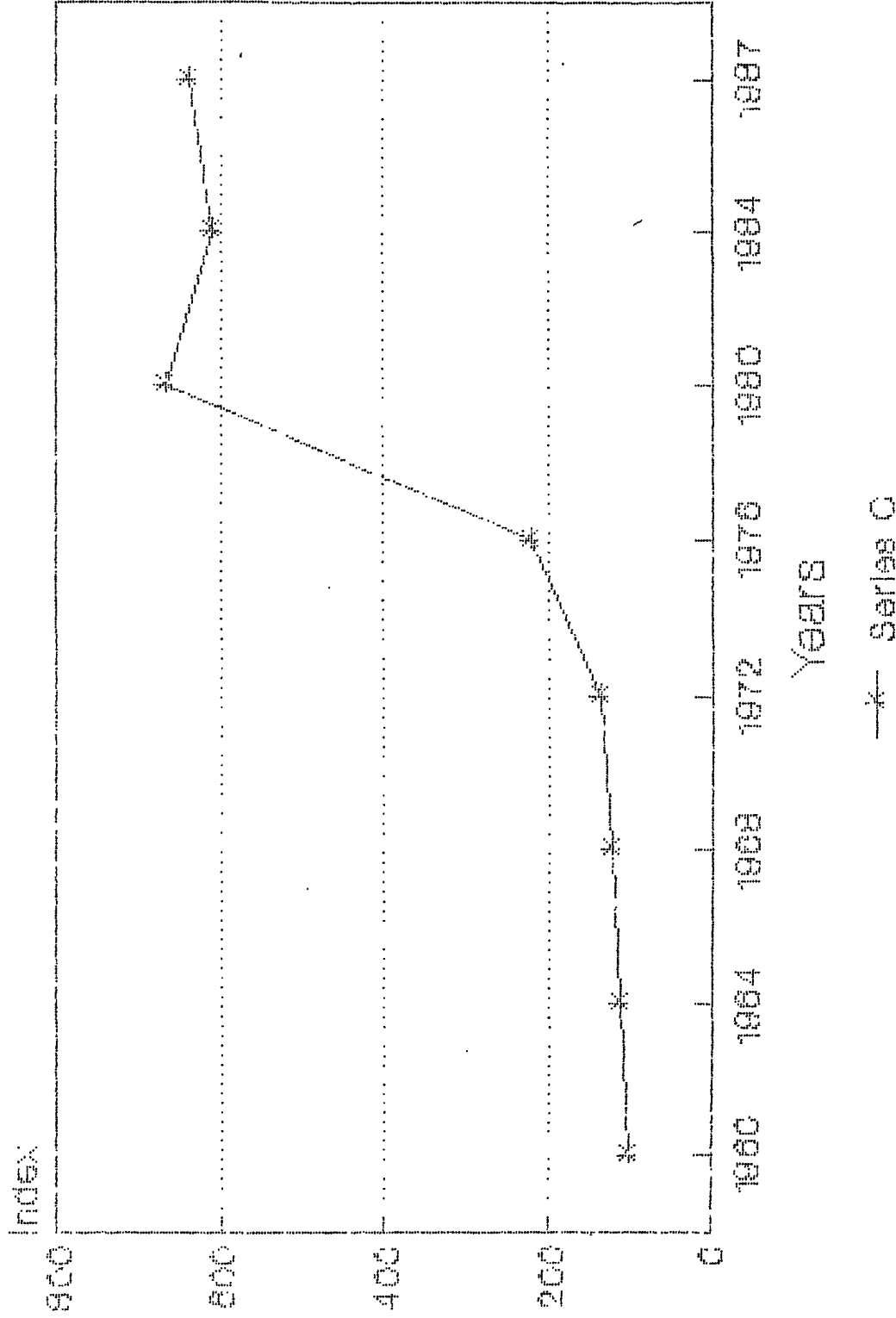
Sources: - Table no.7.1

Development Of WPI in Iraq from 1960 to 1988



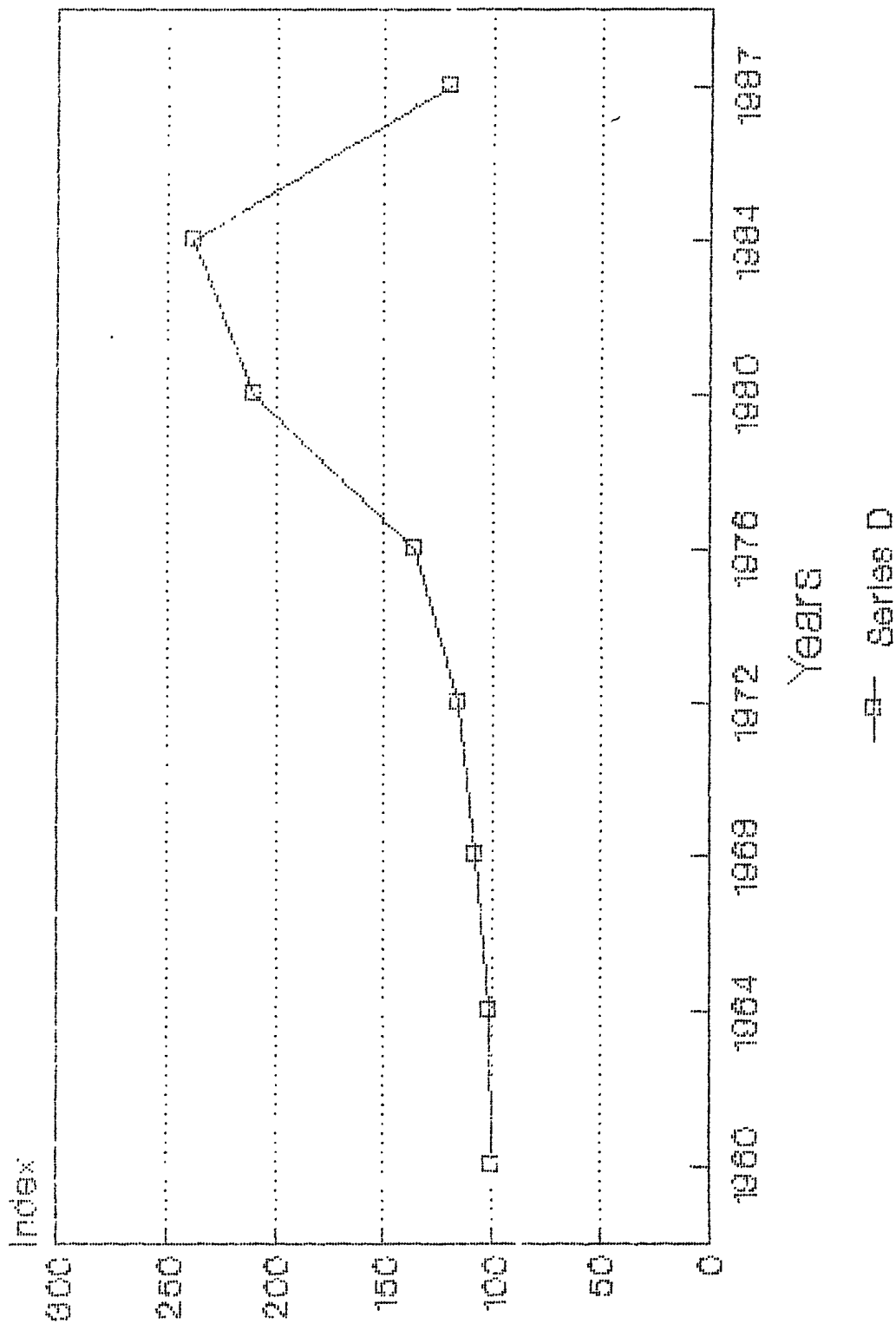
Source:- Table no. 7.1

Development of GDP. def in Iraq from 1960 to 1987

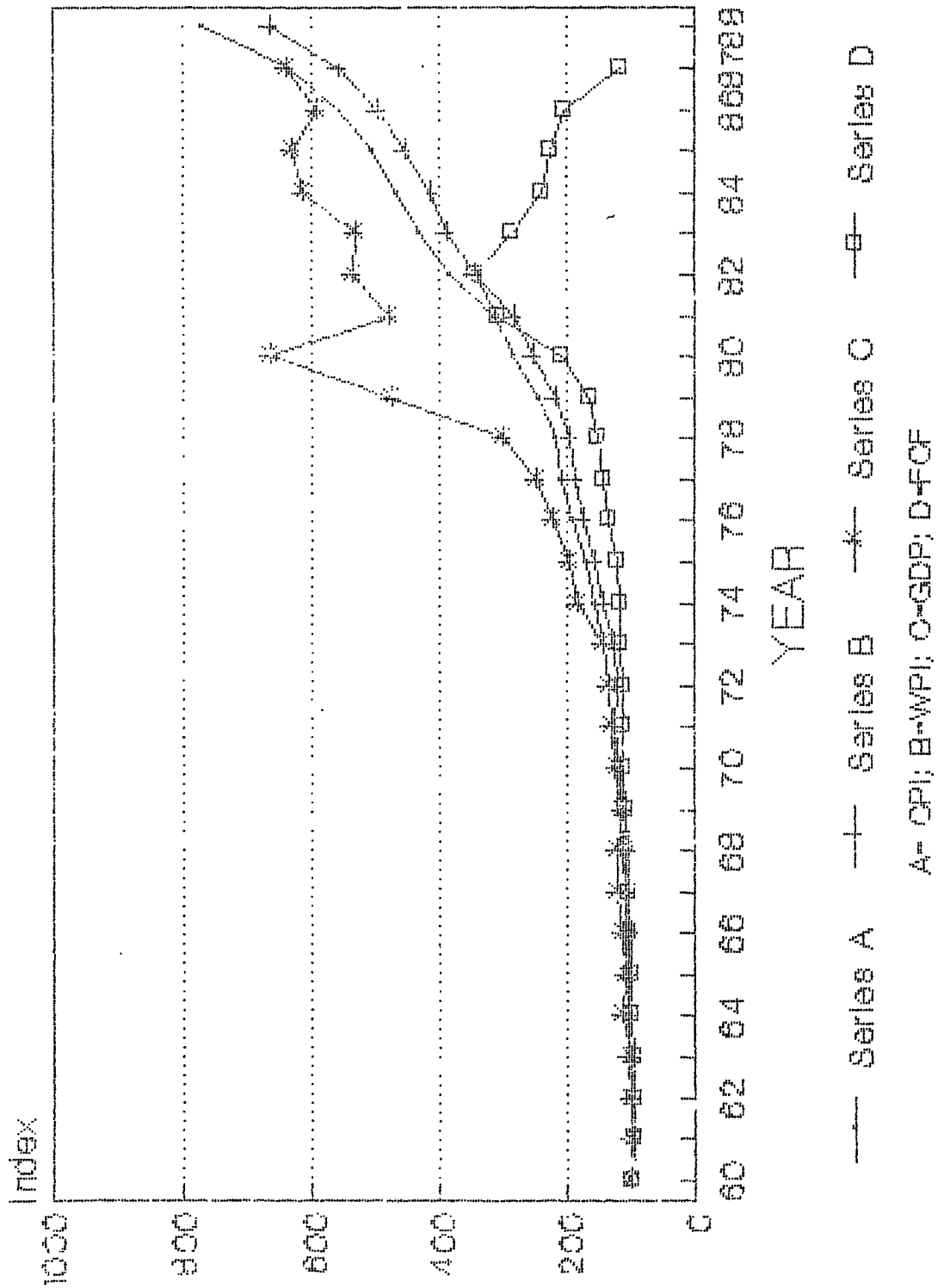


Source:- table no. 7.1

Development of FCF def in Iraq from 1960 to 1987



Inflation Rates in Iran from 1960 to 1988



The wholesale prices index (WPI), which corresponds closely with the consumer price index, is also made up from prices obtained from the whole of the country, and provides a guide to what is happening to prices in the economy. This index was calculated for the first time during the Second World War, based on Laspeyres's method. The index has limitations, since it does not include all domestic products and imported commodities; above all, it excludes oil (Hassan, 1978, p. 74).

The gross domestic product (GDP) deflator is theoretically the most comprehensive index, since it covers CPI, WPI, prices of investment goods, and the prices of government services. It is calculated in Iraq according to the formula:

GDP at current prices

GDP at fixed prices

The main problem with this index is that it is influenced by export goods. Thus, when oil prices rose in the post-1973 period, a large jump appeared in the index, which was not reflected in the domestic price structure (Al-said, 1980, p.10).

A country which is concerned with capital accumulation requires a specific deflator for this purpose. This has been captured in the fixed capital formation (FCF) index, which contains most economic activities, such as

Agriculture, Mining and Quarrying, Construction, Wholesale and Retail Trade, Banking and Insurance, Services etc. Although it includes investment goods and is useful as an indicator for certain levels of expenditure, it cannot be used as a general index (Hassan, 1978, p.78).

7.3 Inflation in Iraq

From table 7.1 and the charts, we find that Iraq has experienced a period of rising prices. For greater clarity, the periods are broken down into four sub-periods:

	Sub-period Average Rate of Inflation			
	1960-68	1969-73	1974-80	1981-88
CPI	1.8	4.8	10.1	13.49
WPI	1.0	3.9	10.3	15.8
GDP deflator	2.6	3.7	11.4	0.91 *
FCF deflator	1.2	1.7	5.9	-4.4 *

* Up to 1987

In the first sub-period, prices were relatively stable, with decreases as well as increases, and the GDP deflator rising faster than other indexes. For the second sub-period, prices increased, and the rate of inflation began to accelerate. In the third sub-period, the prices were rising at a much higher rate, at just under twice the rate of the previous period for CPI, and three times for the other indexes.

During the period 1981-88, the war led to price increases, as shortages resulted from the decline in

domestic production. The figures published by the Central Statistics Organisation show a level of inflation averaging around 13.49% per annum. However, prices were controlled by the government and many items were subject to rationing, and the true rate of inflation is thought to be considerably higher than the official figures, probably well in excess of 20% per annum (National Westminster Bank, 1986, p.2).

Thus we can see that Iraq has not been exempt from the inflationary tide that has swept the world, even though the government has adopted anti-inflationary policies such as the fixing of prices and the provision of subsidies to limit price increase. However, Iraq's inflation rate has been less than those of most of its neighbouring countries and those countries from which Iraq imports, especially before the outbreak of the Iraqi-Iranian war. While the whole world suffered from high inflation in 1974-80, we find that Iraqi inflation was lower than that of most of its neighbours, and also less than that of the UK: it was in fact nearer to the inflation rate in the USA, as shown in table 7.2.

7.4 *Government and Pricing Policy*

The pricing structure in Iraq is essentially divisible into two parts:

a- The prices of some privately produced goods and services, such as building materials, land, houses, furniture, second-hand goods, tailoring, etc., are determined largely by market forces.

b- Other goods and services produced in the planned sector (public, mixed, and large-scale private enterprises) operate under prices which are determined either by the management, or by a trade regulation board or other planning agency, e.g. Central Pricing Organisation.

Table 7.2

	Average Rate of Inflation - CPI for Period 1960-88			
	1960-68	1969-73	1974-80	1981-88
Iraq	1.8	4.8	10.1	13.49
Neighbouring countries -----				
Jordan	n.a	7.4	12.8	4.2
Iran	2.4	5.1	15.5	13.5*
Syria	2.3	5.8	11.9	25.3
Turkey	5.9	11.1	44.0	51.0
Important Trading Partners -----				
UK	3.2	7.5	16.0	6.4
USA	2.0	5.0	9.2	4.4
Netherlands	3.7	6.9	7.2	4.0

* Years 1987 and 1988 are not available.

Source: International Financial Statistics, selected years.

The government first paid attention to pricing policy in 1943, when it issued Law no.41, which required the Trade Ministry to establish a committee to study all commodities

in the market and decide their prices.

This law was replaced in 1970, when the government decided to establish an "Internal and External Commerce Organisation", responsible for planning and control of prices, to replace the "Trade Board". The law did not set out the guide-lines for pricing policy for any company, and prices were based on the total cost figures, which were already inaccurate figures (NCCMD, 1973, p.7).

In 1974, the government issued Law no.151, the purpose of which was to establish an organisation responsible for fixing prices of goods in both public and private sectors. This was the "Central Pricing Organisation" (CPO). Its duties were to

- study the Iraqi market and the demand and supply of all commodities and services;
- classify all these commodities and services into necessities and luxuries;
- determine prices based on cost accounts.

The CPO determined the procedures to be followed to increase the price of any goods or services in either sector, though later it was responsible for the private sector only. In the public sector, goods and service are priced by the top management of each company, subject to endorsement from the CPO. The pricing procedures in public sector companies are:

- 1- Calculate direct materials used in production including waste;

2- Calculate unit cost of production by taking the total direct and indirect cost of production in both production and services centres, then dividing by the total available capacity;

3- Add other costs (administrative and marketing costs) to arrive at the total cost of each unit.

After that a profit margin is added, which depends on the nature of the product or service, whether necessity or luxury. In 1987, the government decided to abolish the CPO, and each company was given the right to price its own products. Of course, this policy led to increases in price, which reached double their former levels.

However, when the cease-fire was announced in July 1988, the prices of most goods and services returned to something approaching their former level.

In any event, whether prices of goods and services are determined by government agencies or by company management, the procedure for calculating prices depends on historical cost data with the addition of a profit margin. This has led to weaknesses in pricing policy and to unrealistic prices.

7.5 Inflation in Arab Countries

Most Arab Countries had begun to suffer from inflation by 1974 (Table 7.3), the time of the oil crisis, but there was little study of the inflation accounting problem. Several theoretical articles written in Arab journals have explained methods of inflation accounting, but many of these were merely translations of accounting

Table 7.3

**Inflation Rate in Some Arab Countries
and in the UK, and USA
(CPI from 1960 to 1988)**

YEARS	JORDAN	SYRIA	KUWAIT	SAUDI	ALGERIA	EYGPT	USA	UK
1960	n.a	100.0	n.a	n.a	n.a	100.0	100.0	100.0
1961	n.a	101.0	n.a	n.a	n.a	100.7	101.1	102.7
1962	n.a	97.0	n.a	n.a	n.a	98.0	102.2	106.9
1963	n.a	99.0	n.a	100.0	n.a	98.7	103.6	109.0
1964	n.a	105.0	n.a	103.6	n.a	102.1	104.8	112.8
1965	n.a	101.1	n.a	103.6	n.a	117.1	106.5	117.5
1966	n.a	111.0	n.a	103.6	n.a	128.1	109.8	122.3
1967	n.a	116.0	n.a	107.1	n.a	129.1	112.8	125.5
1968	n.a	120.1	n.a	107.1	n.a	127.1	117.6	131.4
1969	100.0	119.1	n.a	114.3	100.0	131.4	124.0	138.9
1970	105.8	124.1	n.a	114.3	106.5	136.4	131.2	147.3
1971	111.3	125.0	n.a	117.8	109.4	140.8	136.7	161.2
1972	119.3	125.9	100.0	121.3	113.4	143.7	141.5	173.0
1973	132.8	151.1	108.5	142.7	120.3	150.0	150.2	189.9
1974	158.3	180.9	122.7	174.8	126.0	166.0	166.5	218.7
1975	177.3	201.6	133.6	235.4	137.4	182.0	181.9	271.9
1976	197.9	224.7	141.0	306.8	149.3	200.8	192.4	317.0
1977	226.3	251.2	144.6	342.4	167.5	226.5	204.9	367.1
1978	242.0	263.7	159.2	338.9	196.3	251.2	220.5	397.6
1979	276.6	276.4	170.3	342.3	218.7	276.3	245.2	451.2
1980	307.0	328.6	182.3	356.7	239.7	333.2	278.3	532.1
1981	330.7	389.0	195.7	366.2	274.7	367.9	307.2	595.4
1982	355.1	444.7	210.9	364.4	293.7	422.7	325.9	646.0
1983	372.9	471.0	220.8	362.2	316.6	490.3	336.4	675.7
1984	387.8	514.3	223.5	358.9	339.0	574.1	350.8	709.5
1985	399.4	602.7	226.8	347.1	375.3	650.5	363.1	752.8
1986	399.4	820.3	229.0	336.7	421.8	797.5	370.3	814.9
1987	398.2	1304.2	230.5	333.5	453.4	954.5	383.6	879.8
1988	410.9	1633.6	234.0	336.8	480.2	1122.4	399.0	923.8

Source: International Financial Statistics, Year Book,

selected years.

standards or exposure drafts issued in Western countries, and few were based on empirical study of the impact of inflation on financial reports.

The first empirical attempt to tackle the impact of inflation was in Egypt, in 1979 by Dr. Hijazi, and the second attempt was in Kuwait in 1980 by Dr. Al-Azama, and Dr. Al-Adilly. In both, the CPP method was applied to the financial reports of certain companies. In the 1980 there were several attempts to study inflation accounting in Iraq and other Arab countries. In 1982 the General Federation of Arab Accountants and Auditors held a conference on the subject of inflation accounting, and a committee was formed to determine a framework for inflation accounting in the Arab Countries.

Another study was that carried out by Dr. Hijazi, in 1979. He applied the recommendations of the Institute of Chartered Accountants in England and Wales, SSAP 7, to three Egyptian companies, using a consumer prices index to restate the accounting information in their financial reports (Hijazi, 1979).

Similarly, in Kuwait, a study of the impact of inflation on published financial reports was carried out by Dr. Al-Azama, and Dr. Al-Adilly. They chose the method of historical cost adjusted for changes in the general price level, using the CPI for restatement of the financial reports (Al-Azama and Al-Adilly, 1982).

Both of these studies concluded that the companies

were suffering from the high impact of inflation on their capital and profits. Therefore, they recommended the use of the CPP method as a first step to tackle the impact of inflation.

7.5.1 Iraqi Research

Most of the studies conducted in Iraq have been theoretical, and represented a translation from English to Arabic. The first empirical study was done in the University of Baghdad by Miss Yladoo, in 1985. She studied a public company, assessing the effect of inflation on the depreciation of fixed assets in the inflationary period.

She found that the company had reported a profit for 1979 of more than I.D. 826000, whereas after restatement according to the CPP method, there were real losses of about I.D. 362000.

During the present researcher's interviews at this company, this study was examined and further information obtained. There was erosion in the capital of that company of I.D. 537000 for the year 1979, because of distribution of profit calculated on historical cost figures. The profit figures calculated by Miss Yladoo, and the erosion in capital after restatement are as follows (Yladoo, 1985, pp. 173-5):

Year	Net Profit (Losses) (000, I.D.)		Erosion in Capital After Restatement (000, I.D.)
	HC	CPP	
1974	1052	1034	13
1975	98	20	154
1976	(251)	(446)
1977	1198	896	262
1978	4001	3640	299
1979	826	(362)	537
1980	4226	1589	1950
1981	(270)	(5277)
1982	(3485)	(10868)

From the above, one can conclude that many Iraqi companies, whether public, mixed, or private, are suffering from changes in prices, and some companies have eroded their capital, while still thinking that they are making a profit.

7.5.2 General Framework for Inflation Accounting in Arab Countries

In 1982 the General Federation of Arab Accountants and Auditors held a conference in Tunisia, on inflation accounting in Arab Countries, to prepare an "Arabic Pattern" for treating the impact of inflation on the financial reports. The system had to take into consideration simplicity, the state of the profession in Arab countries, and its ability to develop in the future.

A Committee from that conference was chosen to construct a framework for inflation accounting, and it chose the current purchasing power method as the most

practical pattern for Arab professional accounting, giving the following reasons:

- Most Arab countries have general price indices, and do not have a specific price index for assets.

- Rates of inflation in Arab countries, in general, are not as high as in other countries.

- The CPP method is simple, and capable of being applied and understood by accountants, in most Arab countries. Although it has several disadvantages, it is, at least at present, more acceptable than the current cost accounting method, which is more costly and needs more time and skill from accountants.

The Committee recommended that this framework be applied by companies in the public and mixed sectors. The factors which influence which companies have to apply the system are (GFAAA):

- Size of sales (revenues).
- Size of capital.
- Number of employees.
- Share of company in its economic sector.

The items which are restated under the CPP method are:

- Fixed Assets.
- Stocks.
- Depreciation.
- Cost of sales.

These restated items appear as supplementary information for financial reports, and give the following information:

- Main items in historical cost, and in current

purchasing power.

- Effects of the difference between HC and CPP methods on profit (loss).

With regard to dividends and taxes, the Committee recommended companies not to distribute profit unless they have removed the impact of inflation; in other words, only the restated net profit is available for distribution. Taxes should be calculated on net profit after restatement, in order to avoid erosion of capital.

In fact, the recommendations of the Committee did not go beyond SSAP7. This was the case also in all studies by researchers in Arab Countries.

The reasons on which the Committee based its recommendations are not acceptable. If most Arab countries have no specific indexes, then these should be established, not ignored. Moreover, most Arab countries suffer from high inflation, not the low levels assumed by the Committee, as is very clear from tables 7.1 and 7.2. If the rate of inflation had been as low as they suggested, then the CCA method, not the CPP method, would have been appropriate.

The main weaknesses of the work of the Committee were:

- The Committee did not make any surveys, in order to establish what accountants or company managements want. Its work was done by only three of its members. This kind of study needs wider contribution to the

decision as to what system should be adopted.

- The study relied totally on SSAP7; the Committee did not investigate the experiences of other countries such as Brazil or the USA FAS 33. All members of the Committee had graduated from UK universities, and were influenced by the "English Method". Moreover, they did not research the CCA method which had, by then been applied in the UK.

- The Committee ignored the private sector totally, though this sector covers a considerable proportion of the economy of most Arab countries.

-The committee did not suggest a date for introduction of the system. Moreover, it did not explain what the companies should do with problems of the accumulated depreciation of fixed assets which were acquired a long time ago, or on different dates.

- The committee did not specify the size of sales or revenues, capital or other criteria for the companies which would apply its proposal.

Furthermore, the recommendations were not put into practice. A letter received from the Chairman of the Federation of Arab Accountants and Auditors, stated:

Unfortunately Arab Countries have not taken up the suggestion of the Committee to put it in practice....., and moreover, there was no response from Arab Countries about the subject. (Al-Hasson, 1987)

Since that conference was held, no attempt has been made either by the Arab Guild or by government to deal with inflation accounting.

7.6 *Current Cost and Macro Accounting*

The system of historical cost accounting on which the uniform accounting system is based is inadequate for measuring economic performance, at either the corporate or the national level, under inflationary conditions. Moreover, during periods of inflation, traditional accounting may give the idea that profitability is excellent, causing additional and possibly unwarranted expansion. Other groups in society, such as labour unions, tax authorities, and government agencies could be misled to the detriment of the performance of the economic system.

Therefore, there is a need to change enterprise data so that it becomes suitable for national accounts purposes. A set of enterprise accounting data should be created, using the same valuation method as that needed for the national accounts. Enthoven, A. said :

An important aspect in applying sets of enterprise accounting data to national accounts is that the data be expressed in the same units, and similar valuation, measurement and aggregation procedures applied.... Therefore, enterprise accounting valuation of inventories and capital consumption should preferably be adjusted by means of "revaluation account" in a reconciliation account, to eliminate any book gains or losses, in order to make enterprise data valid for national accounting purposes. (Enthoven, 1983, p.95)

It is thus necessary to incorporate current costs into accounting measurement, reporting, and decision-making in order to reflect activities and resources in both the micro and macro economic sectors.

In national income accounting, most inputs and outputs are valued at their market prices at the closing date of the reports, i.e. current cost. Gross National Product and its components are also generally stated at current market prices. This will pose problems, especially in regard to capital consumption and inventories, which are calculated on the basis of historical cost in the enterprise (Enthoven, 1985, pp.8-9).

If the historical cost principle is used, the capital gains which will probably arise in a period of inflation will distort the real value of output and national wealth in national accounts (Enthoven, 1983, p.97). For that reason, enterprises should revalue their inventories and assets, and any book gains or losses should be removed to make the information on the enterprise's position more useful for national accounting and management purposes.

7.7 Inflation and the Uniform Accounting System

The creators of the uniform accounting system introduced some accounts within the system, to help national accountants in preparing their statements according to current value.

These accounts, which are called "Opposite Twin Accounts", appear in the same amount on both sides of the Current Operating Account. The accounts are :

Account
Number

- 191 Movement of Finished Product at Current Price.
- 1943 Valuation Difference of Finished Product Stock.
- 1944 Valuation Difference of Goods Purchased for Sale.
- 291 Opposite Movement of Finished Product at Current Price.
- 2943 Opposite Valuation Difference of Finished Product Stock.
- 2944 Opposite Valuation Difference of Goods Purchased for Sale.

7.7.1 Account No. 191 and its Opposite Twin Account

Finished Product at Current value and its opposite account provide periodic information about finished product at current price.

The accounts reveal movement of finished production, received by or issued to/from stores at its current value, and are presented each month for finished goods produced and sold.

These two accounts record the value of stocks, resulting from changes in current prices (BSA, 1985, p.75 and p.153).

The accounting entries are as follows:

1- The following are recorded on the debit side and in the opposite account in the credit side:

- a- stock of finished goods at beginning of the period.
- b- monthly production.
- c- goods returned.
- d- increase in price differences.

2- The following are recorded on the credit side

and in the opposite account on the debit side:

- a- stock of finished goods at the end of the period.
- b- monthly sales.
- c- production returned.
- d- decrease in price differences.

Because every entry recorded in account no. 191 must also be recorded in its opposite account, no balance should appear in the balance sheet at the end of the financial period. Although this may render these accounts unimportant at the enterprise level, their significance is for national accounting purposes. However, although the uniform accounting system requires all companies to prepare a statement showing these changes in prices, most Iraqi companies do not do so, because of their lack of understanding of the system and the unavailability of current price data.

7.7.2 Accounts Nos.1943, 1944, and their Opposite Twin Accounts

These accounts reflect valuation differences in stocks of finished goods and goods purchased for sale at the beginning and at the end of the financial period on the basis of current value minus their historical costs (ibid., pp.157-8).

7.7.3 Depreciation

The general principles used in the uniform accounting system for calculating depreciation are:

- All fixed assets except land are subject to depreciation.
- Acquisition cost is the basis for depreciation.

- Depreciation is calculated according to the percentages laid down by the Depreciation of Fixed Assets Act No.206.

When the accumulated depreciation reaches a value equal to the cost of the fixed asset, the enterprise has to continue to charge depreciation on that asset at 100% of the latest depreciation charge (Ministry of Finance, 1984).

This additional amount is put in a special account called "Reserve for Rising Prices of Fixed Assets", and appears in the balance sheet. This additional amount is taken from the profit and loss account. In turn, net profit of an enterprise will be reduced by that additional depreciation. However, this additional depreciation does not represent exactly the same percentage of increase in price level of fixed assets. Moreover, the amount of fixed asset depreciation is shown in the balance sheet at its historical cost.

The uniform system therefore reflects, indirectly, the impact of inflation on financial reports, though only for national accounting purposes. Moreover, it concentrates on finished goods and stocks of goods purchased for sale, while other accounts, such as inventory of raw materials, and unfinished products, are ignored. Furthermore, only an indirect method is used to deal with changes in price of fixed assets.

It would be preferable for the uniform accounting

system to adopt the current cost method for all kinds of inventories, this being an important cost factor in production. In order to do that, the enterprise must have a system of standard prices, which are calculated for all products in inventory, and standard prices must take into account the expected price level, current value, at first of January of the new financial year. Standard prices determined by purchasing departments follow the trend in current values of group raw materials and other purchases.

In most Iraqi enterprises, there is a purchasing department, which is responsible for serving the raw materials needed by other departments. It is essential that it follows the trend in the current cost of important groups of raw materials and other purchased products. Moreover, there is in the Ministry of Industry a specialist department concerned with importing, which may be able to perform that task and prepare, at least yearly, indices for most inventory items.

For internally manufactured products the current value is determined by the quantities and prices of raw materials, semi-finished products, and man and machine hours required for production. Any changes in quantity or quality of the manufactured products should be reflected by a change in current value.

With regard to fixed assets, first of all, it is necessary to distinguish between different kinds of fixed assets. Since most machinery and equipment in Iraq

is imported from outside, the purchasing department in the Ministry can follow the price trend for these assets in the supplying countries, and should publish revaluation indexes annually.

With buildings, since few Iraqi enterprises construct their own buildings, an index for building expenditure published by the Central Statistic Organisation might be a better source for revaluation purposes. For land, the current cost of land consists of the price payable for land in the same condition, and for the same purpose. To sum up, it is clear that in recent years Arab countries have suffered from high inflation rates.

The attempt of the General Federation of Arab Accountants and Auditors (GFAAA) to establish an inflation accounting framework for all Arab countries was laudable, but the method chosen was inadequate. It would have been better for them to choose the CCA method, which is more relevant to the Arab countries' environment. This was, indeed, admitted by the chairman of that Federation when interviewed by the researcher.

Chapter Eight
Iraqi Industrial Companies
and
Inflation Accounting

8.1 Research Sample

The basic research method was the structured interview, based on a prepared questionnaire. The aim was to interview, from a number of Iraqi companies, top management, and the person responsible for accounting. There were also interviews with other bodies, such as representatives of ministries, state auditors, and academic and professional accountants.

The choice of companies was a major problem. Random choice was not suitable because the companies are not listed in any directory according to size (capital or number of employees), and the random method has the disadvantage that there is no guarantee of the help of the companies chosen. Also, in order to find out whether or not inflation accounting techniques are used, it was necessary to choose large companies, which keep accounting records and have a budgetary control system from which variances are calculated, and where changes in prices have an effect on the financial results. Because the study relates to Iraqi industrial companies, it was considered advisable to coordinate with the Ministry of Industry in ascertaining which companies were willing to co-operate. The researcher met a chief of economic organisation in the Ministry, to identify suitable companies. Three companies from the public sector, three companies from the mixed sector, and one company from the private sector were chosen, representing different types of industry. This number may appear small, but since all

companies (public or mixed) are obliged to apply the uniform accounting system, the results can be generalised among all companies.

According to the agreement made with the representative of the Ministry, the companies chosen will not be named, but referred to as follows:

- companies A, B, and C representing the public sector.
- companies D, E, and F representing the mixed sector.
- company G representing the private sector.

8.2 Organisation of Study

In collecting the data needed for the empirical study it was found that the interview method with a guiding questionnaire was most appropriate, for mailed questionnaires have the disadvantage of non-returns or incorrect completion. The survey took place in Iraq during 1988, and there was another visit during 1989. The interviewees were promised that their responses would be treated in confidence.

Because the interviewees included managers and accountants, the questionnaire was arranged in three sections. The first section, which elicited general information about the company and the interviewees, contained 6 questions. The second section aimed to find out whether managers of enterprises feel the need for financial reports presented according to the uniform system and based on historical cost accounting. Therefore, two members of top management (the director and his assistant) were

interviewed in most enterprises.

Moreover, as most of the managers were either engineers or chemists, the design of the questionnaire tried to avoid direct questions on inflation accounting, starting instead at a general level and moving gradually to more specific questions. Section two contained 39 questions, concentrating on management attitudes towards financial reporting in general, and inflation accounting in particular.

The third section dealt with the chief of the accounting department in the selected enterprises. There were 34 questions, concentrating on published accounts, budgetary control, managerial accounting and inflation accounting.

The following section will discuss the interviews and their responses in general terms; because of similarity in the questions posed to both managers and accountants, these two groups will be discussed together. Questions to managers began with Q2, while questions to the accountants began with Q3. The viewpoints of officials will be discussed in chapter nine.

8.3 General Information

The Iraqi economy contains different sectors, each of which forms a given percentage of the Iraqi economy as a whole, this percentage being determined by government policy. Interviews were conducted in the industrial companies in the three sectors as follows:-

Sector	Number of enterprises
Public	3
Mixed	3
Private	1
Total	<u>7</u> =====

As said earlier, because all companies must follow the uniform accounting system, the number of interviewees will not affect the result. What is important, in our opinion, is the job of the interviewees. Therefore, interviews were conducted with the managers of these companies, because in the public or mixed sector, they represent the government in these companies, and must implement its policy. The jobs of the interviewees were as follows:

- Enterprises	No	%
managing director	<u>7</u>	<u>36.8</u>
assistant director	5 (financial and technical).	26.3
		---- 63.1
chief of accounting department	6	31.6
chief of cost department	1	5.3
		--- 36.9
Total	----- 19 =====	----- 100 =====

With regard to the ages of the interviewees, most fell into two main groups: first, managers and their assistants, aged 38-50 years; secondly, accountants, 35-45 years, except for two accountants who were more than 50 years old. Moreover, most had more than five years experience in their current positions.

The main areas of expertise for managers were engineering and chemistry, while chiefs of accounting

departments had either graduated from college (accounting or economics department), or had secondary school diplomas.

In order to clarify the accounting system which is used in these sectors, the question was asked: what kind of accounting system does your company use? From the theoretical and legislative points of view, all companies in Iraq must follow the uniform accounting system. However, in practice, only the public and mixed sectors use that system, while the private sector uses the English double entry method, which is called the traditional accounting method. Although since 1986, the government has required all enterprises which work in the private sector to apply the uniform accounting system, many have failed to do so, because of shortage of accountants, and only foreign companies now present their financial accounts according to the uniform system.

In order to ascertain how the companies are tackling the problem of shortage of accountants, we asked the interviewees whether they have a modern technical system for recording and preparing their financial reports. It was found that 83% of the enterprises in the public and mixed sectors use a mixed system. The computer carries out procedures up to preparing the trial balance, whilst the other elements of the financial reports are prepared manually; even the budget variance and their analysis. The private company records and prepares its accounts manually.

8.4 Managers and Accountants Responses

The impact of inflation makes the responsibility of management greater than ever, especially after the management shake-up which was carried out in the government's new economic programme. This requires that companies' objectives and policies be clearly defined and understood by all levels of management. Therefore, the reporting system needs to be devised in such a way that it informs management of the effect of inflation on the business and the rate at which costs and revenues are changing, so that management can use the information in decision-making.

8.4.1 Report Characteristics and Management Satisfaction

In this section, the concentration will be on the managers' points of view on the financial reports, because they are the primary users of them. Of course, other questions were of particular relevance to the accountants.

In uniform accounting there are several statements which must be compiled. It is necessary first of all to identify the person(s) responsible for preparation of annual accounts. Companies B, C, D, E, and F said that this function is carried out by their accounting department annually, usually two or three months after the end of the fiscal year. The manager of company A pointed out that the Board of Supreme Audit is responsible for preparing the annual reports. In the private sector, the situation is different; this job should be done by the accountant of the

company, but in practice these reports are prepared by a private auditor. The following percentages show actual responsibility for preparing the annual reports:

	%

Accounting department	72
Board of Supreme Audit	14
Private auditor	14

Government regulations and policy basically guide the accountants in their accounting procedures, as was found from their responses to Q3.1. Furthermore, almost all the accountants indicated that their records and reports should conform with government regulations. The management's policy was also considered as a guide for internal purposes. All enterprises kept accounting records as required by the uniform accounting system.

In order to find out whether there were any non-Iraqi accountants, Q3.2 was asked, and it was found that the respondents, with the exception of company C, did not employ non-Iraqi accountants. However there were many non-Iraqi accountants at the beginning of the 1980s, mainly those from Egypt, followed by those from Palestine, Lebanon, and India.

The accounting department is one of several departments in a company, and is interactive with the others. It needs information from these departments to prepare its reports, and feeds them with suitable information. In order to understand the relationship between these departments and the accounting department, and how they co-operate, question

2.2 was asked of the managers.

72% of the managers stated that inadequate perception of the role of accounting prevails among other departments. Consequently, respondents believed that it was difficult to secure the co-operation of these non-accountants to meet the needs of the accountants.

To ascertain the accountants' points of view regarding the helpfulness of other departments in the company in the collection of information, question 3.3 asked: "Would you say that other departments in the company have an understanding and perception of accounting's role?".

The responses showed that the accountants felt there was an inadequate perception of their role among non-accountants and other departments. Respondents believed that it was difficult to secure the co-operation of non-accountants in their functions.

The manager of company G added that most of its employees are working class, and there is no relationship between them and the accountant. If he needs any information he can contact directly the person(s) responsible.

Lack of co-ordination and co-operation between departments in the company is likely to result in failure in achieving objectives. It seems that the main reason behind this is inadequacy of education in accounting, management and business in general. This in turn, results in lack of the information needed by management or other users.

The information provided by the financial system was sufficient in the opinion of the chief accountants, as was

found from their answers to question 3.5.

The accountants answered that the form of financial reports is acceptable, and contains a wide range of information, most of which is related to national accounting requirements rather than the real needs of the company for financial reports, such as labour reports, efficiency reports, and financial ratio analysis.

The following sections discuss the manager's responses to specific questions related to the satisfaction and reliability of the financial reports.

8.4.1.1 *Timeliness and Frequency*

If accounting information is not provided at the right time it will be wasted; financial reports must therefore be presented in sufficient time to be used in decision-making. Several questions were asked about the timing and periodicity of financial reports (Q2.3, 2.4, and 2.7).

85% of the general managers of companies expressed that the financial information system generates the financial reports and statements only after considerable delay. They complained that the average time lag between the end of the financial year and the presentation of the audit balance sheet and other reports is about 3-5 months. This means that the operating results of a given year are not submitted to users until six months into the following year. They added that these reports are prepared manually and consume a great deal of time.

For instance, the general manager of company C said

that the company was required to prepare the financial reports no later than February of the following year. He complained that this deadline was not met in practice. Furthermore, the general manager of company E complained that in many cases the reports he received from the cost accounting system were late and he had to rely on his own knowledge in making decisions. By way of example, he described an occasion when he had carried additional costs because he was not able to make a decision, and to take advantage of a fall in prices in the market.

Some information is presented to the manager more - or - less daily, for example stock information (raw materials, finished and unfinished goods), while information relating to spare parts and production control is received monthly. Most of this information is quantitative. Regarding the trial balance, companies stated that the accounting department prepares it monthly. The production cost report is presented quarterly.

In the public and mixed companies, the balance sheet, current operating account, profit and loss account, and budgetary control reports of departmental expenses are presented on a yearly basis. Trial balances are prepared monthly. Moreover, it was found that the periodicity in receiving the financial reports was as shown in Table no. 8.1. Most managers of the companies interviewed concentrated on the raw materials inventory, which was checked daily, in order to maintain continuity in manufacturing.

Table 8.1

Periodicity of Receiving Reports

kinds of Reports	Public Sector			Mixed sector		
	A	B	C	D	E	F
- Raw material used in production	D	D	Q	D	M	D
- Wages paid for product	M	M	M	M	M	M
- Inventory level	D	D	M	D	D	D
- Overhead expenses	Q	Q	Q	Q	Q	Q
- Profit and loss for the production Period	Q	Q	Q	Q	Q	Q
- Variances reports	Y	Q	Q	Q	Q	Q

Key: D = Daily M = Monthly Q = Quarterly Y = Yearly

The private sector company has no managerial reports of any kind. The owner replied that he knew what was going on in his company without needing any report. With regard to the final accounts, the owner added, it takes no more than two or three months for these to be prepared and audited by the private auditor.

8.4.1.2 Satisfaction and Confidence

Financial reports should first of all give management a complete picture of the financial position, and should be understood by the manager. These two factors will create satisfaction and lead to confident decision-making by the users. Questions 2.5, 2.6, and 2.8 indicated the managers'

views on these points.

It was found that the managers and their assistants would prefer to receive these reports on a monthly basis, and agreed that the current reduced frequency of issue poses a number of problems, including peak clerical staff loads during the closing period. They declared that their companies are trying to solve problems of peak clerical staff loads by using the computer for accounts payable, the general ledger, and the trial balances.

The Ministry of Industry official and the general managers stated that they would prefer to receive the cost of manufacturing reports each month instead of each quarter or at the end of the year. Therefore, new government regulations have been introduced, requiring all companies to send their cost reports and manufacturing statements to the Ministry of Industry monthly. Table 8.2 shows the various reports generated by the cost accounting system, shown by frequency of presentation.

It was found that the managers and their assistants chose to answer question 2.8 diplomatically, expressing a reasonable amount of confidence in any kind of information presented to them. This suggests that management at different levels trust the information received, especially accounting data. However, the managing director of company A complained of receiving misleading reports from some departments, for instance, production planning control. He pointed out that in many cases the total working time, as reported to him, greatly exceeded the working hours

Table 8.2.

List of the various reports generated from
the cost accounting system shown by frequency
of presentation

Company	Report	Frequency of Presentation	
		Monthly	Quarterly
A	waste control	/	
	cost control	/	
B	waste control	/	
	cost control	/	
C	cost of manufacturing		/
	production efficiency		/
D	waste control	/	
	material control	/	
	labour control	/	
E	cost control	/	
	scrap cost	/	
F	cost of manufacturing		/
	waste control	/	

available, thus preventing him making correct decisions. He added that he once received a report from the planning and control department which provided him with information about delays caused by lack of materials, leading to idleness of

machines. He added that the specialists of the productivity and organisation department were assigned to investigate the matter. According to him, the staff discovered that the total idle time greatly exceeded the total available working hours.

8.4.1.3 Reliability

The importance of reliability comes from the need at different management levels in general and the top management in particular, to assess the different activities of the company and to rely on the financial reports in decision making. Questions Q2.9, 2.11, 2.12, 2.15, and 2.16 dealt with this aspect.

The managers of companies C and G answered that they were very much interested in the financial data, while the assistant manager of company C was not particularly interested. He said, "I receive too much information. Most of it, I either do not need or it is not related to my interest". However, companies A, B, D, E, and F showed considerable interest in financial data. Thus, with the exception of company C's assistant manager, management perceive the need for the accounting information and are interested in it. Table 8.3 shows the level of this interest. Therefore, companies did not need to answer question 2.10 which was applicable only if the information was found to be of no interest to managers.

Table 8.3

	Managers % out of 7 -----	Assistants % out of 5 -----
- A great deal of interest	71	---
- Very much interest	29	---
- Average interest	---	80
- Little interest	---	20
- No interest	---	---

To increase understanding of management use, respondents were asked to specify the extent to which annual accounts, as distinct from other accounting information, influenced decisions in specified areas of management of their business. Table 8.4 shows the influence of the annual accounts in management decisions:

Table 8.4

	Major Influence % -----	Minor Influence % -----	NO Influence % -----
- Pricing decisions.	72	14	14
- Borrowing decisions.	57	14	29
- Capital expenditure.	29	71	---
- Staff pay and conditions.	29	57	14

Pricing decisions were considerably influenced by annual accounts. This seemed to be for one main reason: companies depend on information available in the annual accounts, and their pricing decisions are taken at the beginning of each year, and are not normally changed during the year, unless there is a change in the policy of government or management.

The majority of managers (72%) who used accounts for

management purposes thought that they were adequate for that purpose. Respondents were then asked to suggest ways in which annual accounts could be made more useful. No clear pattern emerged, though the inclusion of more information and increasing the timeliness of production of the accounts were mentioned.

Then we asked respondents to rank a number of uses of the company's annual accounts in order of importance (Q2.12). The public sector respondents indicated that providing managerial and financial information to managers was of first importance; the Ministry of Industry came in second place, then the Ministry of Planning, later the Ministry of Finance (Tax Department). The mixed sector also gave priority to management requirements, but said the second most important users were shareholders and the tax department, then the Ministry of Industry. The private sector considered the tax department to be the most important user, and then the Ministry of Industry, and the Companies Registrar. Table 8.5 shows the relative importance of the users of the financial reports to each sector.

Table 8.5

	Ranks of Importance		
	Public	Mixed	Private
	_____	_____	_____
- Managers	1	1	1
- Ministry of Planning	3	-	-
- Ministry of Industry	2	4	4
- Tax department	4	3	2
- Shareholders and Companies Registrar	-	2	3

Managers of companies, answering questions 2.15 and 2.16, explained that the importance of financial reports, in general, for decision-making depends upon the nature of the decision itself. The factor which is most influential is the net profit; a favourable figure will enable the company to get support and endorsement from the authorities to go ahead in its decision. Other factors such as turnover of sales and auditor's report, are taken also into account for a decisions. This would suggest that managers do study most of the information included in the reports, due to the importance of accounting data.

Most of the assistant managers showed less interest than the managers in these reports (see table 8.3). 80% of them said that 75% of the reports might be studied. This was because most of them are not responsible for the overall activities of their companies.

From this section it can be concluded that the managers of the companies surveyed find their financial reports useful, interesting, and generally containing most of the information they need. However, the major problem is timeliness.

8.4.2 Disclosure of Financial Reports

Financial reports must be clear and based on accounting policies. Disclosure of the significant accounting policies on which the reports are based is therefore necessary. In Iraq, accounting policies are not regularly and fully disclosed in financial reports. In a single set of financial

reports, some significant accounting information may be disclosed while other items are not. However, if there is any change in accounting policy which has a material effect, it is necessary to disclose that change.

Because legislation does not regulate disclosure in financial reports, most companies try to avoid disclosure in some or all of their financial statements. Question 2.13 asked whether particular items should be disclosed. Table 8.6 shows the resistance to or acceptance of disclosure of the following items:

Table 8.6

	In favour of disclosure %	Not in favour of disclosure %
	-----	-----
- Turnover of sales.	71	29
- Net profit before tax.	57	43
- Value of stock.	71	29
- Loans from the government	14	86

The above answers show that 71% of the managers were not resistant to publication of these items. The exceptions were the managers of companies B and C, who argued that this information is not very important to the public. The managers added that they published some information about the quantity and quality of production, but did not explain what kind of information they felt was needed by the public. Furthermore, 86% of them refuse to disclose any information on the loans presented by the government in general.

The Board of Supreme Audit is responsible for public audit for all companies in Iraq. Therefore, to determine the services provided by the Board, questions 2.14 and 3.30

were asked, for managers and accountants respectively.

Managers and their assistants argued that the greatest importance (85%) was attached to audit of the accounts, followed by the efficiency report on the company. The manager of company A had difficulty in seeing audit as a function separate from the preparation of the accounts. Table 8.7 clarifies the perceived importance of the services presented by the Board of Supreme Audit as percentages as follows:

Table 8.7

	Importance of the services %

1- Auditing the company's accounts.	85
2- Efficiency report.	71
3- Management advice.	57
4- Preparation of annual accounts (in same time).	43
5- Other financial advice.	29

Accountants were asked the same question about the services provided by the Board of Supreme Audit. They agreed that the first objective of the Board is to audit the accounts, and sometimes to give financial advice. In recent years, the Board has tried to present reports on efficiency. These reports are useful to both managers and accountants, as they show whether the company has carried out its activities and prepared its budgets according to legislation. However, they added up that because of shortage of staff at the Board, most Iraqi companies have not received these reports.

8.4.3 Budget Information and Asset Valuation

8.4.3.1 Budgetary Control

A budget is a short term plan, set out in sufficient detail for monitoring the activities of a business and the performance of its line management. Generally, a short term plan is linked to a longer term plan, which may cover up to five years or more ahead. Therefore, questions 2.17, 2.18, 2.19 and 3.6 were posed to both the managers and accountants, and it was found from answers to Q2.17 that because all companies have to apply the uniform accounting system, all companies in the public and mixed sectors prepare the budgets, such as cash, production, expenses, sales, and purchasing, required by the system.

In contrast, the private company which should also follow the uniform accounting system does not, in fact, prepare any budgets. All that is done is to prepare a production form in quantitative terms for presentation to the Ministry of Industry. It is basically a technical procedure for exercising control over private industrial companies. Every three months, a form is filled in by each company, showing capital, employment, production, profit, cost and sales.

The answers to question 3.6 did not differ from those given by managers (Q2.17), though accountants added further detail to their complaints regarding budgetary information. For instance, the companies do not use modern forecasting techniques (e.g. regression, correlation and time - series

analysis) for budgeting purposes. The use of flexible budgeting techniques for control purposes is uncommon and the budget projections which are used for performance comparisons are based upon historical data and experience. These projections do not provide a satisfactory basis for performance comparisons because they reflect the inaccuracies of previous years.

With regard to the use of statistical studies to prepare the budgets (see Q2.18), companies in the public sector explained that they make a statistical analysis only for the basic production item; companies D and E pointed out that some kind of trend analysis is used but for only a few items. Company F and private company G answered that no statistical studies are for building the budgets.

In response to question 2.19, the universal finding was that there is no adjustment on any budget for the impact of inflation. The companies set incremental budgets, which means that the budget for the coming year depends on the current budget, with a standard increment for each item.

During informal discussion outside the interviews (e.g. during the lunch break) it was explained that the figures from the budgetary control system did not provide much help to the managers in planning, controlling, and evaluating activities. The managers in the public sector, especially, argued that the primary obstacle to accurate budgets was the errors that occurred in the preparation process.

The assistant manager of company A suggested that the

forecast figures were sometimes unrealistic, since they assumed a quality of material input and conditions of repair and maintenance of equipment which were not normally achieved, due to their constant fluctuation, while a poor information system was another source of errors in the forecast figures.

8.4.3.2 Variance Analysis

The overall variance between a planned budget and an actual budget is usually due to a number of factors. Ascertaining the contribution of each factor to the overall variance is termed variance analysis. Any variance must be either a favourable or an adverse variance. To find out whether companies revise their budgets and analyse the variances, several questions were posed, namely questions 2.20 to 2.24.

The Ministry of Industry requires all companies in the public and mixed sectors to present, monthly, a revised report on the budget. The companies stated that the revision of the budget is made every three months for production and cost elements. The main reason for the revision is to follow up the execution of the production budget and cost estimates.

With regard to inflation, question 2.21 was asked: " In analysing variances, do you calculate an inflation variance?".

The companies in the public and mixed sectors, except company A, replied that at the end of each three months,

variances are calculated, but there is no specific calculation of an inflation variance. This variance is usually hidden in the price variances of the cost elements. Manager of company A said that the variances are prepared at the end of the financial year.

With regard to the views of the accountants on the analysis of variances, questions 3.7 and Q3.8 asked whether they:

- Make adjustments to actual and forecast costs linked to a general price index;
- Make adjustments to actual and forecast costs linked to a specific index;
- Make no specific adjustment; or
- Calculate an inflation variance, see questions list.

The answers in public and mixed companies showed that the estimates are based on historical figures. This means that there is no specific calculation of an inflation variance, which is usually hidden in the price variances of the cost elements. It appears from the answers to Q2.21 and Q3.8 that inflation is not taken into account in calculating the raw material, wages, and overhead expenses.

In order to find out if there are any problems in preparing budgets where inflation accounting is used, another question was asked within the interview: " Please, clarify the problems you would expect to face in applying inflation accounting". The managers and the assistants (25% out of 12) in companies A, B, and G answered this question by saying, " no idea" or, " I do not know". In other companies the main problem was in the valuation of fixed assets and the calculation of depreciation.

Comparison of actual figures with planned figures is an aspect of budgetary control, and managers were therefore asked in Q2.22, which of the following comparisons were most useful:

- Actual vs. budget for the period.
- Actual vs. budget for the period to date.
- Actual for the same period this year and last year.
- Other.

Most managers (85%) preferred to make a comparison between actual and budget for the same period, while company B compared actual and budget for the period to date. The companies also make another comparison which, they believe, offers a useful guideline; this is the comparison of current figures with those for the previous period and for the same period last year. In fact these two kinds of comparison are required by the Ministry of Industry, as the ministry official indicated in interview.

In order to find out how companies respond to favourable and unfavourable variances, two questions were asked.

Q2.23 If there is a favourable cost variance, do you:

- Reward those responsible.
- Revise the budget to make it more tight.
- Take no action.
- Other.

Q2.24 If there is an unfavourable cost variance, do you:

- Take action against the persons responsible.
- Revise the budget.
- Other.

When there is a favourable variance, the majority (72%) of company managers agreed that they rarely tightened the

budget, though the manager of company D answered that the company tries to revise the budget to make it more tight. Usually managers reward the people responsible for the variance. If there is an unfavourable variance, companies simply take action against the person(s) responsible for its occurrence. Only the manager of the private company replied that his company makes no such comparison, and therefore there is no analysis of variances.

When discussing these answers with the managers, it was found that the public sector companies try not to show unfavourable variances in the control reports which they send to the Ministry of Industry, and if they do so, they hide unfavourable variances by aggregating them with the favourable variances. Therefore, to avoid such problems, the budget is kept rather loose.

This situation prompted another two questions: " Do you study all kinds of variances?" and "Are they determined according to: a ratio of cost; its absolute value; a ratio of gross profit; or other?"

The managers of companies C, D, and E answered the first question in the affirmative, while the other managers replied that they do not study all the variances. For the second question, the managers of companies C and D answered that variances which call for investigation are determined according to their absolute value. In companies A and E, investigation of variances is determined according to circumstances. The manager of company B said that the

variances studied are those which have a great effect on cost, in that they exceed a certain ratio of cost. Company F mentioned that important variances are studied, the degree of importance depending upon the absolute value of the variances. Table 8.8 shows the relative importance of the factors which affect the study of the variances:

Table 8.8

	%
- according to the absolute value	43
- according to the circumstances	29
- great effect on the costs	14
- no analysis	14

The accountants added up that the variance analysis is not done unless the manager or ministry requests it, with the exception of the yearly review done in accordance with the requirements of the Budget Act.

8.4.3.3 *Assets Valuation*

The following questions were designed to find out the valuation bases used in the companies surveyed. They were divided into two groups; the first group, questions 2.25, 2.27 and 3.10 to 3.15 dealt with fixed assets valuation and the calculation of depreciation charges for the accounting period. Group two, questions 2.28, 3.16 and 3.17, concentrated on the valuation of inventory and the calculation of materials costs.

It was found from answers to Q2.25 that most of the companies concerned have not revalued any of their fixed assets in the past ten years. In fact in most Iraqi companies, revaluation of fixed assets is uncommon, although

the managers of the companies surveyed understood the concept and wanted to revalue the company's equipment and machines.

Company B argued that a revaluation of fixed assets was carried out in 1987, because of consolidation of several factories in Baghdad into one company. Then, in April 1988, the company again revalued its assets because the company in Baghdad was consolidated with another two companies. These consolidations required revaluation of all fixed assets, equipment, machines, building, and land.

In fact, an examination of the revaluation statements and procedures revealed that what was called revaluation of fixed assets was in fact nothing more than taking the book value of all fixed assets from the companies' books and re-recording them in the new consolidated company's books. When the manager of company B was told that this was not a revaluation, he answered, " I know that, but we have to do it, because we are in a hurry to finish the consolidation procedures within a limited time (determined by government), and we do not have an expert in the revaluation of fixed assets".

Company D is now trying to revalue its fixed assets according to current costs. It has contacted foreign suppliers and government agencies to provide it with suitable information about the prices of machinery and equipment. For the building evaluation, it intends to take the present market prices for construction of similar

buildings.

From the accountants' answers to the first group of questions (Q3.10 to 3.15), it was found that all companies used historical cost in valuing machines and equipment, and land and buildings, as required by the uniform accounting system.

Furthermore, they confirmed that no revaluation had been made in the accounts since the assets were acquired by the company; an exception was company B which had revalued fixed assets.

The next two questions were designed to investigate depreciation policy. These two questions were:

Q3.13 "What method is used for calculating depreciation?"
and Q3.14 "Is the depreciation charge in the company's accounts based on:

- The original historical cost.
- An estimate of replacement cost.
- Another figure?"

It was found that depreciation is calculated by using the straight line method based on the original cost of assets, without deducting any scrap value. For those fixed assets that are fully depreciated in the accounts, but still in use within the company, a depreciation charge is calculated as 100% of the depreciation charge calculated before the asset was depreciated. This amount is added to the "Reserve for the Rise in Prices of Assets".

With regard to depreciation, companies were asked whether this affects their pricing, and the method used in

calculating the amount (see Q2.27 and Q3.15).

Managers answered question 2.27 that the depreciation amount affects pricing policy for both goods and services. The method in use is the straight line, because the uniform system requires companies to use this method. If a company wants to change to another method it must have permission from the Board of Supreme Audit and explain the reason(s) for that change.

In answer to question 3.15, most accountants tried to explain the situation before the introduction of the new government policy for pricing goods and services. The situation was that the government intervened in fixing the prices of goods produced and services rendered by companies. There was no relation between depreciation amount and the pricing policy, and companies could not increase or decrease selling prices, unless they appealed to the government.

Now, the pricing policy has changed, and gives more freedom to companies. In this situation, the accountants stated that depreciation will be an important element in counting the unit cost of product.

To determine whether companies have any problems or difficulties in calculating yearly replacement cost, question 2.26 was posed " Do you think it is difficult to calculate yearly replacement cost for the fixed assets?".

Managers of the companies surveyed indicated that there are some difficulties in obtaining replacement cost for the fixed assets, but most agreed that the government can help

them to obtain most of the information they need. Moreover, the purchasing department in the companies also has the ability to provide suitable data about the current prices of fixed assets, especially machines and equipment from outside markets. The accountants replied in the same manner.

Raw materials are regarded as an important element in cost production, and the pricing stores issue method is regarded as one of the most important elements in calculating the cost of production. Therefore, we asked the interviewees Q2.28, Q3.16 and Q3.17.

According to the uniform accounting system regulations, companies must follow the Average method in pricing their stock issues. However, companies can change to another method if the permission of the Board of Supreme Audit is obtained.

Again, it was found that historical cost is the basis for valuing inventory of finished goods, unfinished goods, and raw materials. The cost of raw materials issued for production is calculated according to a weighted average, based on the following formula is:

$$\frac{\text{value balance} + \text{value of quantity added}}{\text{quantity of balance} + \text{quantity added}}$$

They also stated that monetary assets and liabilities appear in the accounts at their historical cost without adjustment for changes in the purchasing power of money.

One can conclude that historical cost is the basis of valuation for assets and liabilities, costs and revenues in the companies surveyed. The uniform accounting system is the main influence for all companies in the public and mixed sectors, and quite simply they cannot deviate from it.

8.4.4 Inflation Accounting

This section aimed to discover why inflation accounting is not used. Therefore, the first question asked whether the managers had heard about any of the following inflation accounting methods:

- Brazilian experience in inflation accounting
- Philips company experience
- FAS 33
- SSAP7 and SSAP 16
- Other

The answers to this question, from all companies, were negative. Therefore question 2.30 was not answered, as this concerned opinions of the above techniques.

To ascertain whether the accountants have an idea of different inflation accounting systems, Q3.28 was asked.

The interviewees demonstrated that they already knew what is meant by the CPP or the CCA method, but the majority had not read about the Brazilian experience or the Philips company. The accountants of public companies claimed that they had read about the SSAP 7 and SSAP 16 in journals, and they felt the SSAP 16 to be more complicated and cumbersome.

It was then desired to find out whether or not the companies surveyed were applying any of these inflation accounting methods. Replies to question 2.31 showed that no

attempt was made to apply any kind of inflation accounting on the financial accounts, by any company. In fact, companies C, E, and F had had the CPP method applied on their financial accounts in studies done by postgraduate students in University of Baghdad, but the managers of these companies had no idea of these studies or their results.

With regard to attempts by companies to apply one of the inflation methods, Q3.22 was asked to the accountants. It was found that 43% of companies had experienced an attempt to apply the CPP method, by postgraduate students. They added that, although students had carried out most the procedures of adjustments and restating the annual reports, the company accountants had helped to prepare the information and data needed by the students. Therefore, Q3.23A had already been answered by the accountants; it appears that there is no difficulty in obtaining the information and data for restating or adjusting, at least for the CPP method.

This answer prompted another question as to the reason(s) for the failure to apply inflation accounting: Questions 2.32 and 3.24 asked "If the company does not apply a form of inflation accounting in the company accounts, is it because:

- It is not required by government?
- It is not applied by other companies?
- It is difficult to understand?
- I do not believe in it.
- Other?"

The answers to this question fell into three groups;

first, companies A, E, and F stated that inflation accounting is not required by the government, hence is not applied, whilst companies B, C, and D said that their reason was that inflation accounting is not applied by other companies. The owner of company G, from the private sector, answered that inflation accounting is difficult to understand, and he does not believe in its benefit.

Question 3.24 asked the accountants to choose among alternative reasons for not applying inflation accounting in the annual accounts. The reasons given by the accountants of companies D and G were that it is not applied by other companies, and it is difficult to understand. The other companies' accountants stated that the main reason was non-requirement by government. At interview, it was noticed that most of the accountants would be willing to apply inflation accounting, if the government required its application under a new accounting system. As regards the private company G, it was found that it had no interest in applying any such accounting system as management was satisfied that everything is conducted satisfactorily. Table 8.9 shows the summary of the reasons for not applying inflation accounting:

Table 8.9

	Reasons of not applying inflation accounting % (out of 14)
- not required by the government	50
- not applied by other companies	36
- difficult to understand	14

To find out whether the companies surveyed are willing to apply inflation accounting, and whether they are aware of the benefits arising from its application, questions 2.33, 3.26 and 3.27 were posed.

The interviewees were persuaded of the importance and usefulness of preparing managerial reports and financial statements according to inflation accounting, but they said that it is necessary first to persuade government of the usefulness of inflation accounting. In other words, unless government believes in the value of applying inflation accounting and requires it from the companies by law, no company will adjust its figures.

The majority of managers and their assistants (75%) agreed that inflation accounting should be incorporated in their financial accounts, not only to help the company itself, but to provide government with suitable accounting information, especially that theoretically needed by national accountants. The managers of companies A, G, and assistant manager of company F, in contrast, argued that if they were to apply inflation accounting, there would be no benefit from it.

The accountants agreed that the benefit from applying inflation accounting would be greater than its cost, and that there is a great need for it, although its introduction and use would need time and effort.

We attempted in the next question to find out which method of inflation accounting was preferred. "If it was decided to apply inflation accounting, which form would you

prefer?".

The managers of companies B, C, D, and F answered that the current cost accounting method is better than other methods because it at least represents the market price of their production cost elements. The manager of company E preferred the current purchasing power method (not surprisingly, since the company's accountant had told him that the company had tried to apply this method). The managers of companies A and G demonstrated their complete lack of understanding of these two methods of inflation accounting.

The final questions concentrated on the difficulties which might be faced by the companies in applying inflation accounting.

All managers indicated that it might be difficult to get up to date information for specific price indices. For the general price indices, they said there is no difficulty in obtaining data, but there is a problem with shortage of staff.

The assistants answered that inflation accounting should be taken in account, but the method would depend on the government wishes. However, respondent's own preferences were divided between the CPP method and the CCA method. The assistants of companies B, E, and F preferred the CCA method, while the others preferred the CPP method.

The accountants of companies C, D and G chose the CPP method, and added that it had been recommended by the Arab Accountants and Auditors Guild. Moreover, it is easy to

apply and the important thing is that the general price index is available from the government. In contrast, the accountants of companies A, B, E, and F chose the CCA method. Their reasons for this choice were different, and summarised as follows:

- It can be applied to any type of business, because the concept of current cost profit is primarily useful to a continuing type of business operation, which is the basis of most companies.

- It is useful to management as the basis for internal reports and for published accounts.

- If management wants to, it can measure its performance to assist with decisions.

Table 8.10 summarises the preferences of the interviewees regarding inflation accounting methods:

Table 8.10

Method	Managers %	Assistants %	Accountants %	Total %	No
CPP	57	60	57	58	11
CCA	14	40	43	32	6
None	29			10	2
				<u>100</u>	<u>19</u>

Questions were asked to find out whether companies have the internal records and external information needed to apply inflation accounting, if it were proved to be useful. To test this, the following questions were asked:

Q3.18 " Do you have any information about the trend of prices during the last five years?

Q3.19 " Do you keep any record of the replacement costs of your company's assets?

Q3.20 "If you decide to adjust your financial report according to change in price level, do you use:

- Information prepared within the company;
- External information (government source);
- Both?".

It was expected that the answers to these questions would be in the negative; in other words, the companies would have no records of the replacement cost of assets, because they have no interest in the subject as long as government is responsible for replacing assets. On the contrary, as said earlier, it was found that all public and mixed companies interviewed had records of prices of raw materials, wages, and the main items of overhead expenses for the last five years. This was very surprising, since these records are not actually required for preparing the budgets. None of the companies declared that they used external information about prices or indices because no adjustment is made for changes in prices.

Some theoretical studies have already shown that statistical information is difficult to obtain and that necessary adjustments are not easily made. Therefore, question 3.21 asked how this information could be obtained. Generally, the accountants of public companies asserted that there is no difficulty in obtaining information from government agencies, though it might take some time. The mixed and private companies experienced some difficulties in obtaining information from the government, such as

statistical information, annual abstract of statistics, or the bulletin of the Central Bank. Of course, if the government were to decide to adopt an inflation method, it would be its duty to make indices, statistical, and other data available to users.

8.4.5 Computerisation

In recent years computer departments have been created in most Iraqi companies, as a result of the rapid growth of the economy, which has led to creation of large companies and factories, and the increased financial capacity of the Iraqi economy, which has enabled the purchase of computer equipments.

However, despite the rapid development of computerisation in Iraq, still there is a lack of well qualified systems designers. With the increased use of computers by many Iraqi entities, the government established the National Computer Centre (NCC). This has found itself in a very difficult situation due to the increased demand for the design of computer programs and the provision of training programmes. Therefore, most companies try either to send their staff abroad for training or to bring experts from outside to design the programs they need.

Accounting programs began to be widely used at the beginning of the 1980s. Most programs were concentrated on preparing wages, stock control and bookkeeping procedures, up to preparing trial balance.

As computerisation would help both managers and

accountants to do their work, several questions were asked on this subject: Q2.37, 2.38, 3.31, 3.32, and 3.33.

All managers answered that computer systems are not important for accounting information alone, but for several different purposes. They had already planned to computerise most of their companies' activities, and are thinking in terms of personal computers. They believe that the use of computers will make it easier to apply inflation accounting, because most accounts and assets values will be in the computer, and only changes in value or prices will be added. Moreover, it will be easier to prepare financial reports and make them available at the appropriate time.

In all companies, except company G, computers were used to prepare the accounts up to the stage of preparing the trial balance. Accountants believed not only that using computers would help in preparing the financial accounts, but also that they would be useful if the government decided to apply inflation accounting. They recommended increased use of computer facilities by extending the accounting programs to include preparation of periodic financial reports.

Question 2.39 sought suggestions for improving the financial reporting and information system. Most managers agreed that they need more financial analysis presented to them instead of several statements prepared according to the uniform accounting system, which they do not use, such as statement of other applications, debtor and creditor statements, and statement of the highest five salaries in

the company. They would prefer to have an analysis of financial ratios, efficiency of production department and utilisation of production capacity. They added that they want the uniform accounting system to unify the cost accounting system, at least for each industry group, rather than leave that matter to the company's discretion. The cost accounting systems for all companies surveyed are still based on historical cost figures, and the use of standard costing is not yet common among these companies.

With regard to cost information, it was found that all companies are dissatisfied, because the cost figures generated by the system do not assist either the higher authorities or management in the pricing of products, since the cost estimates are calculated incorrectly. Moreover, the cost figures do not help the managers to make correct "make or buy" decisions. It was also argued that the separation of overhead costs into fixed and variable expenses for the purpose of decision-making was not handled satisfactorily.

The managers and their assistants complained of government interference in their affairs. The next section summarises their points of view on the subject.

8.5 *Government Interference*

The Ministry of Industry maintains direct control over the companies' administration and interferes in their affairs. There were widespread complaints that this does not allow a reasonable degree of independence, and makes work more cumbersome, more difficult to control and more

confusing. The Ministry of Industry is authorised to check on the implementation of government regulations, to issue orders and directives to control the use of resources, to oversee the implementation of all managerial decisions, and to demand reports and documents from companies. This interference can be seen in:

- The accounting system; as each company is required to apply the uniform accounting system which serves primarily national planning needs and national accounts, and control of economic activities all over the country.

- The production system; as companies are not allowed to increase, decrease or alter their production without government permission.

- Planning and control; the company's management is not the only authority exercising these functions for the company; the government and its agencies for planning and control are authorised to lay down plans for the company and to control its activities to ensure that all companies in the public and mixed sectors work according to the general plan and for the public benefit. In the case of private companies, the government also interferes in their activities, though not as much as in the public and mixed sectors.

The government has fixed prices for most products, particularly in the public sector. With the increase in input prices (most of the inputs are imported), and companies' lack of ability to review their selling prices, companies have suffered from losses in the last few years.

Therefore, the government has changed its pricing policy to give companies more freedom to determine their selling prices.

As a result of complaints, the government has considered adjusting prices of finished goods in the light of current input prices (as indicated by the Ministry of Planning). Although this might help with the problem, it will not entirely solve it. It is most important that the government should allow companies to introduce current costs in their accounts, for only through the proper matching of cost and revenue at current level can profit be calculated correctly.

In analysing the answers to this part of the questionnaire, the following conclusions can be drawn: There is a great deal of government interference within the public sector companies in Iraq. In particular, the Ministry of Industry maintains direct control over the administration of companies and interferes in their affairs. There are widespread complaints that this control and interference do not allow company officials any autonomy and make their work more cumbersome, more difficult to control and more confusing.

Managers in all companies asserted that this interference by the Ministry of Industry puts them in ambiguous situations and encourages their staff to stretch regulations and exaggerate reporting of results. The general managers of most companies pointed out that centralised

decision-making created two problems for their companies. Firstly, because the decision-making powers are concentrated in the ministerial headquarters in Baghdad, the implementation of ministerial decisions is frequently hampered. This is because the ministerial officials who make decisions are out of touch with the management. Secondly, the main responsibility for supervising and implementing ministerial decisions is divided between the Ministry of Industry and Ministry of Planning. Lack of co-ordination between them results, in many cases, in confusion because of the frequent inconsistency of instructions to the company.

All managers point to the fact that the decentralisation of administration and decision-making should be encouraged, with reduction of the cumbersome bureaucratic machines and greater independence for company officials.

8.6 *Summary and Conclusion*

It would be helpful here to give a summary of the results of interviews with the managers, assistants managers and accountants of the companies surveyed.

Financial reports are used as a basis for economic planning, and play a major role in providing information for decision-making. However, it appears that they are based on the historical cost method, and are considerably removed from reality, especially in those companies which have been operating for thirty years or more, and are still using many of the production facilities which were bought at low prices

at the date of acquisition.

The main findings were:

- The annual reports are prepared by the accounting department. These reports are guided by both the government regulation and management policy. Moreover, the relationship between the accounting department and the other departments is inadequate. This leads to difficulties in securing the co-operation of these departments to meet the needs of the accounting department.
- Although 85% of the managers and their assistants were satisfied with the financial reports and they can to a reasonable extent rely on them, they complained of the time-lag between the end of the financial year and the presentation of the audit reports, which is more than three months.
- Furthermore, it was found that neither managers nor the assistants read all the information in the financial reports; 80-90% of the information is used in their decisions. The main influence of this information is on pricing decisions and borrowing. Although the uniform accounting system aims to serve the national accounting requirements, it was found that the main users of the financial reports were managers and the other users were the Ministries of Industry and Planning.
- There is a trend to disclose the financial reports or at least some items, such as net profit and value of stock.
- Budgets are built in a routine manner. Although companies

use some statistical analysis for the basic production item, there is no adjustment on any budget for the impact of inflation. The companies set incremental budgets.

- Any adjustment is made, for analysing budget variances, not because of its usefulness, but to ensure that the company keeps within budget figures. Therefore, any changes will appear as variances at the end of the financial period. In fact, not all variances are studied. There is no general investigation and study. Moreover, the companies study what they think is important, according to circumstance, absolute value, or when the variance is higher than expected.

- Aggregation of favourable and unfavourable variances is carried out for convenience and in order to hide unfavourable ones. Such practices give the variances reports very limited usefulness, in both planning and control.

- There is no revaluation of fixed assets, although one company claimed to have done it. The historical cost method is used to value and record the fixed assets. As a result, the depreciation amount does not reflect the real amount charged to the accounts, and incorrect amounts are charged to the prices of goods and services.

- There is no difficulty in calculating replacement cost, because companies keep records of most information, such as acquisition cost of fixed assets, prices of raw material and its trends, and indices can be made available by the Ministry of Planning. Furthermore, the purchasing departments in the companies are able to provide data needed for adjustments.

- None of the managers and assistants are familiar with inflation accounting methods. Moreover, none of the companies applies any method, though postgraduate students have attempted to apply the CPP method in three Iraqi companies, two from the mixed sector and one from the public sector.

- The accountants were willing to apply inflation accounting, specially the CCA method, and the managers were also in favour. The main problem preventing the application of an accounting technique is that the government does not require it and has not encouraged the companies to apply any such method.

- The government has undue influence on the managers decisions. Therefore, they want more decentralisation of administration.

In general, the financial reports are important and useful in any company, whatever the society. Therefore, it would be preferable when preparing these reports to use current cost , which will be helpful to management in performing its functions effectively, and to the government agencies. This would assist the measurement of the efficiency of the company itself, and would benefit the economy through the implementation of government plans.

Chapter Nine
Government and Professional
Views of Inflation
Accounting in Iraq

9.1 Introduction

This chapter considers the views of officials who work in either the ministries or professional bodies. In addition, the views of academicians, private sector auditors and other interested parties are considered.

The following is a list of those interviewed:

- Ministry of :-
 - Industry
 - The Chief of the Economic Organisation.
 - General Director of Accounting Department.
 - General Director of Budgets.
 - Planning
 - Deputy-General of Financial and Management Department.
 - General Director of Industrial Statistics.
 - Chief of the National Accounts.
 - Finance
 - General Director of Accountancy.
- Board of Supreme Audit
 - Director of the Industrial Accounting Sector.
 - Deputy Chairman of the Uniform Accounting System Committee.
- Private Auditors, three firms.
- Academicians
 - Two from the University of Baghdad (one of them is the Dean of the Arabic Institute of Accountancy).
 - One from Al-Moustanseryia University.
 - One from the Management Institute in Baghdad.
- Chairman of the Iraqi Accountants and Auditors Guild.
- General Federation of Arab Accountants and Auditors
 - Chairman of the Federation.
 - Finance Deputy.

Before summarising the interviewees' responses, it is

considered helpful to give an outline of the roles of the Ministries of Finance and Planning, and the Board of Supreme Audit.

9.2 The Role of the Ministry of Finance

This ministry has a major role in the preparation of the economic plan, and in developing accounting in Iraq. Most important, however, is that it is the body responsible for preparing the government budget. It prepares the studies necessary to draw up the general budget for presentation to the Revolutionary Command Council, and sends instructions relating to preparation of the budget to all ministries; in general, these cover the following points:-

1- a statement of expenses and revenues for the coming year.

2-instructions regarding the method for preparing the budget in each ministry.

3- the deadline for providing the budget.

The representative of the ministry explained that "although the ministries present their final budget, and it represents their expectation of both expenses and revenues, we find that most of these ministries exaggerate their budget amount and do not express their real expectation. Then, it is our duty either to return it to the ministry to be re-budgeted, or it is corrected directly by us".

Now this situation has been changed: in order to ensure that the government budget is prepared by the due date, the Ministry of Finance has decided to send a representative,

together with a representative of the Ministry of Planning, to participate with the budget committee in each ministry, discussing the ministry's estimates and making the necessary adjustments. Furthermore, representatives of both ministries discuss the companies' estimates in relation to the economic plan.

9.3 *The Role of the Ministry of Planning*

This ministry has an important role in finalising the national economic plan, and in controlling its execution. While the Ministry of Finance is responsible for securing the financial resources to meet the requirements of the plan, and ensuring that public money is spent in accordance with the budget, this ministry has responsibility for both the financial and physical elements. For instance, in preparing the budget, its main role is to decide the total investment in the national plan, and to decide on the level of production of goods and of operating expenses.

Also, it co-ordinates the investment projects of the different companies, to balance growth among the different sectors of the national economy. The Planning Ministry is also responsible for the monitoring process, which is designed to ensure continuous supervision and control over the plan when it is in operation. This task is the responsibility of the Central Follow-up Department, which has produced various forms which must be filled by companies as part of the information machinery of the Planning

Ministry.

This ministry, in conjunction with the Ministry of Industry reviews the production plans, financial plans, wages, and prices, if necessary.

In fact, this ministry controls the social and economic plans, employment, investment, and production efficiency. All this is done to ensure that the goals of society are achieved as planned.

9.4 Board of Supreme Audit

In addition to what was described earlier, in section 6.2.6, the Board has many features: first of all Act no.42 in 1968 which established the Auditing Board, insisted on specialisation and higher degrees for members of the Auditing Board and for the staff conducting audit in various governmental units.

The Board of Supreme Audit is organised into five main departments:

1- The General Board, which is responsible for internal administration.

2- The Financial Illegality Department, the main duty of which is to investigate fraud, etc.

3- The General Technical Matters Department, responsible for the control and efficiency evaluation of the organisations audited.

4- The Financial and Economic Matters Department, which is responsible for the routine audit procedures for financial transactions and vouchers in the government

administrative offices.

5- The General Accountancy Department which is responsible for post audit activities and preparing final accounts of companies in different sectors. This department is divided into several sectors, e.g. industry, commercial, transport, etc.

The director of the Industrial Sector in the Board was interviewed and asked about the procedures of the Board in auditing and publishing financial reports. He explained that " the procedures of auditing followed by the Board and the published accounts are the same in all companies. Uniform published accounts with standard classification are imposed by the Board, whether they have a uniform accounting system or not".

The Board gives advice to improve the accounting system and uniform accounting in enterprises. It assists with regard to financial problems, system weakness, etc.

From 1980 the Board become responsible for auditing all entities in Iraq in all sectors, public, mixed, and private (since 1986), and all foreign companies (since 1984). This was a greater burden than the Board could bear, and the result was delay in publishing its reports. However, it must be said that the uniform accounting system has helped the Board in auditing procedures and enabled it to become more efficient.

The Board of Supreme Audit procedures with regard to the national economic plan take the following forms:

- audit of the information provided by companies to the

national accounts. The audit of current information will help guarantee the objectivity of the information upon which the economic plan is based; and

- the subsequent control and audit of actual activities, to review the efficiency of each company, each sector, and the whole economy.

The actual results of each company can be compared with its budget, on which investment programmes for the economy were based. In turn, aggregation of all the results will be facilitated and planning and control by central government will be improved. Therefore, the Board plays an important role in the economic planning process, and takes part in national planning activities, with advice about the financial position and financial resources of each sector and company.

9.5 *Accounting and Financial Reports*

In this section are set out the points made by the interviewees on accounting and financial reports, generally, in terms of confidence, timing, and the kinds of report received.

The chief of the economic organisation in the Ministry of Industry explained that the financial information system, at the company level works in the following manner:-

- The financial reports are prepared annually from the ledger sheets and invoices.

- Supporting schedules, such as an analysis of costs incurred, a summary of sources of revenues and a report of

cash funds are produced, quarterly and annually.

- Trial balances of the general and subsidiary ledgers are prepared monthly. Double-entry book-keeping is used to develop the information for the statements.

Moreover, the higher authority fixes financial targets for the coming year and sends them to companies under the Ministry. The financial targets usually include the following:-

- prices fixed by the higher authority (more recently these have been fixed by the company itself with ministerial endorsement). Production costs and foreign market prices are both taken into account in the calculation of price targets.

- the annual plan specifies the year's targets and the volume of profit to be deposited into the Bonus fund if the targets are met.

- investments are fixed by the department, together with the planning ministry. Major investment projects are financed by non-returnable budget grants. Minor investment projects are financed by the company's own funds and by loans from the Iraqi Central Bank, or from the Industrial Bank.

The Ministry of Industry receives various reports from companies, such as reports on cost of production and wastage (copies of reports prepared by companies surveyed are sent to the Ministry), production planning and control, stock control, and quantity control.

Concerning timeliness of reporting, the general

director of the accounting department in the Ministry of Industry stated that there are problems with getting reports from companies early enough to allow the Ministry to make timely decisions. He also asserted that even when some of the companies' reports were prepared quarterly, the interval between the preparation of these reports and their submission can be as long as two to four months. He pointed out that the financial reports for the year 1987 had not yet been finished for some companies (this interview was held in June 1988).

With regard to confidence in the reports sent by companies, the general director of budgets complained of inflated and otherwise distorted plan fulfilment reports. He pointed out that there is a tendency by some company managers to inflate the output data and the cost of products in order to make their performance look better than it actually is. Moreover, he argued that these managers draw up optimistic reports showing that they have over-fulfilled the production plan, and try to exaggerate output in order to get rewards or promotion.

The general director of Industrial Statistics in the Planning Ministry was also asked his department's feelings about the reports which they received, He said that some staff dishonestly report a smaller capacity than actually exists, in order that the production target will be kept low enough to allow for emergencies. He complained that these falsifications caused decision makers to make plans contrary to the intentions of the government.

Concerning cost information, it was found that all of the official representatives are dissatisfied. It was claimed that the cost figures do not help either managers in companies or ministries to make appropriate decisions. The interviews showed that the accounting records and fixed assets registers of companies do not provide the information required on the life and costs of machines to be replaced. The general director of the accounting department in the Ministry of Industry explained that the depreciation charges which are shown in the reports received by his department are calculated by the accountants without knowledge of the correct service life of the machines. He added that machine replacement decisions are generally made by the Ministry without the relevant information about estimated operating costs. The major reason given was that it is usually very difficult and time-consuming for the accountants to work out the probable efficient life of each type of machine.

The general director of budgets in the Ministry of Industry explained the budgetary control system as follows:-

- State Planning Committee. This committee is composed of top government leaders and ministerial representatives. It issues plan targets to the Ministry of Industry, which the latter in turn hands down to the companies. The targets are in the forms of orders to the companies by the Ministry to produce and to purchase according to the targets established for the Ministry, with details of purchasing, sales, and product mix and input

usage at which it should aim in the coming year.

- Budget Committee. Budgetary control begins in August each year with the formation of the budget committee. Each committee includes all departmental managers as members and the general manager as chairman. The committee's responsibilities are to study the target figures, to check on how the works are being carried out, and to co-ordinate the efforts of all departments and sections within the company. The total budget period is one year, running from 1st January to 31st December, but it is broken down on a monthly basis.

The companies use several type of budgets: sales budgets, purchasing budget, production budget, capital expenditure budget, cash budget, and overhead budget.

These budgets are presented to the Ministry of Industry for study and review. When this has been carried out, the approved budgets are submitted to the Ministry of Planning and to the State Planning Committee.

The Ministry of Planning requires companies to present a follow-up reports and are prepared on a quarterly basis. The main purpose of these reports, is to follow-up the implementation of the budgets for both companies and ministries, and their contribution to the national plan. These reports contain several sections to compare actual performance with the budgeted figures (see table 9.1, 9.2, 9.3, and 9.4), in addition to columns to clarify the reason(s) for any variance(s).

Table no.9.1

The Quarterly Follow-Up of
Production Plan

Product Name	Measurement Unit	Factory	Stock Balance	Actual Production		No. of Working Days		No. of Working Hours		No. of Maintenance Days		Reasons for Variance
				Quantity	Value	Actual	Planned	Actual	Planned	Actual	Planned	
1-												
2-												
3-												

Table no. 9.2

The Quarterly Follow-Up of
Raw Materials

Material Name	Measurement Unit	Factory	Stock Balance		Actual Consumption				Reasons for Variances	
			Local	Imported	Local		Imported			
			Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
1-										
2-										
3-										

Table no. 9.3

The Quarterly Follow-Up of
Sales Plan

Product Name	Measurement Unit	Actual Sales				Reasons for Variances
		Local		Exported		
		Quantity	Value	Quantity	Value	
1-						
2-						
3-						

Table no. 9.4

The Quarterly Follow-Up of
Employment and Wages
Plan

Class	Actual Number	Actual				Reasons for Variances
		Salaries Foreign Consultants	Overtime Allowance	Incentive Rewards	Family Allowances	
Clerks						
Workers						
Foreign consul.						

Although these reports should be presented quarterly, it is doubtful whether they are effective for control purposes, because they are submitted too late for affecting decision-making or for taking corrective action. There is no acceptable level of variance in the reports, and the information is historical in nature and of little use for cost control.

9.6 Uniform Accounting System

The interviewer sought the views of the ministerial representatives about the uniform accounting system, especially in view of its adoption by the Board of Supreme Audit since the financial year of 1986.

Representatives of the Ministry of Industry, the Board of Supreme Audit and the Ministry of Planning (except the chief of national accounting) favoured the existing system without any complaint, saying that it is a comprehensive

accounting system for recording, financial reporting, and financial planning and control.

Whilst the chief of the national accounting department agreed with them, she added that the system still needs further classification and analysis, to help in preparing the national accounts, for instance:

1- with regard to the general framework of the system:

a- It is necessary to have a control account for fixed assets in the general ledger to compare it with the amount recorded in the fixed assets books, and to calculate depreciation and redistribute it to the cost centres. The new system does not prevent this, but it is first necessary to get permission from the Board. This results in lack of unity between the annual accounts at the national level, because some companies do it, while others do not.

b- More classification would be useful both inside the company and outside, especially for the Ministry of Planning.

c- It is necessary to unify the classification of buildings and equipment according to the system's needs for controlling cost centres. This requires the extension of the code of accounts to the fifth level for buildings and to the fourth level for equipment.

2- The packages account should be reclassified into paper, glass, metal, etc.

3- It would be preferable if the system were to put the account of transportation of employees (account no.3341) in

the account of salaries and wages (account no.31) instead of in the services requirement account (account no.33).

4- The Board of Supreme Audit must be more diligent in monitoring the application of the system at the factory level, and in the private sector.

The academicians also have their views on the uniform accounting system. A.S. Al-Shamaary, assistant professor in the University of Baghdad and the Dean of the Arabic Institute of Accountancy, argued that the uniform accounting system includes inventory changes in the revenues account, rather than in a separate account. The Valuation Difference of Changes in Finished Product Stock (inventory changes \times price - cost), and Valuation Difference of Changes in Goods Purchased for Sale, are not real accounts but assumed accounts, included for national accounting purposes; therefore, they were opposite accounts.

Imputed interest and imputed rent are also assumed accounts, and accordingly are entered both in the debit and in the credit side of the current operating statement. Therefore, the legislation has created two problems:-

- It uses the figures of these accounts in assets and liabilities instead of using them in the costs and revenues statement.

- These accounts have no effect on the current operating statement, while they must be entered with their opposite accounts to count the value added.

Having regard to the framework of the system, he added that there is a need to create more new accounts for the use

of companies, such as a projects stock account and accounts for supplying goods which are purchased from the domestic market, e.g., some companies buy raw material from the local market and pay its value, but do not classify and record it in stock books because their documents have not yet been received. Moreover, direct raw material should be divided into direct raw material for operating purposes, and for capital purposes.

These points were raised with the deputy chairman of the Committee of the Uniform Accounting System in the Board of Supreme Audit, who replied, "Of course, there are some weak points in the system, and we have put the subject up to debate; there is a committee inside the Board whose duty is to receive any comment, or criticism, and deal with them. We intend to gather these viewpoints, and there will be a general meeting or conference on the subject. A meeting may be held in 1990 to evaluate our experience with the system from 1986 to 1990".

9.7 Publication of Financial Reports

The conclusion regarding the publication of financial reports was that "there is no need to disclose the financial reports of different economic sectors". The reasons for this are as follows:

- There is no interest in this matter, on the part of the public, workers, and even shareholders. They only want to know how much profit the company has made, and the amount

of dividend they will receive. The other financial data in the reports are not even read. That was the response of the chief of accountants in the Ministry of Industry. Moreover, these individuals have no concern with fixed assets values, and liquidity of the company. The director of the Industrial Sector in the Board of Supreme Audit added that, " From the company's point of view, there is no incentive to disclose its financial reports, because we are not in a competitive market and so we do not need to express any preference between our companies".

The national accountant has different views, arguing that "We are changing towards giving the private sector and the mixed sector more participation in the economic programme, and attracting Arab investors and funds to local industries. Then, it will be necessary for different parties, either inside or outside the company, to have an idea of its financial position and profitability. In other words, now we need more than before, to disclose the financial reports even at the public sector level."

The presentation of financial data according to the requirements of the uniform accounting system is very specialised. Hence, it is necessary for a person reading these reports to have a specialisation in accounting generally, and to understand thoroughly the uniform accounting system's terminology. Therefore, these reports need another report to explain their contents, especially as most industrial companies are directed by management with no background in accounting or economic science. This was the

view of the representative of the Ministry of Finance, who added, "Whether or not we disclose does not affect our needs for information from companies".

Furthermore, the representatives of the Board of Supreme Audit were of the opinion that most company managers do not read the reports, because of lack of accounting knowledge.

9.8 Inflation Accounting

The ministry representatives and the director of the Industrial Sector in the Board of Supreme Audit pointed out that inflation in Iraq has two linked aspects: a decrease in the quantity of production, and an increase in prices. The reasons for this are:

- 1- Decreased efficiency of companies.
- 2- Decrease in internal resources used in production.
- 3- The pricing policy has created inflation, because pricing depends on the total unit cost of production, which is already inflated. Moreover, a profit margin should be added to that inflated cost, in turn increasing prices of goods and services.
- 4- The new pricing policy which gives management some degree of freedom to set prices for their products has led to greatly increased prices. Because each product is made by only one company (or rarely by two companies), a company can impose whatever prices it wishes.
- 5- Perhaps the most important factor is that the finished goods of some companies are regarded as raw

materials for another company. The problem is that the first company aims to make as high a profit as possible, therefore the prices of these raw materials are very high. The result is that the second company also increases the price of its products, to cover the high purchasing prices. Later, it is the consumer who bears the load of this pricing policy.

With regard to inflation accounting, the representative of the Ministry of Planning (from the Central Statistical Department) stated, "Several attempts have been made to study the impact of inflation on the financial reports. For instance, the Central Pricing Organisation has carried out some empirical studies on some companies using the CPP method. All the studies proved that all companies surveyed were suffering from inflation and its impact on their financial position, and no action has been taken by the government".

The national accountant complained that most industrial companies have not been preparing the opposite twin accounts, and hardly any company prepares the imputed interest account. These accounts are regarded as important sources for calculation of value added, but because of the shortage of accountants, they are neglected. With regard to the application of inflation accounting to the national accounts, it was found that use is made of general indices. The national accountant said, "What happens here is to restate the final account for the industrial sector, according to the general price level, and the base year is

1980". In fact, these restated accounts have no use at present, because the indices do not represent the actual increases in the prices of goods and services. Moreover, there is no place for these restated amounts in preparing the national plan.

With regard to fixed assets, an attempt was made to discuss the problem of the revaluation of assets, to find out why most government agencies are reluctant to determine current cost. The reason given was that, according to the government, "current cost accounting is inflationary". A major reason for this view is a failure to define effective methods of revaluing the assets' base. The use of indices is a very imperfect system, because statistical collection and analysis is only at the development stage.

Although the interviewees, especially in the Ministry of Finance, at first either had no clear idea about the CCA or were reluctant to adopt an inflation accounting system, eventually each changed his mind and expressed willingness to introduce a system for inflation accounting, if the government so required. Therefore, most of the ministry representatives agreed that there is a need for an inflation accounting system based on the current cost method. National accounts based on current value and the CPP method will be unsuitable for that purpose, and are not a method of treating inflation.

9.9 Professional Accounting and Inflation Accounting

In this section the opinions of accounting professionals are outlined. The interviewees included the chairmen of the General Federation of Arab Accountants and Auditors, and the Iraqi Accountants and Auditors Guild. In addition, there were several meetings with academicians and private auditors. With the chairman of the General Federation of Arab Accountants and Auditors, the discussion concentrated on the efforts of the Federation to develop the accounting profession in general, and their work with regard to inflation accounting in Arab countries.

The Federation contains most of the accountants' and auditors' guilds in Arab countries and aims to strengthen the co-operation between these guilds, by holding meetings and conferences, and publishing accounting journals on different aspects of accounting, finance, taxation, management, etc.

One important objective of the Federation is to unify accounting terms and issue accounting standards which are suitable for the Arab World. Unfortunately the Federation has no authority to make its recommendations mandatory. Therefore, few decisions have been implemented in practice. For instance, the Federation held a conference in 1982 in Tunisia, and decided to adopt the CPP method as a first step towards tackling inflation accounting in the Arab Countries. Although all member of the Federations agreed with that decision, none of them has applied it.

The reasons behind this are the weakness of the statistical information which is regarded as an important factor in its application. Most Arab countries are still unable to supply companies with suitable indices. However, there are attempts by some Arab countries to introduce the study of inflation accounting at undergraduate level. But still the crucial factor is the Federation has no support or power from the Arab government.

Another professional view was that of the chairman of the Iraqi Accountants and Auditors Guild, who discussed the main objectives of the Guild. He explained that the objectives of the Guild, among others provided by the Act no. 185 at 1969, are as follows:

- To increase the quality of accounting education among its members.

- To enhance the recognition of the accounting profession in the country.

- To increase co-operation among its members, preserve their professional rights, and defend their legitimate professional interest.

With regard to its role in inflation accounting in Iraq, the chairman said, "There is co-ordination between the Guild and the lecturers at Baghdad University to carry out some empirical studies on the public and mixed sector companies. Although the CPP method, when applied, gave a good indication of how inflation has affected the Iraqi companies and how they have suffered from changes in prices, no action has as yet been taken by the government".

In fact, from several meetings which took place outside the formal interviews, it was found that the Guild has no role either in improving the profession or in contributing to the development of accounting education. This impression is based on the opinions of several lecturers, members, and professionals, who argued that the Guild's performance is unsatisfactory, and that there is no sign of development in the Iraqi accounting profession.

Meetings with accounting professionals and academicians to discuss matters related to disclosure in financial reports and inflation accounting revealed that the majority of respondents showed no interest in such matters, and moreover, had made no contributions to professional development or research. The main reason given for this, was that they are very busy in lecturing at the universities.

From the opinions expressed by ministerial representatives and professionals, the following points emerge:

- Most companies, whatever the sector, although they have a record of their assets, are not ready to use the current cost, or hypothetical calculations which are invalid.

- From the legislation point of view, most people in charge of the Companies Acts and Commercial Acts are specialists in law, and have little idea of accounting requirements in general, or of the uniform accounting system and national accounting requirements.

- The prospect of inflation accounting in general, and current cost accounting in particular, is not very bright in the eyes of many ministry representatives, and officials.

- Iraqi accounting professionals, represented by the Accountants and Auditors Guild, believe that the inflation problem has still not been thoroughly debated and it is not possible to achieve a sound system of accounting for inflation. However, inflation accounting is a problem for the whole world economy, and not only America or Europe, but the rest of the world, and especially planned economies, need such methods.

9.10 Summary and Conclusion

From the role of the ministries of Finance and Planning, it is clear that there is considerable interference in the management of companies, in preparing the budgets, determining resources, production plans, and investment projects. This has advantages and disadvantages; the advantages are it makes possible the control of national economic plans, and to ensure that the limited resources are used in the best investments, and projects. The disadvantages are that it stifles innovation, and limits the role of managers in making-decision for the production plans and investments.

- Although the Board of Supreme Audit is responsible for auditing all companies, it has failed to do that because shortage in the staff. This led to delay in finishing the audit financial reports on time. The Board plays a major

role in the economic plan, and is considered the most important partner in preparing the budgets and national plan.

- The Board is the main committee responsible for any enquiry or advice needed by either management or accountants in different sectors, on the implementation of the uniform accounting system.

- The Ministry of Industry receives various reports from the companies. The main problem with the receipt of financial reports is the timing. They are often not available when they are needed. As a result, the policy-makers in the ministry have to rely on their experience or on the previous reports to take a decision.

Although, the ministry has emphasised to the companies the need to present their financial reports on time, they are failing in this. The companies try to prepare the production cost reports, trial balance, and stock reports. The reasons for this are failure to understand the requirements of the uniform accounting system, and the number of reports required by the system.

- Despite what has been said by the chief of the national accounting and the academicians about the uniform system, the other ministerial representatives were satisfied, and favoured the existing uniform system without any change, at least up to the end of the 1990. They also were reluctant to disclose the financial reports, on the ground that there is no competitive market and no attention is paid by the public to the subject.

- Inflation accounting is still ignored by the ministries. Although, they have agreed that there is a need for it, no action has been taken by the government. However, the uniform system creates several accounts to help national accountants and others to reflect the impact of inflation on the financial reports through the accounts, opposite twin accounts, imputed accounts, and increase in the revaluation of the fixed assets. However, the main problem is lack of understanding of these accounts, and shortage of staff able to handle them.

With regard to cost accounting, it was found that raw materials and labour costs represent a high proportion of production cost in most industrial companies. As most of the materials are imported from outside, particularly from countries which already have high inflation rates, such as Brazil, Argentina, Egypt, France etc., this element of cost is already inflated, which must be taken into account when the company wants to calculate its production costs or price its goods and services.

The managers, the accountants and ministerial representatives are agreed that the financial reports are an important source for planning and controlling and medium for evaluating performance, especially in a country such as Iraq, which has a planned economy. Their importance stems from their effect on the companies, industry, government, and finally on the whole nation's plans and activities, as inflation has reached a high rate in the last few years (21%

in 1988). Financial reports should no longer be based on historical cost.

Inflation accounting, specially the CCA method which is applied by the Philips company, is essential to bring home to industrial management, to government and other parties affected, the truth of the situation, so that industry can make its proper contribution to the national economy. It is believed that the benefits of so doing outweigh the extra costs. These benefits, which can be regarded at the same time as criteria for choosing the inflation accounting system are:

1- Providing accurate information to the management, and in turn, to government. This information is up-to-date concerning the value of assets to the business.

2- Providing an accurate basis for calculation of current cost of production and a proper match of costs and revenues.

3- Helping management to make the right decision at the right time.

4- Providing a basis for setting budgets and calculating variances.

From these benefits it is considered that the current cost accounts system is preferable, as a base for reporting realistic current figures in financial reports, generally, and enabling managerial reports to serve management in exercising control during periods of changing prices.

Chapter Ten
Summary and Conclusion

10.1 *Summary*

This thesis has examined financial reports and their role in the economic planning and decision-making of developing countries during inflationary periods, with special reference to Iraqi Industrial Companies.

The assumption of a stable monetary unit has become the subject of debate in many developed countries in recent years. It has been argued that the conventional accounting reporting system is not capable of reflecting the economic reality of price changes, and that the impact of price changes needs to be recognised in financial accounting if financial reports are to be useful for planning and decision-making.

Generally, the debate on the effect of changing prices on accounting has been characterised by two main views: the first considers the problem to be the effect of the unit of measurement, and its proponents believe that the best remedy is to change the scale of measurement by restating historical cost figures in terms of units of current purchasing power, by using general price-level indices for restating financial reports.

The second point of view holds that it is necessary to adopt some notion of current cost accounting. These two points of view have been discussed and analysed at length in the literature. Most of these studies were carried out in developed countries, though some have originated in Latin American countries. No inflation accounting system has been

suggested for government or management use and few have mentioned the need for an accounting system that satisfies managerial needs.

Financial accounting reports are the main source of information for many users, and particularly for macroaccounting needs. Their objective is to provide information about the economic activities of micro units, and about the financial position, performance and efficiency of an enterprise, which is of widespread interest for economic decision-making. Therefore, chapter two discussed the development of financial reports, and the factors which have affected them. Furthermore, consideration was given to the way the variety of users of these reports has affected the type of information disclosed.

Financial reports do not give a true and fair view in inflationary periods, if they are prepared on the historical cost basis. Therefore, interested parties have suggested methods of restating the financial reports to make them reflect changes in price-level. Chapters three, four, and five discussed the measurement models used in various countries. Inflation accounting in the UK was discussed in chapter three, and the historical background to the problem was presented. The problem is international in its scope, and the impact of inflation generally has been distinguished by two approaches. The first concentrates on the unit of measurement and chooses current purchasing power as a remedy

to the inflation problem. The second approach adopts some notion of current cost, which it holds to be the proper solution.

In the UK, the accountancy bodies have played an important role in the development of inflation accounting. They have issued several documents, exposure drafts, and accounting standard statements on inflation accounting. The development began in January 1973, with ED 8, "Accounting for Changes in the Purchasing Power of Money", which adopted current purchasing power accounting. One of the most significant developments was the Sandilands Report, published in September 1975, the principal recommendation of which was the adoption of a system described as "Current Cost Accounting", as the basis of financial reports. It called for a radical departure from the traditional historical cost basis, and rejected the current purchasing power method, which was recommended in SSAP 7. From that time the professional bodies in the UK took CCA as a basis for subsequent exposure drafts and standards.

In the USA, the initial attempts by the profession to deal with accounting in inflationary conditions were limited to adjustment of historical cost statements for general price level changes, as discussed in chapter four. Both ARS no.6 and APBS no.3 recommended voluntary experimentation with general price level accounting, and had no visible impact on accounting practice. The FASB issued an exposure draft in late 1974 recommending general price level

accounting. Then in March 1976, the SEC issued ARS no.190 requiring the publication of replacement cost data. In December 1978, the FASB issued Statement no.33, which required companies to give supplementary information under two fundamentally different measurement approaches: constant dollar accounting and current cost accounting.

The development of inflation accounting in the Netherlands has been based on Limperg's theory of replacement cost accounting, discussed in chapter four. Since 1950, several large companies have adopted replacement cost accounting as a system for reporting and dealing with inflation. The Philips company is an excellent example of the application of replacement cost accounting for management purposes, and for other users. The application of this system has passed through three main stages. The first was in 1951, when the company changed to current cost accounting to provide management with current data to measure performance and for decision-making. Several principal changes were made in 1971. These changes related to accounting for excess technological price fall, maintenance of stockholders' equity, and accounting for deferred taxes. Prior to 1971 Philips accounted for both the specific price changes for fixed assets and inventories and the maintenance of the stockholders' equity through the profit and loss account. This practice was abandoned in 1971, and the adjustments were thereafter set against reserves. Since 1981, the company has used a gearing

adjustment, and it now presents its financial reports in both current cost and historical cost accounting.

Chapter five discussed the Brazilian system of inflation accounting. Here, a monetary correction system was first used in 1951. This allowed revaluation of fixed assets according to indices. There were several changes in the system between 1951 and 1964. The military government in 1964, desiring to generate revenue for the National Treasury, issued a law which authorised the issue of indexed treasury bonds and made compulsory the monetary correction of fixed assets.

Although several laws were issued, depreciation was still not calculated on the restated value of fixed assets. The monetary correction system used the concept of working capital adjustment for the first time in 1964, when it was defined as current assets plus long-term assets, less liabilities. Since then, various decrees have redefined working capital and its adjustment. Law no.1338, in 1974, defined it as owner's equity, less fixed assets, plus investments. With regard to fixed assets, Brazilian law requires that companies revalue their fixed assets within four months of the end of their fiscal year, the revaluation being based on the official indices.

The second part of the thesis examined financial reports in Iraq, with particular reference to inflation accounting. Chapter six discussed the economic environment

in Iraq and the elements that have affected the development of accounting. Then the users of financial reports in Iraq were identified, and consideration was given to the question of whether or not the Iraqi government or companies need an accounting standard on inflation accounting.

Chapter seven discussed the development of government expenditure and its effect on inflation in Iraq. Inflation measurement and prices policy in Iraq were also discussed, as was the way in which the uniform accounting system deals with inflation. Arab countries including Iraq have tried to adopt inflation accounting systems, and the General Federation Of Arab Accountants and Auditors has also made a proposal on the subject.

Chapters eight and nine presented the case study. Chapter eight discussed inflation accounting from the viewpoints of managers and accountants. Their opinions were sought concerning their satisfaction with, and confidence in financial reports, budgetary systems and variances analysis. Their opinions regarding inflation accounting and their company's attempts to apply such approaches were also discussed. Chapter nine concentrated on the views of officials and professionals on the subject, and their suggestions on the uniform accounting system. Questionnaires and interviews were the main sources of data for research purposes.

10.2 *Conclusion*

10.2.1 *General Conclusion*

Managers, shareholders, investors, employees, government, the public, and other users require information on the activities of companies, either regarding past performance or as an indication of future potential. Financial reports must provide the information required by internal and external users, while serving both retrospective and prospective objectives. Information is needed for the effective conduct of day-to-day activities and financial and non-financial transactions at all levels of the company, as well as for external purposes. Management must therefore supply information on the operations and prospects of companies, which entails the preparation of financial reports which satisfy users' needs. This requires an evaluation of the accounting measurements on which these reports are based. The historical cost accounting system has limitations, particularly in inflationary periods, when it gives unrealistic measures of the company's costs, asset values, and return on capital, thus distorting the company's results. This, in turn, has serious implications for macroaccounting, which relies primarily on the financial accounting information provided by micro units within the economy.

Different methods that have been suggested for reporting during periods of changing prices were examined to illustrate the different concepts, and their difficulties and advantages.

Accounting, as an information system, plays a crucial role in economic development by providing the information necessary to implement economic plans. However, there are serious challenges facing accounting systems in developing countries, such as lack of relevance to users. This has prevented accounting from playing the significant role as a source of information for decision-making, which it could and should play. Indeed, many sectors have not properly recognised the value of accounting, especially in inflationary periods, as an instrument of administrative and financial control. The accounting systems in most developing countries are affected by Western accounting, especially that of the UK and the USA; most of these systems evolved through colonialism, powerful foreign investors, or the influence of education.

Because these countries have different environments, western accounting systems are not necessarily appropriate to them. Therefore, Iraq has tried to adopt an accounting system suitable to its environment, namely a uniform accounting system. The main reason for the emergence of uniformity is the requirement for central planning purposes of unified information from various sectors, which can best be achieved if data is based on a uniform system. The Arab League's chart of accounts was an important factor in the evolution of the uniform accounting system in Iraq.

The most important aspect of this system is its attempt to create a link between micro and macro accounting.

National accounting is an important economic tool for executing the economic plan by gathering and consolidating information on the implementation of the plan by various sectors, and comparing it with the targets. To do this, national accounts rely on budgets, financial reports, and other statements, which clearly reflect the activities of each sector, and its role in the economic plan. Thus, the financial reports of the entities must contain relevant information for macroaccounting purposes.

The macroaccounting framework is based on information provided by the financial reports of individual companies. However, the quality of the uniform accounting system is affected by its valuation methods. The method used by the system for product costs, income determination, and presentation of financial position is that of historical cost. It is thus inefficient for decision-making, and does not present a true and fair picture in times of price level increases.

Therefore, in order to find out how inflation affects financial reports and, in turn, managerial reports, interviews guided by questionnaire, were conducted. Several top managers and chief accountants were interviewed in seven Iraqi industrial companies in the public, mixed, and private sectors. In addition, interviews were held with representatives of the Ministries of Industry, Planning, and Finance, and the Board of Supreme Audit.

The interviews and questionnaire were built on specific main objectives. As changes in price level, either general

or specific, have affected and distorted most companies' figures, it was felt necessary to find out whether the preparation of figures by the historical cost accounting would affect its use by management. It is believed that historical data may mislead management as it has little relation to current conditions. Managerial functions, especially planning, control and decision-making, will be better achieved through the use of current rather than historical figures.

10.2.2 Conclusion of the Case Study

10.2.2.1 Budgetary Control

Although the uniform accounting system requires companies to prepare many budgets, these are of very little help to the managements of the economic units, because the budgets contain no explanation of the technique of budgetary control, at either company or ministry level. The planning process is no more than an aggregation of the budgets of the various departments or establishments under their control. There is no unified method to be applied by companies to prepare the budgets; each company uses its own method, according to its past experience, relying almost entirely on the previous budget and the last year's actual results.

From the interviews and responses to the questionnaire, it appears that most industrial companies do not use statistical methods or sound costing in preparing budgets. Furthermore, there is a failure to improve budgets during implementation, and flexible budgets are not used.

All budget figures are based on historical cost data, which do not provide a satisfactory base for planning or for variances analysis, because most of the costs increase during the financial year. Companies provide the Ministries of Industry and of Planning with quarterly reports of variances. These reports show actual figures compared with those planned. The analysis of variances is limited; there is no indication of the level at which variance should be regarded as serious; moreover, most companies try to hide unfavourable variances.

The universal finding was that none of the companies surveyed make any adjustment in their budgets for the impact of inflation; they simply prepare incremental budgets, and there is no specific calculation of an inflation variance. Most companies showed favourable variances, not, as the managers suggest, because of hard work and full use of the capacity of the factory, but rather, in the researcher's view, because the budgets are built on exaggerated figures; when the following year shows an increase in the rate of inflation, the actual figures are higher than those budgeted, so that there is a favourable variance. Therefore, the figures generated by the budgetary control system are not helpful for planning, control, and evaluation of the activities of companies.

However, management, when planning, needs to measure the effects of inflation during the year. Government plans for whole economic sectors, either for a single year or in

the five-year plan, must also take account of expected inflation rate. The budget should therefore be expressed in expected figures for the forthcoming period, and if the financial results are based on current cost, the comparison will be more accurate than if it is based on historical cost, and the analysis of variances will be more meaningful.

10.2.2.2 *Financial Reports*

The financial reports required by the uniform accounting system are usually prepared to meet national accounting needs. It was found that the information provided, whether to the management or to government agencies, suffers from many limitations and is not helpful for decision-making, especially to managers. The reports are prepared on the historical cost basis, whereas the valuation basis in the national accounting is current market value. Therefore, the information provided by these reports for national accounting purposes is not suited to the requirements of the national economic plan.

The problem is not in the uniform accounting system per se, but it is in the people who are responsible for implementing it. Although the system has been in use since 1970, it was initially applied only in a few companies, and was run either by Egyptian or Palestinian clerks. Since 1986, when the government decided to apply the system to all sectors and companies, there have been shortages of accountants and training programmes. Although the academicians and the Guild have tried to instigate several

courses in the uniform accounting system, there is still insufficient training in this area.

Regarding the timeliness and frequency of the financial reports, the managers of the companies surveyed complained of delay in receiving the reports, especially the final accounts. There were delays of more than 3-4 months in receiving the audited final reports, because the Board of Supreme Audit is responsible for auditing all companies, a task which it has neither the staff nor the facilities to fulfil. As a result, the final accounts and the performance reports are not helpful to management for economic decision-making.

In order to reduce the burden for the Board, the professional auditors of the private sector could play a role in auditing and verifying the financial reports in the mixed and private sectors, especially now the government is keeping only the most economic and profitable enterprises under its control.

Although most managers and their assistants expressed a reasonable degree of confidence in their financial reports, they admitted to not reading all the information given in the reports, and showed little interest in receiving more data. Moreover, the financial information has comparatively little influence on many of their decisions, such as pricing policy and capital expenditure. This might be related to delay in receiving the audited financial reports.

Revaluation of fixed assets is still not common in Iraq. Although some companies try to revalue their fixed

assets, either because of merger with another company or because their managers wish it, from reading and studying the revaluation reports and comparing them with the fixed assets records, it was found that what some managers called revaluation of fixed assets, was in fact no more than re-recording the book value of these assets as shown in the ledgers. Furthermore, the ministerial representatives were reluctant to use the current costs of fixed assets, and regarded current cost accounting as inflationary per se. Perhaps the reason for that is a failure to understand or define effective methods of revaluing the assets base.

Depreciation is based on the historical cost of fixed assets, so does not reflect the real production cost. This will give a false indication of the true performance, especially if the current year is long after the year in which assets were purchased. Therefore, there is a strong possibility that productivity improvement might be shown although production in physical terms is decreasing, especially in a period of rapidly increasing prices.

In fact, the uniform accounting system has created an account to calculate depreciation on the current cost basis, " the Reserve for Rising Prices of Assets". This account is based on the accumulated retained profit (from the current operating account), with a provision for the difference between depreciation as shown on the historical basis and on the current cost basis, for national accounting purposes. However, in practice, this account is not used as required by the national accounting system, for

most accountants have no idea how to cope with national accounting requirements. Whereas these require the difference between the value of fixed assets at historical cost and the current value to be recorded, what the accountants actually record is the additional depreciation on fixed assets which are already written off, but still in operation. Therefore, the national accountants complained that none of the companies have as yet prepared this account.

The situation is similar regarding finished goods valuation. The uniform accounting system values this account by the cost or market value method. This method is not helpful for effective decision-making, because the costs of production are based on historical cost data, and the sale date is different from those of production and of the acquisition of materials. Nor are these figures helpful for national accounting purposes. Therefore, the national accountants revalue the stock according to market price in the value added statement. The market price can be reached by adding the opposite twin account of valuation difference of changes in stock (account nos. 1943 and 1944), which represents the gross profit margin. Usually the national accounting department uses an estimated selling price. Nevertheless, it was found that none of the Iraqi companies prepare these opposite twin accounts, through which the production for the period at current cost could be calculated.

Actually, from the above it is clear that the opposite

twin accounts and the reserve for rising prices of assets are not used by all the companies. The result is misleading financial reports, because they do not reflect current market price, while in the national accounts (value added account) these accounts will appear at the market price. Therefore, the national accountants complain of this problem and require the Board of Supreme Audit either to prepare these accounts or to force companies' accountants to do so.

The most obvious defect in the overall control system in Iraqi companies, is that very little attention is paid to the cost accounting system, and cost planning, either by the committee of the uniform accounting system or by companies. Cost estimates on a process or centre basis either do not exist or are calculated incorrectly, so that there is very loose control over costs at the process or centre level. Moreover, there is no distinction drawn between direct and indirect cost, or variable and fixed costs; companies use the total cost method to count the unit cost. This does not help managers to analyse price-cost-volume relationships.

10.2.2.3 Government Interference

During the interviews, and from responses to the questionnaires, it emerged that two main problems face Iraqi companies: government interference, and the lack of education of both managers and accountants.

With regard to the first problem, there is direct

government interference in both public and mixed sector companies, as regards their accounting system, managerial reports, plans, budgets, control and decisions. This affects not only the accounting system applied and the way that companies are managed, but also the behaviour of accountants and managers in answering the questionnaire or speaking during the interviews. They were found to be interested only in the current position and doing what is required of them, without really thinking whether or not there are better ways of doing things.

The main supervision is by the Ministries of Industry and Planning. The lack of co-ordination between them causes double supervision and sometime creates conflict in executing orders or preparing budgets. Therefore, most managers desired more decentralisation of company administration and decision-making. Government interference has an unfavourable impact on companies, for the following reasons:

1- There are several planning and control agencies which require a great deal of information. This takes much effort and time to prepare, which would better be spent on improving productivity and efficiency.

2- Government interference kills the spirit of motivation among the companies' workers; they feel they are only tools implementing government orders, rather than productive units.

3- Although the government's method of applying the uniform accounting system is based, in general, on

historical figures which represent an unrealistic measure of companies' costs, assets values, etc., it does not allow a company to use or try an inflation accounting system to tackle the impact of inflation, and concentrates on its own needs at the expense of the companies' needs.

Culture also affected to a great extent the responses of most managers, who had never heard of inflation accounting. As a result they were not able to judge the usefulness of inflation accounting for managerial purposes, or the difficulties that may arise in its application. Their answers expressed a preference for the status quo. The accountants, generally, have no education in the uniform accounting system, even though it has been in use for more than fifteen years, in some companies. The present level of accounting education is so low that accountants cannot realistically be expected to follow effectively all the requirements of the uniform accounting system, especially with regard to the opposite twin accounts and national accounting requirements.

University graduates in accounting are not sufficient for the current demands of Iraqi business and industry, and there is an absence of qualified accountants owing to the poor quality of accounting education programmes. The poor quality of the university accounting programme was attributed to several factors: accounting's technical orientation, insufficient full-time instructors, inadequate and insufficient text-books and libraries. Moreover, very

few empirical studies have been carried out, either by academicians or postgraduate students. This may be because of lack of available data; it may be in a form which is difficult to use, or withheld by companies or government. All these factors reduce the motivation to carry out research.

10.2.2.4 Inflation Accounting

The uniform accounting system is designed to serve the requirements of economic plans and to provide the information necessary at macro level for planning and control at all levels. In addition, it provides managements with suitable information to help them in managing their companies. All these functions, and others, depend on the valuation method used by the system. The system uses historical cost as the main basis for recording, calculating, and evaluating production costs, determination of income, and calculating the financial position. On the other hand, the macroaccounting system uses the market value as the main basis of valuation. Therefore, most decisions, either at micro or macro levels, will not be accurate, because they are based on historical figures, or there will be a conflict between company and national accounting, which will not reflect the effect of changes in prices.

Although there is inflation in Iraq, no technique is used to reflect its impact on the financial reports. Inflation rates were not particularly high during the 1960s, but the rate increased to 21% in 1988. Moreover, though the

prices of internally manufactured goods were formerly held relatively stable from one period to another, due to central control and central pricing, this situation has changed since the government decided to give the managements of companies in various sectors the freedom to price their goods, and, in addition, goods imported from abroad carry with them the inflation rate of their countries of origin.

The new government policy, to keep only the economic and profitable enterprises and to give more freedom to the management to price goods, led to price increase and a rise in the inflation rate, especially in 1987 and 1988. Therefore, in the 1990 economic plan the government has decided to revert to the policy of price control, to increase its subsidies to the public sector, and to increase the share of the industrial sector in the whole economic plan to 53% of the total budget, i.e. 5,600 million I.D.. It also aims to reduce the inflation rate within the next five years of the plan.

Although the General Federation of Arab Accountants and Auditors had suggested the current purchasing power method as a suitable remedy for the impact of inflation in Arab countries, none of them have applied it, except for some individual attempts by lecturers or by postgraduate students. They found that most companies suffer from inflation and their reports do not present a true and fair view, and are not useful for planning and decision-making.

During the interviews, it was found that none of the companies surveyed have applied an inflation accounting

method. This may be because it is not required by government, or because of lack of the statistical data needed for restatement purposes. Although the managers and accountants of most companies surveyed agreed that there is a need to apply inflation accounting on their financial accounting, they were torn between the two general methods: current purchasing power and current cost accounting.

From the interviews with the accountants of the surveyed companies, certain facts emerged:

1- Companies rely on the historical cost system in preparing their final accounts: this is required by government in the application of the uniform accounting system.

2- There is no publication of the companies' results; even the companies' own shareholders must obtain this information by demanding (or buying) it from the Registrar of Companies.

3- The accountants have no objection to applying the uniform accounting system.

4- They have little information about inflation and the standards issued around the world, or even the framework of the Arab Federation.

The behavioural factor, in the case of both managers and accountants, cannot be ignored in analysing their responses. Most of them have no motive to develop a more useful accounting system, which will provide realistic up-to-date information. All they do is apply the uniform

accounting system: no more and no less. Under the inflationary conditions which affect the whole of the Iraqi economy, the application of an inflation accounting system seems a necessity in order accurately to reflect current costs and realistic values in companies accounts.

10-3 *The Replacement Cost Accounting System*

To determine an appropriate inflation accounting system which can be recommended for application in Iraq, alternative inflation accounting systems were assessed in terms of their ability to provide a company with the information needed to fulfil its objectives and exercise management control. The chosen system should, at least, provide:

1- Up-to-date and accurate data concerning the value of assets at both the micro and the macro level;

2- An accurate basis for calculation of current cost of production and a proper match between costs and revenues;

3- A basis for preparing budgets, planning, and decision-making suited to inflationary conditions. From chapters 3,4, and 5, it is clear that the system applied by the Philips company, during the 1970's, is most able to satisfy the above criteria, i.e. the system is simple, practical and free from the complexity of the gearing adjustment. This system, in our opinion, produces realistic current figures for expressing a company's actual performance, for setting and preparing budgets and planning for economic units and for the national economy as a whole. Moreover, the Sandilands Committee had recommended that

system if the UK were to adopt CCA. (Sandilands, 1975, p.229).

However, in 1981, an important new feature was added to the Philips system: the use of a gearing adjustment. This is the aspect of the system which is most likely to present difficulties. The main reason for this adjustment is that a portion of the cost of goods sold adjustment and the additional depreciation is financed by borrowing, and should be removed from the profit and loss account. In fact, this concept has no meaning in Iraqi companies in general, either in the public or mixed sectors, for all public companies are financed by government, either directly or indirectly, and the companies' managements are representatives of the government. Therefore, this aspect of the Philips system may not be applicable in Iraqi companies at this stage.

A suggested plan for incorporating current valuation at the development stage is outlined below. The starting point could be the companies' financial and managerial' reports, gradually extending to cover other aspects and functions in the economy. The programme could be as follows:

- 1- Correction could be applied to selected items in the financial reports, according to simplicity and their relative importance. The most important item would be inventory, in order to enable an improvement in the quality of the company's profit and loss account and to reflect current values to a limited extent. Therefore, inventories would be valued at replacement cost. Changes in replacement

cost would be credited / charged to the special account "inventory price difference". These corrections would be done in the year-end financial reports, or at quarterly intervals, to help maintain each company's financial position intact.

2- The valuation of fixed assets could be based upon official price indices specific for particular industries. The depreciation charged on the fixed assets should be corrected in the same way.

The difference between the original cost depreciation and the adjusted depreciation would appear in a "fixed assets price difference account". Consequently, the result would be reflected in the cost system, and it would be useful for managerial purposes, especially "the correct calculation of long-run supply prices". (Enthoven, 1973, p.271).

3- Fixed assets would be revalued in the balance sheet on the above basis.

4- There would be no need to adjust monetary assets, because the balance sheet value would reflect the value to the business at the balance sheet date. (Sandilands, 1975, p.177).

The above practices would appear to be effective as a starting point, for companies, government, and social accounting. Furthermore, they need not be applied for every industry at the micro level; criteria for application will be discussed later. However, the suggested procedures could help Iraqi companies in preparing budgets, pricing, costs

and national accounts requirements. The advantages of applying the suggested system could be as follows:

1- The budgets are the yardstick, being not simply plans, but also targets which individual companies and sectors are expected to meet, to fulfil their role in the plan for the economy as a whole. Generally, planning in Iraq is divided into two main categories: (1) strategic planning (long-term); (2) operational planning (short-term). The overall situation of the economy and environment form the basis for formulating the objectives of the strategic plan. Operational planning starts with economic forecasts carried out at management level in co-ordination with representatives of Ministries of Planning and Industry.

The forecast includes items such as economic growth based on GNP, and consumer spending. At this point, the inflation rate and currency exchange trends should be taken into account. Current cost data will help all parties to build the budgets on an accurate basis. All operational plans are then reviewed by the Ministries of Finance, Planning, and Industry, to produce consolidated budgets which should express the expected figures for the forthcoming period after taking into account the inflation rate and the expected current cost.

Furthermore, current cost data will help both managers and national accounting requirements with regard to project appraisal. Projects should be appraised, within sectors, based on cost-benefit calculations. If the data considered

are based on historical cost, the result may be less accurate than where current cost data are used. Current cost data help the various parties concerned to predict the future position in terms of the same measurement unit. In addition, the use of current cost may have an important effect on profitability, as social profitability, input and output are to be measured in current cost, particularly important in inflationary conditions. For instance, where capital expenditure decisions are concerned, awareness of the impact of inflation can help managers to consider whether to accept a project or to reject it.

Moreover, budget preparation and project appraisal based on current cost data will make a comparison between the plans and the actual figures more accurate than it would be if based on historical cost information, and the analysis of variances will also be more meaningful.

In a country like Iraq, with a high rate of inflation, it is difficult for companies to rely on historical cost. The CPP method cannot be used to prepare budgets and analyse variances, for it is no more than an adjustment of the historical cost figures with a general price index, and in no way represents current cost. It is clear that it is necessary to base budgeting on current values.

2- The various macro accounts are obtained largely from the enterprise's profit and loss accounts and balance sheets, and require rearrangement for the data to reflect current activities. Inputs and outputs are usually valued at their current price, and the GNP is usually stated at

current value; its components should therefore be stated on a similar basis. At present, valuation of stock in enterprise accounting is normally at the lower of acquisition price or market price, while the valuation in the national accounts is at current value.

A similar situation applies with regard to capital consumption; depreciation is treated as an operating cost, and calculated based on the historical cost of fixed assets. From the national accountant's point of view, this calculation is not economically meaningful or realistic. If depreciation is to be accurately estimated and calculated, the enterprise must reflect the current cost, at least as an additional item through a depreciation re-valuation adjustment to historical cost.

The uniform system already makes provision for connection between national accounting requirements and the enterprise accounts, for example, opposite twin accounts, re-valuation of fixed assets, and imputed interest. The problem is that so far, none of the Iraqi companies have tried to use these accounts, nor does the Board of Supreme Audit use them. Information regarding stock, equipment, building, and machines if obtained from enterprise accounts based on historical cost, could distort the real values of output and national wealth in the national accounts. Therefore, enterprise accounting valuation should preferably be adjusted by means of current cost accounting.

3- National accounts are important tools for strategic

planning. They aim to describe systematically and quantitatively the structure and activities of an economy or sector during a certain time span. Current costs in accounting measurement are required in order realistically and effectively to reflect activities. Measurements in macro economic analysis and policy have to facilitate comparison between current and projected cost, and benefits. Government activities, including budgeting, will be effectively served by means of current value information

The most important benefit of using current value in micro accounting is to supply the national accounts with data expressed in the same units, and with similar valuation, measurement and aggregation procedures applied.

Value added reporting serves both micro and macro accounting and economic purposes. It reports the wealth created by a business entity over a period of time, and can also be used as an effective measure of the performance of an entity. Since companies use historical cost accounting and national accounting uses market value to value input and output, a conflict is created and it is difficult to prepare aggregated reports for economic purposes. Using current cost accounting will help the entity and national accounting to prepare the financial reports at current value, so that the value added report will express more accurately the growth and development at entity or national level.

4- Another advantage of the recommended system is that it would protect the company's capital from erosion. If prices rise by, say 5% in less than 20 years, the company

has eroded its capital, and is slowly dying, since the apparent profits reflected by historical cost accounting are misleading, so that tax and dividends are paid from capital.

Iraqi companies, as found in the interviews, are concerned to show high profits in their financial reports. The reason, as explained earlier, is to keep the company under government responsibility, since the government has decided to keep only the profitable companies. Therefore, most Iraqi companies have eroded their capital by paying dividends and dues to the Treasury Department (see chapter seven) based on profits which do not in fact exist.

Using current cost accounting would give a clearer picture to the government about the profitability of the public sector, so it can make sound decisions as to whether to keep and subsidise companies or to sell them.

5- Other factors which influence government decisions as to the fate of an enterprise are cost of production, and prices. The latter depend upon the product cost, and usually the government and management forecast the prices of commodities in advance. Pricing based on historical cost data is inaccurate. Current cost accounting is more helpful in calculating the cost of inflation, as it can be used to calculate the percentage change of current costs for each component over the last period. Moreover, it will help in continuous revision of the product cost estimation.

6- The Iraqi government needs to maintain the production capacity of the companies, particularly in this

post-war period. In other words, the government is currently as interested in the firm's maintaining its physical productive capacity as in its maintaining the general purchasing power of its capital. One potential advantage of current cost accounting is that it can be used to measure profit after maintenance of physical capacity.

However, the suggested system should not be substituted for historical cost accounting; rather, the two should exist side by side, at least for a time, and changes should be introduced gradually, according to the needs of the country and industry. Therefore, to put the suggested system into practice several steps need to be taken, as follows:

- 1- Since current cost accounting is a new system, to put it into practice needs legislation issued by the government. Therefore, the government must take the first step and be responsible for adopting the system, because neither the professionals in Iraq (IAAG) nor the managements of companies can make the decision whether to apply it or not; most managers, accountants, and professionals said during the interviews that only the government can implement the system.

The government could either establish a committee to be responsible for applying the system in the Iraqi industrial companies, or do so through the Board of Supreme Audit. Therefore, fiscal law will require adherence to historical data, as already required by the uniform system. Whichever organisation is responsible, the important thing, as said earlier, is to apply the system first to the public

industrial companies, and to determine some criteria for deciding which companies must apply it, for instance, the volume of the company's capital, number of employees, and sales turnover. Then, a date must be set for implementation.

2- Secondly, the government must prepare the appropriate indices to make adjustments. Care needs to be taken that specific indices used to implement a system of current cost accounting effectively measure the rate of change in prices of specific assets. Therefore, a choice needs to be made as to which is the most appropriate for determination of profit. Choice of index is a difficult task, and a decision must be made as to the group of assets to be covered, and by what procedures the indices are to be constructed.

Generally, the Ministry of Planning calculates and prepares several kinds of indices such as, CPI; GPI; FCF deflator; GDP deflator. These indices cover most commodities and items. The main problem is not the existence of these indices, but to make them available to the different users. However, index numbers should be available in the economy for consumer and wholesale prices, while specific price index numbers should be available for major classes of goods and services. It will be the task of the government to work up such figures for various periods, although industries can also generate such specific and general information for production used and sold. Furthermore, they can help by providing the government with trends of prices of fixed

assets through the purchasing department in each company, the duty of which is to provide the company with different commodities and forecast market prices and trends.

3- At the same time, the government, through the committee responsible for the system, in co-ordination with academicians and the Iraqi Accountants and Auditors Guild (IAAG), have a dual duty: first, it should modify the uniform accounting system to be capable of meeting inflation accounting requirements. Some accounts need to be added to the system and additional reports need to be prepared. The system already has accounts related to revaluation of fixed assets and inventory, but it is necessary to add revaluation reserve accounts, for instance fixed assets price difference and inventory price difference accounts. With regard to the additional reports, there is a need for supplementary reports for cost of sale adjustment, fixed assets at current cost, depreciation, profit and loss account at current cost, the balance sheet must be prepared at current cost and include the revaluation reserve accounts.

The second responsibility of the IAAG would be to prepare a complete education programme on how to apply the system with the uniform accounting system and how to use the uniform accounting accounts to serve the requirements of current cost accounting, especially through the opposite twin accounts, imputed accounts, and re-valuation accounts. Academicians, for their part, must introduce inflation accounting as a subject in the accounting courses, and managers and accountants should prepare training courses.

4- To evaluate the cost of the suggested system, it is necessary to look at the cost and benefits; if the benefits are higher we should proceed. Judging by the arguments made above, the advantages of the system should outweigh its cost. However, the system may face some opposition, especially from those who want to apply the CPP method at first and then move to the CCA method. As said earlier, the CPP is not a system for inflation accounting and will not solve the inflation problem, especially for internal purposes, though it could be acceptable for external reports. Of course, it will be more difficult for different users to understand a hybrid system, and such a system would be more difficult to prepare, at least at this stage. Therefore, the CPP method is not suitable for application in Iraq.

5- The directors of all companies who are or are likely to be included in the categories of which the system will be applied should in their annual reports for prior accounting periods, state what progress has been made by the company concerned in introducing the system. Moreover, the professional accounting body (IAAG), in consultation with the government, should at the earliest opportunity make interim recommendations to its members on how the effects of changes in costs and prices should be shown in company accounts.

6- There is a need to reform the uniform accounting system. In the medium term, in order to make the suggested

system more effective for measuring profits and for decision - making, there is a need to study imported costs and resources. That means there is a need to study the shadow prices and foreign exchange problem.

In fact, in Iraq, as in most developing countries, the government tries to fix the prices of goods and services, and moreover, most raw materials, and capital equipment are imported from outside. Therefore, dual problems face the government: the availability of foreign exchange and differences between the border prices of the imported items and the domestic prices of these items. Both of these have implications for the inflation problem in general and inflation accounting in particular.

Availability of foreign exchange is regarded as a factor of production (Enthoven, 1973, and Roemer, and Stern, 1975) because it represents the ability to purchase goods and capital equipment. Foreign exchange is itself produced by activities of both export and import. The Iraqi government tries to fix prices and the rate of foreign exchange. Therefore, it must pay more attention to the availability of foreign exchange by estimating the shadow exchange rate. The latter is related to the supply and demand of foreign exchange. It represents the collective behaviour of importers who are willing to pay for each quantity of imports with foreign exchange. Hence, it also shows the value of imports to the consumer and their willingness to pay. The demand for foreign exchange will give the shadow price of foreign exchange that is spent on

imports. The same thing will happen to the supply of foreign exchange from exporters, who earn it by selling goods and services overseas; shadow exchange rates can thus be determined for import or export activities, or a combination of both of them. (Roemer, and Stern, 1975, pp.48-49).

Furthermore, foreign exchange rates are usually fixed by the government at an artificially low level, because of the absence of a free exchange market. This leads to deficits in the balance of payments, and misuse of the elements of production. Using shadow prices will correct some of these distortions, and the shadow price of foreign exchange should be equated with the increasing cost of earning it by increased exports or saving it through import substitution. (Enthoven, 1973, p.166).

Thus, shadow prices are very important, especially in a country like Iraq with a high inflation rate, which is expected to continue in the foreseeable future. The potential problem in calculating the shadow prices should not be underestimated. Therefore, more researches and studies need to be done to cover this area, to enable the accounting system to provide better data and make possible more analysis of the basic current cost of production factors including foreign exchange. Consequently, for the benefits of the proposed inflation accounting system to be fully realised, more attention needs to be given to shadow prices and foreign exchange by all concerned.

Finally, accounting, as an information measurement,

reporting and control system, has a significance beyond the reporting of financial transactions and resources of micro entities. The micro accounting measurements of economic phenomena have macro accounting and economic implications. Accordingly, accounting should portray information which is relevant and useful from a general financial-economic point of view. In this regard there is a need for current cost information, at least on a supplementary basis.

Moreover, it is required to improve the statistical system, and involve the government and enterprises. The suggested system could be applied step-by-step.

All in all, the study was designed to compare the application of inflation accounting in developed and developing countries. Iraq was chosen because it is a developing country which has had an accelerating rate of inflation, especially in the last few years. The primary task was to make recommendations which could form the basis of a permanent and long-lasting reform of accounting practices used by Iraqi companies, designed to take account of changes in prices as they affect companies.

In order to serve management and national accounting requirements, management must be helped to realise its objectives. The uniform accounting system is an excellent step in this direction, but in periods of inflation it does not provide management and national accountants with suitable information for planning, budgeting and decision-making. Replacement cost accounting would enable both micro and macro levels to understand the current costs of

different resources required for realising their programmes. The expected current cost would be the most appropriate system to be used in fulfilling the managerial function and meeting government requirements.

QUESTIONNAIRES

1- SECTION ONE

General Information

- 1.1- Name of the company
- 1.2- Industry and classification; public sector ();
mixed sector (); private sector ().
- 1.3- Job of the interviewee.....
- 1.4- Personal details:
- Age: under 30 ; 31 -45 ; 46 - 60 ; over 60 years.
 - Which is your main area of expertise :
 - Technical (e.g. engineering, manufacturing)
 - Professional (e.g. law, architecture)
 - Financial
 - Managerial
 - Other
- 1.5- What kind of accounting system does your company use:
- government accounting(); uniform accounting();
special system().
- 1.6- Is your company's accounting system; manual ();
mechanical (); computerised (); mixed ().

2- SECTION TWO

A.Report Characteristics and Management Satisfaction

2.1- Who prepares the financial reports for the company? Is it; the Supreme Audit Board (); your accounting department (); a private accounting company ().

2.2- Would you say that other departments of the company have an understanding and perception of accounting's role in the company?

2.3- How long does it take you to obtain the required financial information? a few hours (); several days (); several weeks (); several months ().

2.4- How do you feel about the timing and frequency of the financial reports which you regularly receive? satisfied (); not satisfied (); and why?

2.5- Is the management satisfied with the general service provided by the accounting department?

2.6- If no, is the reason:

- They have insufficient experience.
- They lack education.
- They lack training.
- Other.

2.7- How often do you receive information on each of the following?

- Raw material used in production.
- Wages paid for production.
- Inventory level.
- Manufacturing overhead.
- Profit and loss for the production period.
- Variances.

2.8- How much confidence do you have in this

information?

- A great deal of confidence.
- A reasonable amount of confidence.
- A little confidence.
- No confidence at all.

2.9- How much interest do you take in this information?

- A great deal of interest.
- Very much interest.
- Average interest.
- Little interest.
- No interest.

2.10- If "not interest", is that because:

- Information is not related to your interest.
- Information is not related to items under your control.
- Information is not understood.
- Information is not detailed enough.
- Information does not cover all the points you need.
- Information is historical (not current).

2.11- Please rank the influence of annual accounts in management decisions:

- | | Major
Influence
----- | Minor
Influence
----- | NO
Influence
----- |
|-----------------------------|-----------------------------|-----------------------------|--------------------------|
| - Pricing decisions. | | | |
| - Borrowing decisions. | | | |
| - Capital expenditure. | | | |
| - staff pay and conditions. | | | |

2.11- Please rank in order of importance the uses of the company's accounts:

- Providing management and financial information to the managers of the company.
- Providing information to the Ministry of Planning.
- Providing information to the Ministry of Industry.

- Supporting tax computation (profit distribution).
- Other.

2.13- Do you believe the following figures should be publicly disclosed?

Yes No
----- -----

- Turnover of sales.
- Net profit before tax.
- Value of stock.

2.14- Please rank in order of importance the services provided to the company by the Supreme Audit Board:

- Preparation of accounts.
- Audit of the accounts.
- Management advice.
- Efficiency report of the company.
- Other.

2.15- Please rank in order of importance for business decisions:

- Net profit.
- Net current assets.
- Total assets.
- Turnover of sales.
- Source and application of fund.
- Auditor's report.

2.16- How much of your report do you study (in percentage).

B. Budget Information and Assets Valuation.

2.17- Do you use budgetary control, either in the short or long term?

2.18- If so, do you use any statistical studies when preparing the budgets?

2.19- If so, do you:
- Make adjustments to actual and forecast costs linked to a general price index.
- Make adjustments to actual and forecast costs linked to a specific price index.
- Make no specific adjustment.

2.20- How often do you revise the budgets?

2.21- In analysing variances, do you calculate an inflation variance for :

- Direct raw material.
- Direct wages.
- Manufacturing overhead.
- Other.

2.22- Which comparison is more useful:

- Actual vs budget for the period.
- Actual vs budget for the period to date.
- Actual for the same period this year and last year.
- Other.

2.23- If there is a favourable cost variance, do you:

- Reward those responsible.
- Revise the budget to make it more tight.
- Take no action.
- Other.

2.24- If there is a unfavourable cost variance, do you:

- Take action against the persons responsible.
- Revise the budget.
- Other.

2.25- Have you revalued any of the company' fixed assets:

- | | Yes | No |
|----------------------------|-------|-------|
| | ----- | ----- |
| - Equipments and Machines. | | |
| - Building. | | |
| - Land. | | |

2.26- Do you think it is difficult to calculate yearly replacement cost for the fixed assets?

2.27- Does depreciation affect the pricing policy?

2.28- What is the method used in calculating cost of material issued for production? Fifo (); Lifo (); Average (); Other ().

C. Inflation Accounting.

2.29- Have you heard about:

- Brazilian experience in inflation accounting.
- Philips company experience.
- FAS 33.
- SSAP7 and SSAP 16.
- Other.

2.30- If so, what is your opinion of it/them?

2.31- Does your company apply one of these system?

2.32- If the company does not apply a form of inflation accounting in the company accounts, is it because:

- It is not required by government.
- It is not applied by other companies.
- It is difficult in understand.
- I do not believe in it.
- Other.

2.33- Do you feel there is a need for inflation accounting?

2.34- Do you think that inflation accounting would help in preparing useful financial information for both, management and government?

2.35- If you were to adopt a form of inflation accounting, which would you choose:

- Current purchasing power.
- Current cost accounting method.
- Another method.

2.36- Please rank in order the difficulties of applying inflation accounting in your organisation:

- There is no up to date information about indices.
- There is no one who can restate financial report.
- There is limited use of the financial report in decision making.
- Other.

2.37- Do you use a computer in your work?

2.38- Do you believe that its use would be necessary for the application of inflation accounting, if it is introduced? and why?

2.39- What changes would you like to recommend to improve the financial report and financial information system?

Your comment, please....

3- SECTION THREE

3.1- Which of the following basically guides your accounting procedures? government regulations and planning policy (); management policy (); other.....

3.2- Do you have non- Iraqi accountants in your department?

3.3- Would you say that other departments in the company have an understanding and perception of accounting's role ? Yes (); No ().

3.4- Who determines the form of the financial reports and budgets? government (); your department (); a private accounting company ().

3.5- How do you feel about the form in which the financial information is produced by the financial report? sufficient (); acceptable (); not sufficient (), if it is not sufficient, why?

3.6- What areas do budgets cover:

- Profit.
- sales.
- cash.

- Production cost.
- Purchasing.
- Services.

3.7- In analysing variances, do you :

- Make adjustments to actual and forecast costs linked to a general price index.
- Make adjustments to actual and forecast costs linked to a specific index.
- Make no specific adjustment.

3.8- In analysing variances, do you calculate an inflation variance for:

- Raw material.
- Wages.
- Overhead expenses.
- Other.

3.9- What method is using for preparing the published accounts:

- Historical costs.
- Historical cost adjusted by the use of a general index.
- Historical cost adjusted by the use of specific index.

3.10- Do the equipment and machines appear in the company's account at their:

- Historical cost.
- Replacement cost.
- Valuation by experts.
- Historical costs adjusted by the use of general index.
- Historical cost adjusted by the use of specific index.

3.11- Do land and buildings appear in the company's accounts at their :

- Historical cost.
- Historical cost adjusted by the use of general index.
- Historical cost adjusted by the use of specific index.
- Valuation by experts.

3.12- The following chart plots the frequency of revaluations made by the company: Answer "YES" against the percentage of assets revalued on each occasion (for last ten years).

Key: Land and Building X
 Equipment and Machines O

Frequency of Valuation	Average percentage of fixed assets revalued					
	0-19%	20-34%	40-59%	60-79%	80-99%	100%
10 times						
6-9 times						
5 times						
4 times						
3 times						
Twice						
Once						

3.13- What method is used for calculating depreciation?

For Machines and Equipment For Building
 ----- -----

- Straight line.
- Sum of year digit.
- The declining balance.
- Other.

3.14- Is the depreciation charge in the company's accounts based on:

- The original historical cost.
- An estimate of replacement cost.
- Another figure.

3.15- Does depreciation affect pricing policy?

3.16- What is the valuation basis for the inventory:

Finished Goods	Unfinished Goods	Raw Material
-----	-----	-----

- Historical cost.
- Replacement cost.
- Historical cost adjusted by the general index.
- Historical cost adjusted by the specific index.
- Other.

3.17- What method is used to calculate the cost of raw material issued for production:

- FIFO
- LIFO
- AVERAGE
- Other.

3.18- Do you have any information about the trend of prices during the last five years for:

- Raw material.
- Fixed assets.
- Wages.
- Inventory.

3.19- Do you keep any record of the replacement costs of your company's assets?

3.20- If you decide to adjust your financial report according to change in price level, do you use:

- Information prepared within the company;
- External information (government source);
- Both.

3.21- If you depend on government information, do you have any difficulty in obtaining it? (i.e. statistical information, current market prices of

assets, raw material cost, and wages).

3.22- Have you tried to apply inflation accounting for preparing the financial accounts?

3.23- If yes;

a- Do you find any difficulties in applying it ?

b- Where are the difference between historical cost and figures dealt with?

- Profit and loss account.

- Balance sheet.

- Distribution profit.

- Other.

3.24- If no, give the reason(s):

- It is not applied by other companies.

- It is not required by government.

- I do not believe it is beneficent.

- It is difficult to understand.

- The extra time and cost needed for applying it.

3.25- Do you think the benefit of applying any form of inflation accounting would be:

- Higher than the cost of applying it; or

- Less than its cost.

3.26- Do you agree that there is a need for restating and adjusting the financial reports according to changes in price level?

3.27- Do you believe that adjusting financial reports according to inflation accounting would make them more realistic?

3.28- Have you heard about:

- Brazilian experience.

- Philips company's experience.

- FAS 33.

- SSAP7 and SSAP16.

3.29- If it were decided to apply inflation accounting,

which form would you prefer:

- Current purchasing power.

- Current cost accounting.

- Another method.

3.30- Please rate in order of importance the services to your department of the Supreme Audit Board:

- Preparing financial accounts.
- Profit distribution advice.
- Audit of the accounts.
- Other financial advice.

3.31- Do you use a computer to prepare the company's account?

3.32- Do you believe that its use would help you?

3.33- If yes, please give the reason:

- It would help to prepare the financial report in time
- It would be easy to apply inflation accounting.
- Other.

3.34- If no, is it because:

- There is no one able to work on it.
- There is not enough experience to use it.
- Other.

Bibliography

- A S S C., The Corporate Report, A Discussion Paper
London: ASSC, 1975.
- A S C., Inflation Accounting -An Interim
Recommendation by the Accounting
Standards Committee, London: ICAEW, 1977.
- A S C., Current Cost Accounting, Statements of
Standard Accounting Practice 16, London:
ICAEW, 1980.
- A S C., Reporting the Effect of Changing Prices
on Earnings, Exposure Draft 38, London:
ASC, 1985.
- Alexander, D., Financial Reporting: the theoretical and
regulatory, London: Van Nostrand Reinhold
Co., 1986.
- Allardyce, F., "The Application and Use of Current Cost
Data for Internal Managerial Purposes:
The American Standard Approach", in
Enthoven, A., Current Cost Accounting:
Its Aspects and Impacts, International
Accounting Research Study no.4, The
University of Texas at Dallas, 1983,
pp.47-55.
- Altmann, M., "The Brazilian Experiment", The Accountant,
December 1974, pp.750-753.
- Al-Azama, M. and S. Al- Bassam, "Economic and Social Aspects
of Accounting Regulation in Developing
Countries: The case of Kuwait", The Arab
Journal of Social Science, Vol.2,no.2.,
October 1987, pp.333-357.
- Al-Hassoon, A., The General Secretariat of General
Federation of Arab Accountants and
Auditors, Unpublished letter to
researcher, 25 th October 1987 (in Arabic).

- Al-Mustawfi, A. and A. Al-Hiali, The Uniform Accounting System in Iraq, Baghdad: Al-Zaman Press, 1978 (in Arabic).
- Al-Rahim, S., "Educational Development and Human Resources Planning in Iraq", Unpublished Ph.D. Dissertation, University of Texas at Austin, 1978.
- Al-Said, A., "Economics and Social Prospects for Inflation", Journal of Management and Economics, Baghdad: Al-Mustansiria University, 1980, pp.9-15 (in Arabic).
- Al-Siagh, H., Government Accounting, Baghdad: Al-Zaman Press, 1977 (in Arabic).
- A A A., "A Tentative Statement of Accounting Principles Affecting Corporate Reports", The Accounting Review, June 1936.
- A A A., "Accounting and Reporting Standards for Corporate Financial Statement 1957 Revision", The Accounting Review, Vol.32, October 1957, pp.536-546.
- A A A., A Statement of Basic Accounting Theory, New York: AAA, 1966.
- A A A., Accounting Standards for Corporate Financial Statements, New York: AAA, 1975.
- A A A., "Report of the Committee in Accounting in Developing Countries", The Accounting Review, Supplement, 1976, pp.198-212.
- A I C P A., Financial Statement Restated for General Price-Level Change, Statement of the Accounting Principles Board No.3, New York: AICPA, 1969.
- A I C P A., Objectives of Financial Statements, Report of the Study Group on Objectives of Financial Statements, (Trueblood Committee) New York: AICPA, 1973.
- Appelo, H., "World Accounting Report", The Financial

Times, February 1982.

- Arnold, J., "The Information Requirements of Shareholders", in B. Carsberg, and A. Hope, Current Issues in Accounting, London: Philip Allan Publishers Ltd., 1977.
- Arthur Andersen Client Inflation Clinic: the Brazilian Method of Indexing and Accounting for Inflation, Appendix 9, London: Arthur Andersen, 1975.
- Arthur Andersen Problems of Monetary Correction in Balance Sheet, Sao Paulo: Arthur Andersen, 1975.
- Barton, A., "Why Use Current Value Accounting", The Australian Accountant, September 1975, pp.444-449.
- Bear, W. and P. Beckerman, "The Trouble with Index-Linking: Reflecting the Recent Brazilian Experience", World Development, September 1980, pp.677-703.
- Beckerman, P., "Index-linked Financial Assets and the Brazilian 'Inflation-feedback' Mechanism", Unpublished working paper, College of Commerce and Business Administration, University of Illinois, October 1978.
- Belkaoui, A., Accounting Theory, New York: Harcourt Brace Jovanovich, Inc., 1981.
- Belkaoui, A., The New Environment in International Accounting: Issues and Practices, New York: Quorum, 1988.
- Bevis, H., "Riding Hard on Accounting Standards", The Accounting Review, January 1961, pp.9-16.
- B S A., Uniform Accounting System, Baghdad: Al-Zaman Press, 1985 (in Arabic).

- Brazilian Gazette Corporation law no. 6404, Sao Paulo: Ministry of Justice, 1976.
- Briston, R., "The Evolution of Accounting in Developing Countries", International Journal of Accounting Education and Research, University of Illinois, Fall, 1978, pp.105-120.
- Briston, R., "SSAP 16 in Practice- Some Potential Problem Areas", The Accountant's Magazine, February 1981a, pp.35-37.
- Briston, R., "The Evolution of Accounting for Inflation in the United Kingdom", Journal of Accounting, July 1981b, pp.27-48.
- Briston, R., Introduction to Accountancy and Finance, MacMillan Press Ltd., 1981c.
- Briston, R. and R. Fawthrop, "Accounting Principles and Investor Protection", Journal of Business Finance, Vol. 3, no. 2, 1971, p. 10-19.
- Burgert, R., "Reservations about Replacement Value Accounting in the Netherlands", ABACUS, Vol.8, no.2, 1971, pp.111-126.
- Cairns, D., "Providing the User with A Useful Statement", Accountancy, July 1988, pp.26-27.
- Carsberg, B. and A. Hope, Current Issues in Accounting, London: Philip Allan, 1977.
- Carsberg, B. et al., Small Company Financial Reporting, London: Prentice-Hall, 1985.
- Cattela, R., "An Introduction into Current Value Accounting and its Application within Philips N.V." in A. Enthoven, Current Value Accounting: its Aspects and Impacts, Dallas: The University of Texas at Dallas, 1983.

- Chapra, M., Towards a Just Monetary System, Leicester: The Islamic Foundation, 1986.
- C I M A., "Insidious Effects of Inflation on Company Performance, Management Accounting, Vol. 52, 1974, pp.195-196.
- Chatfield, M., Contemporary Studies in the Evolution of Accounting Thought, California: Dickenson Publishing Company, 1968.
- Comer, R., "Brazilian Price-Level Accounting", Management Accounting, October 1975, pp.41-53.
- Comissao, V., Regulacao do Mercado de Valores Moiliarios: Fundamentos e Principios, Rio de Janeiro, 1979.
- Coughenour, R., "Financial statement and the Uncertain Dollar", The Journal of Accounting, September 1935, pp.171-197.
- Cox, J., "ED 24- the New Proposals Explained", Accountancy, June 1979, pp.56-60.
- Cyert, R. and Y. Ijiri, "Problems of Implementing the Trueblood Objectives report", Journal of Accounting Research, Vol.12, Supplement, 1974, pp.29-45.
- De Bruin, A., "De Toegepaste Waardering - Smethod en Van, Duurzame Active", Maandblad voor Accountancy en Bedrijfshuishoud Kunde, January 1970, pp.15 ff.
- Dicksee, L., Auditing: A Practical Manual For Auditors, London: Gee and Company Ltd., 1945.
- Douppnik, T., "Indexation : Brazil's Response to Inflation", International Journal of Accounting Education and Research, Vol.18, no.1, 1982, pp.199-221.

- Douppnik, T., "The Brazilian System of Monetary Correction", Advances in International Accounting, Vol.1, 1987, pp.111-135.
- Edey, H., "Accounting Principles and Business Reality", Accountancy, Vol.74, 1963, pp.1083-1088.
- Edey, H., "Company Accounting in the Nineteenth and Twentieth centuries", in M. Chatfield, Contemporary Studies in the Evolution of Accounting Thought, California: Dickenson Publishing Company Inc., 1968.
- Edwards, J. and J. Barrack, "Objectives of Financial Statements and Inflation Accounting: A comparison of Recent British and American Proposals", The International Journal of Accounting Education and Research, University of Illinois, Spring 1976, pp.11-32.
- Ellis, H., The Economy of Brazil, California: University of California Press, 1969.
- Enthoven, A., Accounting and Economic Development Policy, Amsterdam: North-Holland Publishing, 1973.
- Enthoven, A., Current Value Accounting: its concept and practice at N.V. Philips Industries, The Netherlands, International Accounting Research Study no.3, Dallas: The University of Texas at Dallas, 1982.
- Enthoven, A., "US Accounting and the Third World", Journal of Accountancy, Vol.155, June 1983, pp.110-118.
- Enthoven, A., Mega Accounting Trends, Accounting Research Monograph No.5, Dallas: The University of Texas at Dallas, 1985.
- Farran, J., Company Law, London: Butterworths, 1985.
- F A S B., Exposure Draft, Constant Dollar Accounting, Stamford: Connecticut, March 1979a.

- F A S B., Statement of Financial Accounting Standards No.33, Stamford: Connecticut, October 1979b.
- F A S B., Statement of Financial Accounting Standard no.89: Financial Reporting and Changing Price, Stamford: Connecticut, 1986.
- Fleming, R., "Accounting for Inflation in Brazil", The Accountant's Magazine, February 1974, pp.58-60.
- G F A A A., "Inflation Accounting: Report of the Committee", Conference in 1982 in Tunisia, 1982, (in Arabic).
- Godfrey, P., "Inflation Accounting", Accountancy, October 1985, p.3.
- Goudekot, A., "An Application of Replacement Value Theory", Journal of Accountancy, Vol.110, July 1960, pp.37-47.
- Graves, O., "Walter Mahlberg's Valuation Theory: An Anomaly in the Development of Inflation Accounting", ABACUS, Vol.25, no.1, March 1989, pp.22-31.
- Gray, S. et al., Information Disclosure and The Multinational Corporation, New York: John Wiley, 1984.
- Harvey, M. and F. Keer, Financial Accounting: theory and standard, New Jersey: Prentice-Hall Inc., 1983.
- Hassan, T., Source of Monetary Inflation in Iraq: Its causes and its Remedy 1960-1975, Baghdad: Ministry of Culture, 1978 (in Arabic).
- Hasseb, K., "Plan Implementation in Iraq, 1951-67", Studies in Selected Development Problems in Various Countries in the Middle East, (U.N.E.S.C.O.B., 1969).

- Hendriksen, E., Accounting Theory, Illinois: Richard D. Irwin Inc., 4th ed., 1982.
- Hijazi, M., Inflation Accounting in Egypt, A report presented to the Zakakeik University, Egypt: Zakakeik University, 1979 (in Arabic).
- Hulle, K., "The EC Experience of Harmonisation: Part 1", Accountancy, September 1989, pp.76-77.
- I A S G., Guidance Manual on Current Cost Accounting, London: Tolley and the ICAEW, 1976.
- I C A E W., Accounting in Relation to Changes in Purchasing Power of Money, Recommendation No. 5, London: ICAEW, 1952.
- I C A E W., Accounting for Stewardship in a Period of Inflation, London: ICAEW, 1968.
- I C A E W., Provisional Statement of Standard Accounting Practice No.7: Accounting for Changes in the Purchasing Power of Money, London: ICAEW, 1974.
- I C A E W., "Insidious Effects of Inflation on Company Performance", Management Accounting, Vol. 52, 1974, pp.195-196.
- I C A E W., Accounting Standards: 1986/87, Oxford: The University Printing House, 1986.
- I C A S., Making Corporate Reports Valuable, ICAS, May 1988.
- I A S C., Proposed Statement: Framework For the Preparation and Presentation of Financial Statements, IAS, May 1988.
- Joffe, G. and K. McLachlan, "Iran and Iraq: The Next Five Years", The Economist Intelligence Unit,

Special Report, no. 1083, London: EIU, 1987.

- John, A. and K. Denis, "The Companies Act 1989: Accounting Aspects", Accountancy, February 1990, pp.100-104.
- Jones, M., "Stimulation or Revolution", Accountancy, April 1989, pp.106-108.
- Jordan, J., "Financial Accounting and Communication", The Price Waterhouse Review, Spring 1969, pp.12-22.
- Kenley, W. and G. Staubus, Objectives and Concepts of Financial Statements, Accounting Research Foundation of the Australian Society, 1972.
- Kirkman, P., Inflation Accounting in Major English - Speaking Countries, London: Prentice-Hall International, 1985.
- Klaassen, J., "The Practice of Current Value Accounting in the Netherlands", in P. Wanless, and D. Forrester, Reading in Inflation Accounting, New York: John Wiley, 1980.
- Latorraco, N., "Efeitos da Inflacao Sobre o Balanco", Revista Brasileira de Contabilidade, Jul-Set, 1977, pp. 30-38.
- Lee, G., "The concept of profit in British accounting, 1760-1800", Unpublished paper, University of Nottingham, 1974.
- Lee, T., Company Financial Report: issues and analysis, Plymouth: T. Nelson, Clarke Doble and Brendon Ltd., 1976.
- Leech, S. and D. Pratt, "Current Cost Accounting in Australia, New Zealand, and the United Kingdom: A Comparative Study", The International Journal of Accounting Education and Research, Spring 1978, pp.105-118.

- Limperg, T., "Bedrijfseconomie, verzameld werk", (Industrial economy, collected works posthumously published in 1964).
- Lund, B., "The Manager and Inflation", Accountancy, Vol.85, 1977, pp.36-38.
- Mann, E., "Inflation and Accounting in Brazil", Journal of Accountancy, November 1967, pp.49-53.
- Martins, S., "The Reserve of a the Maintenance of the Firm's Working Capital", condensation of a paper presented at the Brazilian Accounting Congress in Salvador, Bahia, 1973.
- May, G., Business Income and Price Levels, New York: American Institute of Accountants, 1949.
- McRae, T. and R. Dobbins, "Behavioural Aspects of the Inflation Accounting Controversy", Accounting and Business Research, Vol.4, Spring 1974, pp.135-140.
- Mendenhall, M. and Beaver, D. Statistics for Management and Economics, Boston: Duxbury Press, 1986.
- Middleditch, L., "Should Accounts Reflect the Changing Value of the Dollar?", The Journal of Accountancy, February 1918, pp. 116-119.
- Miller, E., Inflation Accounting, New York: Van Nostrand Reinhold, 1980.
- Ministry of Finance, Finance Regulation No. 10, Baghdad: Ministry of Finance, 1984 (in Arabic).
- Ministry of Justice, Companies Act NO. 31, Baghdad: Ministry of Justice, 1957 (in Arabic).
- Ministry of Planning, Central Statistics Organisation, Annual Abstract of Statistics, Baghdad: Ministry of Planning, 1974.

- Ministry of Planning, Central Statistics Organisation,
Annual Abstract of Statistics, Baghdad:
Ministry of Planning, 1988.
- Muis, J., "Current Value Accounting in the Netherlands: Fact or Fiction? ", The Accountant's Magazine, Vol.79, November 1975, pp.377-379.
- Mueller, G. and C. Smith (ed.), Accounting : A Book of Reading, New York: Holt, Rinehart and Winston Inc., 1970.
- Murquis, A., "General Concepts of Uniform Accounting System in Iraq and Egypt", The Iraqi Journal of Economics and Administration, Research no.2. Vol.8, Baghdad, 1980 (in Arabic), pp. 115-131.
- N C C M D., Costing System Actually Adopted in Iraq Enterprises, Baghdad: Al- Zaman Press, 1973 (in Arabic).
- National Westminster Bank, Iraq: An Economic Report, London: Westminster Bank, 1986.
- National Westminster Bank, Iraq: Economic Report, An overseas report series, London: Westminster Bank, 1986.
- Nobes, C. and R. Parker, Comparative International Accounting, London: Philip Allan, 1981.
- Octavio, B., "Financial Recuperation for Economic Expansion", in H. Ellis, The Economy of Brazil, California: University of California Press, 1969.
- Paton, A. and R. Stevenson, Principles of Accounting, Ann Arbor: George Wahr, 1916.
- Pennington, R., The Companies Acts 1980 and 1981 a practitioner's manual, London: Lloyd's of London Press, 1983.
- Philips Company Annual Report 1970.
- Philips Company Annual Report 1981.

- Philips Company Annual Report 1986.
- Philips Company Annual Report 1987.
- Philips Company Annual Report 1988.
- Price Waterhouse International, "International Survey of Accounting Principles and Reporting Practices", New York: Price Waterhouse, 1979.
- Purdy, D., "Disclosure of Information", Accountancy, Vol.84, December 1973, pp.21-23.
- Radwan, A., Accounting in the Socialist Sector: Uniform Accounting System, Mosul: Mosul University Press, 1977 (in Arabic).
- Ray, A., Cost-Benefit Analysis: issue and methodologies, Baltimore: John Hopkins Press, 1984.
- Roemer, M. and Stern, J.J., The Appraisal of Development Projects: A practical guide to project analysis with case studies and solutions, New York: Praeger Publishers, 1975.
- Samuels, J. and J. Oliga, "Accounting Standards in Developing Countries", International Journal of Accounting Education and Research, Vol.18, no.1, Fall, 1982, pp.69-88.
- Sandilands Committee, Inflation Accounting : Report of the Inflation Accounting Committee, London: HMSO, Cmnd 6225, 1975.
- Scapens, R., Accounting in an Inflationary Environment, London: The MacMillan Press Ltd., 1981.
- Schmalenbach, E., "Dynamic Accounting", 12th ed., translated by Murphy and K.S. Most, Gee and Co., London, 1959.
- Schmidt, F., "The Importance of Replacement Value", The Accounting Review, Vol.5, September 1930, pp.235-242.
- Schmidt, F., "Is Appreciation Profit?", The Accounting Review, Vol.6, December 1931, pp.289-293.
- Scott, G., "A Business Economics Foundation for Accounting : The Dutch Experience",

Accounting and Business Research, Vol.1,
Autumn 1971, pp.309-317.

- Shalash, A., "Development of Iraq 1950-80, with Special Reference to Changes in the Labour Force in a Planned Economy", Unpublished Ph.D. Thesis, University of Salford, 1983.
- Siddiqi, M., The Economic Enterprise in Islam, Lahore: Islamic Publication, 1972.
- Solomons, D., "The Solomons Guidelines: A reply to the Critics", Accountancy, August 1989, pp.12-23.
- Stamp, E., "ED 18 and Current Cost Accounting: A Review Article", Accounting and Business Research, Spring 1977, pp.83-94.
- Stamp, E. and A. Mason, "Current Cost Accounting: British Panacea or Quagmire", The Journal of Accountancy, April 1977, pp.66-73.
- Stopford, J. et al., The World Directory of Multinational Enterprise", London: Macmillan Press Ltd., 1980.
- Summer, T., "Accounting for Inflation in Brazil..The Effect of Monetary Correction in 1980", Sao Paulo: Arthur Andersen, 1981.
- Sweeney, H., "Capital" The Accounting Review, Vol.8, September 1933, pp.185-199.
- Syvrud, D., Foundation of Brazilian Economic Growth, California: Hoover Institution Press, 1974.
- Taylor, B. and S. Turley, Regulation of Accounting Disclosure, New York: Basil Blackwell, New York, 1986.
- Tierney, C., "The Index Number Problem", in "Reporting the Financial Effects of Price - Level Changes", Accounting Research Study No.6, New York: AICPA, 1963, pp.61-62.

- Tweedie, D. and G. Whittington, The Debate on Inflation Accounting, London: Cambridge University Press, 1984.
- Wanless, P. and D. Forrester, Reading in Inflation Accounting, New York: John Wiley, 1980.
- Warriner, D., "Money in Iraq", in D. Warriner, Land Reform and Development in the Middle East, London: Oxford University Press, 1962.
- Westwick, C., "The Lessons to be Learned from the Development of Inflation Accounting in the UK", Accounting and Business Research Vol. 10, 1979-80, pp.353-375.
- World Bank, "World Development Report", The International Bank for Reconstruction and Development, Washington, 1979.
- Yladoo, E., "Depreciation Under Condition of Changing Prices", Unpublished MSc Thesis, University of Baghdad, 1985 (in Arabic).