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AN INVESTIGATION OF SOME FUNDAMENTAL
LIMITATIONS OF NATIONAL AND FINANCIAL
ACCOUNTING STATISTICS : WITH SPECIAL
REFERENCE TO EGYPT AND THE
UNITED KINGDOM

A Thesis submitted to the Management Centre
for the Degree of Doctor of Philosophy

By

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SYNOPSIS

This thesis has investigated the question of the uses and limitations of national and financial accounts by concentrating on four objectives.

The first is to review the basic uses of each of the national accounts considered in this study, i.e. national income accounts, national balance sheets and flow of funds accounts, in the arena of economic analysis and government policy making. Discussion of the usefulness of these accounts for the circumstances of the developing economies has also been incorporated.

The second objective is a descriptive and comparative critique of the experience of Egypt with the flow of funds system and public companies' accounts in comparison with their British counterparts. It also deals with the initial philosophical approach of Egypt toward the construction of sector balance sheets.

The third objective is to develop a critical approach which is applicable to the current framework, methods and composition of these accounts in general and with specific relevance to developing economies. Special emphasis has been placed on the limitations involved in the recent U.N. proposal of national balance sheets. Its relevance for developing economies in terms of structure and the sources of information have been considered with reference to their current state of national accounts and their special circumstances. The limitations identified in these financial accounts are highlighted in an attempt to assist in the fulfilment of their implied objectives.

The fourth objective is to propose modifications to the current structure of the financial accounting statements of the Egyptian public companies to provide greater assistance to the government. The over-lapping functions of the data collection and controlling agencies and their effect on the information generated by these companies are also examined.

It is concluded that this critical appraisal of both the U.K. and the Egyptian financial accounts identifies the areas where further scope for improvement can be achieved. The appendix provides detailed financial accounting data on the Egyptian public companies sector which hitherto has been unavailable outside Egypt.

Key Words: Uses, Limitations, Accounts, Egypt, U.K.

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CHAPTER ONE

The Implications of Accounting Information for the Management of the Economy - Background and Introduction to the Study

1.1 Introduction:

This chapter is concerned with a general theoretical survey of the importance of the accounting information and its implication in the management of the national economy, starting with a brief review of the evolution of the accounting function.

The importance of the accounting information in the development and management of the developed (western/socialist) and developing economies will briefly and generally be discussed as an introduction to the study.

The basic needs of government, including the compilation of national accounting statistics, from the published accounts of companies, will also be outlined.

The chapter is closed by a statement of the problem to be tackled in this research together with the main hypotheses that this study investigates and the possible significance of the present work. The limitations, methodology and the general framework of the study are also included.

1.2 The Evolution of the Accounting Function:

When accounting systems were first introduced they were generally considered to be an essential part in an organisation. The main task was gathering, processing, recording and communicating financial information concerning the management of the enterprise (82, p.79).

In these early days much of the accounting information disseminated in the final accounts of an enterprise was, in most cases, for the internal use of the management. But with the passage of time and particularly when the ownership had become separate from the management function, it became increasingly clear that the accounting function must also serve other users outside the enterprise, namely the shareholders.

The importance ascribed to the role of the shareholders brought a new dimension to the function of accounting, where the major purpose of the published accounting report was to furnish financial data for them. This view was reflected in Recommendation No. 15 issued by the Institute of Chartered Accountants in England and Wales, (186, p.1):

"The primary purpose of the annual accounts of a business is to present information to the proprietors, showing how their funds have been utilized and the profits derived from such use".

This primary function of accounting has been further strengthened in almost every country by legislation.

Since the beginning of the twentieth century accounting information has reached a stage where it can serve varied groups and purposes. The discipline of accounting is, therefore, no longer restricted to business management or to shareholders.

The increasing importance of published accounting information has accompanied the evolutionary process of economic and political changes. One writer illustrates this importance as follows (6, p.155):

"A generation ago few people were interested in business accounts ... The great economic and political changes of the past few decades have brought us to a situation in which the summary accounts of business are stacked off as public domain, and the profits of business are viewed as matters of public concern. Business accounts are now being watched, analyzed and made use of not only by management and shareholders and regulatory commissions and competitors, but also by tax collectors, economists, statistical agencies, consumer organizations and trade unions. All those now seek vital information in these accounts".

While Lee, (121, p.242) has suggested that the changing function of accounting information has been due mainly to:

"... the increase ... in the degree of public interest in corporate affairs ... the equivalent development of capital markets and investment communities, (and) ... a growing awareness by accountants of their responsibility to persons other than those with whom they have a contractual relationship; ... In other words, ... company profit and loss accounts and balance sheets have become general purpose statements for potential use by a variety of users ...".

Within today's large companies, which control an increasing proportion of a nation's resources, accounting has become one of the most important and difficult functions. The increase in the size of companies and their activities imply that more diversified groups are coming into existence, possibly all of whom may have different needs for accounting information. Now, not only shareholders but other parties, such as the government, evaluate the performance of companies.

Indeed, the government uses much of the information disseminated in the companies' accounts to manage and control the economy as well as in the construction of the national accounting statistics. These uses have

been clearly stated by Sandilands, (161, p.53) as follows:

"The Government has stated in evidence to us that company accounts are an important source of the statistical material on the basis of which much of economic and industrial policy is formed or influenced. The Government ... still relies on the material in published accounts for a good deal of its information".

Although the government is able to collect whatever information it needs from companies, published accounts of these companies comprise a major part of the state's information needs. But when it comes to the published accounts of the public/nationalised industries over which the government has direct control, the needs of government should be the fundamental consideration in deciding the information to be disclosed. Such accounting information will be of major importance to government as a means by which it can perform its control function and assess the efficiency of the working of these public undertakings.

The post-war political and economic environment, and in particular the foundation of regional blocks, underscore the potential for economic exchange across the national boundaries, as a consequence of which the demand for accounting information undoubtedly will increase. Hence the accounting function has to meet a new kind of demand on its services, in which the accounting information is not only needed by the interested parties within the national economy but also by those on an international level.

1.3 Accounting and the International Economy:

Economic integration has been regarded as one of the great historic advances of this century. Increased international business relationships would bring about a number of changes in business processes. One of these

will be a need to use more foreign accounting data and reports.

The international flow of goods and services is stimulated, to a great extent, by opportunity for profits and confidence in the economic stability of the countries being traded with. The primary function of accounting, in this context, is the part it plays in the maintenance of the mutual confidence which is necessary in business relationships.

Other factors have contributed to the use of accounting information at the international level. One of these is the System of National Accounts (SNA) issued by the United Nations which was designed to make, among other things, sound appraisals and decisions on domestic as well as international bases and to compare between countries of the same and/or different stages of economic development. The recent developments in national balance sheets and flow of funds accounts combined with the analyses made possible by them for government policy and in economic analysis, have been considered important factors. Associated with this are the requirements of the international organisations such as IMF, World Bank, OECD and IFC which have emphasised the necessity of keeping and producing accounts with acceptable accuracy and resolution.

1.4 Accounting and the Developing Economies:

One of the conclusions made by an advisor to developing economies is that if national goals of industrial and agricultural development are to be realised, the scope of accounting in these newly emerging nations must be broadened (122, p.18). The reason behind the emphasis on broadening the scope of accounting in these developing nations is that it provides essential techniques and information both for the measurement of available resources and for the control of their uses.

The accounting needs for the different aspects of national economic planning in developing economies were portrayed in the current literature of accounting. These may be summarised (131, 70, 177, 75) as follows:

- (a) Accounting and planning are two complementary techniques; planning aims at the efficient allocation of the country's scarce resources. Accounting is concerned with the administration of the economic resources.
- (b) Accounting is the main source of information which will help the construction of national accounts, on the basis of which organisation, evaluation and revision of national economic plans would be possible.
- (c) Business accounting is most helpful to the government. It provides standard data which helps to improve the government's functions. Companies' accounts furnish the necessary information for assessing the performance of the different economic units.
- (d) Accounting helps to improve the functioning of the development process. It may improve both the efficient allocation of resources and the efficiency of their outputs.

Obviously these functions of accounting can, of course, be performed in both developing and developed nations.

It would be useful to discuss the importance of financial accounting information to the economic development of emerging economies and to clarify the role it plays in the process of economic development of these countries.

Financial accounting has dual goals in economic development. First as a generator of the most important financial information on the basis of which national policies and expansion would be facilitated. Second it could build investors (local and foreign) confidence and interest by disclosing reliable and sufficient information that could mobilise large numbers of investors and, consequently stimulate the development of capital markets.

Both tasks are important and will play a key role in the nation's economic planning and progress. As an example of the impact of accounting information on economic development, the interdependence of the corporate report and the development of a capital market in a developing economy will be outlined in broad terms.

In writings on the problem of development in the emerging nations, it is always admitted that a close relationship exists between the low rate of savings and the development of a capital market. This is a direct relationship, thus, the low rate of savings tends to limit the development of a capital market, and consequently the formation of capital. While a capital market cannot operate if small savings are not mobilised and made available to the entrepreneurs.

The company's reports and accounts could help to break this circle by assisting to create badly needed investor confidence (local or foreign) through the disclosure of objective, reliable, accurate and timely information to the national and/or the international financial community (122, 70, 74). Thus an organised and effective capital market may exist to channel private and foreign investments into industrially productive activities.

It has been argued by Wai and Patrick, (194, p.258) that the availability of reliable information is one of the conditions required to enable small companies in developing economies to issue securities through capital markets.

Thus one of the most important functions of the company's accounts in the development of capital markets is to disclose information relevant for the measurement of the company's efficiency and performance.

Because a developing economy can not be solely dependent upon its own resources in securing the needed capital, recourse to the international community would seem to be inevitable. Evidently, most developing nations of today benefit from the services of international organisations.

These international organisations not only prefer that the recipient country's government guarantees payment in case of default, but also demand from the firms receiving a loan certain financial information concerning their activities. As an example of the nature of this information, the following is cited from the bulletin issued by the International Finance Corporation, (110, p.1):

"Investment agreements between various enterprises and IFC often provide for installation and maintenance by borrowers of accounting and cost control systems and the appointment of independent auditors. These agreements also deal with financial reporting to IFC and related matters. While each IFC investment agreement recognizes the circumstances of each individual case, certain financial information is submitted in all cases. The type of information desired corresponds to the information usually needed for private institutions".

In conclusion it should be observed that the financial information furnished by accounting can and does play a vital role in supporting the economic development process in developing economies. In these countries, the necessary loans and capital are not likely to be forthcoming from

domestic or foreign sources unless investors have a clear picture of the financial position and prospects. This applies not only to companies but also to a nation as a whole. It is the function of accounting, business accounting no less than national accounting, to furnish this information.

1.5 The Implications of Accounting for the Management of the Economy:

During the last few decades the role of accounting in facilitating the allocation of scarce resources and in the formulation of government policy in the western world, the Soviet bloc and the developing nations, has been widely publicised.

In the western world accounting is a major source of data for managerial decision making at micro and national economic levels. National accounting has been regarded as an indispensable instrument for government on the basis of which to base the national policy.

The importance of accounting in the industrial western economies has grown so rapidly that its function is becoming a pre-requisite for a high degree of industrialisation. In this sense, Bevis, (26, p.30) suggested that:

"... an accounting function of high order is characteristic of a successful industrial economy. It is further suggested that this relationship is essential rather than accidental and that, therefore, a high degree of industrialization and the attendant economic progress cannot be developed without a highly developed accounting function which make possible the flow of indispensable economic data".

It appears, then, that accounting and the information it offers may be regarded as an inherent and coherent part of a successful industrialised economy. It also helps the construction of governmental policy and its control of the national economy.

In the socialist countries, particularly the Soviet Union, the significance of accounting as an instrument of planning and management of the national economy was clearly underlined and appreciated by Lenin whose remark on its role in society is now widely quoted by various Soviet as well as western writers*.

The importance of accounting has been much emphasised in the socialist system. For example, it has been argued by Campbell, (38, p.1) that in the management and control of the giant Soviet corporations, the role of accounting is much more decisive than in any capitalist economy. The whole process of preparation and control of the national economic plan comes within the range of accounting.

The developing nations are increasingly becoming conscious of the importance of accounting functions for their economic development. Enthoven, (74, pp. 29-30) mentioned that a fundamental accounting approach is most needed within the economic structure of the developing nations while the relevance of cost accounting clearly was established from the view point of management of a firm.

The potential utility of cost accounting information in economic management and public policy at a national level also hardly needs to be emphasised. It would enable policymakers to base their decisions on facts and figures rather than guesswork.

* During the summer of 1917 and some three months before the October Revolution in which Lenin and the Bolsheviks assumed political power, accounting was assigned a major role for the management of the future socialist society. In this context, Lenin, (28, p.2) wrote:

"Accounting and control - these are the main requirements for 'regulation' for the correct functioning of the first phase of the communist society".

To illustrate, it has been argued by May, Mueller, and Williams, (127, pp. 90,115), that cost accounting information has been used in the service of national policies and economic management and has helped the government to prevent monopolies and price discrimination between various regions. They illustrate their point with two cases. In the first case a large commercial airframe manufacturer made an offer to combine its activity with another large similar company. The cost structure and financial reports were analysed and studied. The results revealed that:

- (a) Both companies if combined would control 70% of the domestic airframe market.
- (b) The optimal economies of scale had already been achieved in both companies individually. Thus no significant cost reduction would be realised from the proposed merger.
- (c) The combination would create a monopolistic company.

On the basis of these arguments, the U.S. Justice Department sought a court order to prevent the merger.

In the second case a large pharmaceutical company had six different price schedules; the price varied according to country, region, type of outlet. To justify these differences in prices, the company was asked to present its cost accounting data. Analysis did not sustain their pricing policy, and the company was forced to revise its pricing structure.

Cost accounting information will be of help to governments in setting out the guidelines and pricing policies of the public undertakings. For example, it has been quoted by Coopers and Lybrand, (55, p.97) that the

main guidelines of the pricing policy of nationalised industries are (Ref Cmnd 3437):

- "(a) ... a nationalised industries' revenue should normally cover their accounting costs in full;
- (b) ... pricing policies should be devised with reference to the costs of the particular goods and services provided.
- (c) ... in addition to recovering accounting costs, prices need to be reasonably related to costs at the margin and to be designed to promote the efficient use of resources within industry ..."

The importance of cost accounting information in the Soviet economy is expressed by Campbell, (38, pp 16-17) who mentions that the whole system of prices and costs is based on cost accounting information.

From what has already been mentioned, it is evident that cost accounting information is a valuable instrument for the government by which they can:

- (a) assess the effective utilisation of national economic resources,
- (b) facilitate comparisons of similar industries either in the public or the private sector,
- (c) detail a pricing policy,
- (d) gather facts about the industries which are of considerable value to the national economy.

The use of cost accounting information is not limited only to the areas discussed above, it has also been used in other spheres of economic analysis at a national level. Among the most important uses is project appraisal.

When an investment decision is made without adequate and accurate cost accounting information, the possibility of wasted economic resources is increased*. While the availability and analysis of the cost components of a project may help regulate its correct functioning.

In Egypt, for example, it has been found that the systems used in the management of public enterprises have suffered from some drawbacks, and accordingly several of the projects implemented by these enterprises have constrained economic development efforts**. Analysis of the financial reports of companies revealed that their cost structure is not accurate, as a result of which the companies faced severe problems in the form of idle capacities (both plant and manpower), foreign currency bottlenecks and operational waste. The NCPEA (National Council for Production and Economic Affairs) recommended, on the basis of this analysis, the development of these public enterprises in order to improve its efficiency. It granted the necessary authority to the chairmen of these enterprises to allow them to decide upon their pricing policies and the method of improving productivity (142, p.3). It is cost accounting information that

* Seiler, (178, p.653) gives evidence of the effect of inadequate cost accounting information for planning within the limited resources of a developing country. He explains what happened in a Latin American country, when a decision was taken to construct a plant for manufacturing chemical fertilizer. Upon completion, at a cost of \$26 million, it was found that the cost of production considerably exceeded the cost of imported fertilizer. The plant operated for only a few months before being closed. The lack of adequate, accurate and sufficient cost accounting information in the decision making process was the main drawback in the implementation of an apparently beneficial project and which resulted in the misdirected efforts and the consequent wastage of scarce national resources.

** According to a statement by the Minister of Finance in Al-Ahram (Daily), 8th July 1975, the public enterprises' losses cost the Treasury some £E92m in 1974 in the form of subsidies to companies.

helped the NCPEA to issue its recommendations by which, it is hoped, to free the Egyptian public enterprises from bureaucratic restrictions.

It may be concluded, then, that cost accounting information is of fundamental importance for the management of the national economy. Its importance has grown from the desire of a country to accelerate its economic growth and technological development. This desire creates a situation that demands careful planning, adequate control and factual information for decision making.

The above discussion indicates that management of the economy - developed or developing - involves the control of resources to produce results. Consequently plans have to be made and decisions have to be taken. Performance of these functions would be greatly enhanced by receiving relevant, sufficient and accurate data on the basis of which realistic national policies can be formulated. Accounting, in this respect, has been regarded as a major quantitative information source for the management of the economy. The specific uses made possible by national accounting information for government policy and economic analysis comprise an essential part of this work. Some of the uses of national balance sheets and flow of funds accounts will be discussed in later chapters with particular reference to their utility for developing economies.

1.6 Basic Needs of Government from the Published Accounts of Companies:

It has been mentioned earlier that the published accounts of companies furnish a good deal of the government's information needs. The government uses this information for a variety of purposes, including the construction of national accounting statistics as well as assessing the

performances of these companies. Therefore the quality and quantity of this basic data may have a significant effect on the behaviour of government when making decisions in respect of these companies, particularly those publicly owned.

The following may be considered the basic requirements of the government from the published accounts of companies, particularly those in public ownership, over which the government has direct control:

(1) Greater Disclosure of Information:

The final accounts of public enterprises/nationalised industries should be presented to the government in such a way as to influence its actions. The more directly the government uses the accounts as first hand observations, the lesser its dependence on the second-hand information, and the possibility of manipulation errors may be avoided.

The greater the detail and variety of the data disseminated in the financial statements of these companies, the more effective the government actions could be, and the better the management of these industries. For example, the greater disclosure of information could benefit the government by:

- (a) identifying a company's development potentials,
- (b) identifying, at an early stage, the problems and bottlenecks facing a company,
- (c) assisting in the allocation of available and scarce resources.

In a recent article published in The Financial Times, (71, p.16), it has been argued that the improvements in planning, both in industry and by government, depend, to a large extent, on greater disclosure of information at the company level.

(2) An Up-to-Date and Speedy Information:

The effectiveness of the accounting information for the purpose of management and control of these public undertakings depends also on the speed with which the information is made available to the government. Unless the data reaches the government within an acceptable time limit, the information would lose most of its value for control purposes. This may lead to unproductive investments by the economic units.

(3) Communicating the Major Economic Events of the Company:

Because the government is most concerned with an entity of public ownership, its published accounts must provide information about relevant economic events* that might benefit the government in a variety of decision makings. Thus instead of producing information of aggregated values, the report and accounts of these companies must furnish information of a disaggregated nature about relevant economic events that allows either the government or other interested parties to generate the necessary information for their different decision making processes.

* Economic events would include most of the transactions recorded in the company's books. Such transactions, if disclosed, may influence the actions of decision makers, including the government. Examples are: extraordinary revenue/expenses, profits of the normal operations and company's contributions to social and environmental developments.

The disclosure of this type of information would enable either the government or even an investor to forecast the performance of the company in the future more precisely.

(4) Greater Uniformity in Preparation and Presentation of the Accounting Information:

A unified system of accounting (both cost and financial) is considered an essential step towards the development and improvement of accounting information at both micro and macro economic levels. It is generally aimed at the unification of all aspects of accounting information in order to increase the reliability, acceptability and comparability of the information disseminated either by businesses or by nations.

The preparation and presentation of the accounts of public companies on a uniform basis would enable the government to collect, analyse and compare the results achieved in these companies. This information would enable the government to understand and manage the operations of these enterprises more effectively.

The unification of this accounting information is not only desirable but also essential at the various levels of the economy.

At the company level, a unified system of accounts would undoubtedly lead to many other desired objectives. For example, the alternative stock valuation methods (FIFO, LIFO) lead to different values and hence different profit figures. Similarly, different accounting policies (eg depreciation, research and development expenditure and maintenance expenses) could have their impact on the company's profits for the year. Thus a standardised practice in accounting would be of benefit and would improve communications, facilitate understanding and enhance the confidence in the information provided.

On the national level, uniformity in the company's' accounts, both in preparation and presentation, could be of value for and facilitate the compilation of national accounting statistics.

It should be clear that while it might not be practical to enforce a detailed uniform accounting system for public enterprises, nevertheless some fundamental items of accounting information could be standardised to a greater degree in order to serve the governments functions, including national accounts construction. These items could be used to measure and compare the efficiency and performance of companies, industries and consequently the sector as a whole.

(5) Accounting Information of Current Value:

The presentation of company's' accounts in terms of current value (eg market value, replacement cost and CCA) is required not only for decision making purposes but also to facilitate the construction of sector balance sheets.

The need for accounting information expressed in current value has been widely recognised by the Inflation Accounting Committee and the professional accounting bodies. For example, one of the major recommendations of the Sandilands Report is the use of CCA as a basis for the preparation of final accounts, while the major professional accounting bodies in both the U.S.A. and the U.K. favour a system of valuation whereby price indices are used to adjust historic costs. Thus it is recognised that accounting information based on current value could be an important aid to decision making and would give a fair representation of the company's performance.

But the definition of current value represents one of the controversial

subjects even among accountants themselves. The reason for this is the difficulty in devising a suitable method of current value which will show adequately the effect of inflation on the company's financial status and which will be acceptable not only to accounting practitioners but also to the wide diversity of users of the information. Enthoven, (75, p.245), comments on this point when he mentioned that because accounting serves a wide variety of needs, it would be difficult to expect one singular valuation system to serve the various needs of all the users of the financial information. It may be argued that while this is true in the case of companies in the private sector, the situation may be different in public companies. This is because the basic purpose of the latter's published accounts is to serve primarily the needs of government, including the compilation of national accounting statistics.

(6) The Provision of Data Relevant for the Construction of National Accounts:

Business accounting comprises a large portion of the information needed for the construction of the various components of national accounting. A consequence of this is that the quality of the latter accounts depends, to a great extent, upon the reliability, relevance and accuracy of their input values derived from the former accounts.

The more the company's accounts conform to the classification of and the computation for national accounts, the more likely that the construction of a large part of national accounts will be easier and of an improved quality.

The importance of micro accounting information for the construction of national accounts has been recognised by economists. For example, Ruggles and Ruggles, (171, p.203) argued that the microdata set can

provide a valuable extension of the various components of national accounting, and the former data must be integrated with the national accounts. While Enthoven, (75, p.68) comments that the two branches of accounting systems (business and national accounting) are able to complement each other.

The extent to which enterprise accounting has contributed to the reliability of national accounting in Hungary is explained by Arvay, (13, p.55) who mentions:

"The reliability of national accounting is favourable in Hungary, as they are based mostly (92 per cent) on the bookkeeping data of enterprises, cooperatives and institutions. The bookkeeping system is uniform in all economic organisations in conformity with central regulations, and it takes into account the demand of computations for national accounting".

The company's accounts, therefore, should consider part of the data needed for national accounts. It may be possible, however, to extend the appeal which has been made by Revell, (162, pp.294-295) to include not only those working on capital formation but also those responsible for the accounts of companies to bear the interests of the compilers of national accounting statistics, including balance sheets, in mind. He further argues that separate studies to furnish data for national balance sheets, for example, could represent a waste of resources and he suggested that it may be wise for those who generate economic and financial data in which they are particularly interested should try to furnish the sort of figures and data that the compilers of national accounting statistics need. The production of these figures may help to reduce the number, and their inherent limitations, of alternative bases of obtaining this information. The limitations associated with these bases (statistical inquiries and

surveys) will be discussed in later chapters*.

1.7 Statement of the Problem:

National accounting and the information it generates has now advanced to the point where it is regarded as a coherent part in influencing governmental policy and in economic analysis. Improved national economic statistics can accelerate the development of advanced state information systems which in turn assist national planning, control and decision making.

In the literature of economics and national accounting there have been several detailed presentations on the concepts, structure and uses of national income accounts. Also, the recent development of sector and national balance sheets together with flow of funds accounts has resulted in significant changes in the state's information system and in economic analysis. The academic studies of Revell and Goldsmith together with the U.N. reports on national balance sheets showed clearly the substantial uses of these balance sheets for national economic policy and economic analysis. The work on flow of funds accounts showed similarly the concept, structure and uses to which these accounts are designed to fulfil.

The basic limitations involved in the present structure of these accounts and balances have been almost overlooked, Morgenstern's study of the accuracy of economic observations states (133, p.257) that:

"The almost religious attention paid to 'GNP' - it being continually used and quoted in the teaching of economics as well as in Government and in the business community - would lead one to expect that criticism

* see Chapters 2 and 4.

would be reacted to sharply. This has not been the case. The textbooks on national income and macroeconomics show little if any evidence of the awareness of these difficulties and limitations. The trade journals likewise go on accepting the statistics at face value and do not seem to be conscious of their severe limitations. This is a thoroughly unsatisfactory state".

When national balance sheets and flow of funds accounts were introduced a decade ago, one would expect to find that their structure, composition and uses would have also been subject to criticism and awareness of their limitations. But the current literature lacks such criticism of the structural and compositional aspects, particularly of national balance sheets and to a lesser extent flow of funds accounts.

It seems, however, that in the absence of identification of these limitations, not only the uses made of these accounts and balance sheets would be impaired, but also the government may be misinformed and consequently may mismanage the economy.

Furthermore, most of the major analytical uses made possible by national balance sheets and flow of funds accounts are discussed in the current literature with developed economies in mind. The potential application of the information generated from these accounts and balances for developing economies seems to have been overlooked. It follows that the current literature lacks rigorous analysis of the possible application of the many uses made of these accounts and balances and their relevance to developing economies.

Moreover, the current literature on national balance sheets concentrates mainly on discussions on the methodological and practical problems involved in the compilation of balance sheets based on the experiences of the United Kingdom and the United States. At a time when other countries' experiences

(when their circumstances, in terms of stages of economic development, economic structure and the national bookkeeping systems, are quite different from those of the U.K. and the U.S.A.) in the compilation of national accounting statistics have become of international concern, the lack of this information may represent a serious deficiency. It is hoped that by discussing Egypt's experience in the field of:

- (a) Flow of funds accounts
- (b) Public enterprises' accounts
- (c) Methodological and practical problems involved in the compilation of:
 - (i) Flow of funds accounts
 - (ii) Balance sheet data in respect of particular sectors
(public enterprises sector and the organised private business sector)

a step will have been taken toward remedying the present deficiency.

1.8 Main Hypotheses of the Thesis:

The main hypotheses that will be investigated in this research are as follows:

(1) That the accounting information currently disseminated in the present structure of:

- (a) National Income Accounts
- (b) National Balance Sheets (with special reference to the U.N. proposal)

(c) Flow of Funds Accounts

is constrained by certain limitations that could impair the uses assigned to them by economists.

(2) There are specific differences between developed and developing economies in their needs and the benefits associated with national balance sheets and flow of funds accounts.

(3) That the recommendation made by the recent U.N. report on the statistical sources for national balance sheets may not be directly relevant to the circumstances of developing economies.

(4) That the present information disseminated in the Egyptian public enterprises' accounts, with reference to the British nationalised industries' accounts, fails to fully satisfy the basic needs of government from the companies financial reporting.

(5) That modifications should be made to the present form of the financial statements of the public enterprises in Egypt in order to provide greater assistance to the government in performing its functions, including the compilation of national accounting statistics.

The main reasons for the above hypotheses on which this research is based is to scrutinise the current limitations of the information disseminated in national and sector financial accounting statistics of developed countries (eg U.K.) compared with Egypt as a developing country.

The uses which these accounts and balances are designed to fulfil will be generally reviewed and analysed. Special reference to their uses for

developing economies is also discussed. The reason is to specify the differences between developed and developing countries in terms of the utility of these accounts, particularly national balance sheets and flow of funds accounts, and to highlight the contrast which might be expected to emerge.

The recent "Draft International Guideline on the National and Sector Balance Sheet and Reconciliation Accounts of the SNA" seems to have overlooked the circumstances of developing economies. In this respect, and before the draft can be put into action, an assessment of the statistical sources and methods recommended by the draft and their relevance to developing economies seems to be essential and desirable. Many would agree with the fact that the uses of statistical information whose basic sources are questionable may not produce information useful for national balance sheets. It is for this reason that the recommendation advocated by the recent U.N. report needs some revision in the light of the criticism that will be discussed in this research. One reason for raising this question is that Egypt, through her limited experience in national balance sheets, has made certain inquiries to collect part of the basic raw data needed for the compilation of balance sheets. Though her approach differs from that recommended by the U.N., it was successful in gathering much of the data needed for the sector balance sheet. Thus, its discussion may hold advantages for other developing economies. While the U.N. approach currently practised by a developed economy (eg U.K.) is suffering from certain drawbacks.

The reason why this research is partly concerned with the published accounts of the public enterprises/nationalised industries of both Egypt and the U.K. is based on the fact that these public undertakings occupy a central role in the economy of these two countries. In Egypt, for

example, the contribution of the public enterprises to total industrial production during the period 1965-1970 ranged from 70% to 80%. While the value added generated ranged from 76% to 80%, and their contribution to the total gross fixed capital formation of the industrial sector ranged from 85% to 95% (41, p.9). The contribution of these enterprises to the total of Gross Domestic Income in Egypt in 1974 was 43.6%, while its share in the total production realised during the same year accounted for 52.7%, (138, p.371).

In the United Kingdom, the NEDO Report: "A Study of U.K. Nationalised Industries : Their Role in the Economy and Control in the Future", revealed that the British nationalised industries are making the following contributions to the national economy (143, pp.7-8):

- (a) more than 10% of the national product
- (b) nearly 20% of total fixed investment
- (c) that they are the main suppliers of energy, communications, steel and transport
- (d) that they are the fourth largest employers in the country
- (e) that they account for about 33% of all the plant and equipment bought by British industry
- (f) that they are the sole domestic customer of several sectors of industry.

Because their influence on the performance of the economy is great and the economic resources they control are enormous, they are a matter not only of prime governmental concern but also of national concern.

Determination of the factors that detract from the usefulness of their published accounts and balance sheets are thus important.

In the last few years suggested modifications to the final accounts have been made in order more adequately to serve the needs of the users. This raises the question "have these efforts considered the government and national accounting needs?". If the answer is 'No', then one may ask "have these considerations been overlooked?". In the case of private companies there are certain problems concerning the feasibility and practicality of considering such needs in their accounts. With nationalised industries, where the government, in theory, has direct control, these problems should not exist. This fact combined with the importance of companies' accounts for the compilation of national accounting statistics, give the reason on which the last two hypotheses are based.

1.9 Significance of the Study:

Nowhere in the current literature (to the best of the author's knowledge) are there reports or evidence of a comprehensive discussion of the limitations that detract from the usefulness of national accounts identified in the research hypotheses, particularly national balance sheets and flow of funds accounts.

These accounts directly influence the government in performing its planning and controlling functions. As the government both produces and uses this accounting information, the inherent deficiencies, in both their preparation and presentation, need to be identified. This may allow greater fulfilment of their designed objectives.

Those who work in the field of national economic statistics and in

economic analysis in both developed and developing nations may find that the identification of problem areas needs to be given greater consideration than it was in the past. Of late the emphasis has been placed more on the uses of these accounts.

Should the deficiencies advocated in the hypotheses of the present structure and presentation of these accounts be confirmed by this research, the result could have a significant impact on the problem of improving national accounting statistics. This is a problem with which the National Statistical Authorities of many countries as well as international organisations have become actively concerned.

The limitations of these national accounts that may emerge from this research could indicate possible areas for improvement. And for those countries concerned with the possible implementation of the recent development of national balance sheets and flow of funds accounts the identification of their current limitations may help to avoid the pitfalls that other countries have experienced.

An inevitable consequence of a failure to identify the limitations of these accounts, particularly balance sheets and flow of funds accounts, is a delay in both their improvement and uses for national economic policy and in economic analysis.. This delay may create doubt among theorists, of the analytical value of these accounts. For example, one writer (128, p.399) expresses his view on the U.S. flow of funds statistics as follows:

"... yet despite this vast and continuing outpour of data from the Federal Reserve's flow of funds statistical salt-mill, to the reviewer's best knowledge not a single important substantive contribution to the fields of money, finance and investment behaviour has resulted from the availability of data or from the special accounting format used to assemble and classify the figures".

It is hoped that the limitations investigated in this research may lead to improvements in these accounts and consequently accelerate their uses for national economic policy.

Moreover, discussion of the experience of Egypt in the area of flow of funds accounts and her limited experience in gathering part of the data needed for national balance sheets may be beneficial for similar developing economies which have not so far implemented such a system. Because of the very limited national experience in gathering and compiling balance sheet data, as reported by the United Nations*, the case of Egypt may be used to fill this gap.

As current literature lacks a comprehensive analysis of the current deficiencies of the accounts identified in the hypotheses, this research may be regarded as stimulating further thought and discussion on the design and dissemination of these accounts.

This does not however mean that by identifying their deficiencies, these accounts and balances are valueless. On the contrary, identification of their limitations may strengthen their application for economic analysis and government policy. In this context, Samuels (1974, p.181) writes:

"Frank recognition of the uses and limitations of national accounts can only strengthen their claim as a useful addition to our technical equipment for the analysis of social and economic phenomena".

It follows that the more thought put into identifying the limitations of these accounts, the greater the assistance for improving the design of the

* see reference (192), p.103

system and the greater the benefit of the information to policymakers and economic analysts.

1.10 Limitations of the Study:

For practical considerations, the research is limited in certain respects to specific areas:

- (1) The scope of the study will be limited to the national accounts and balances identified in the research hypotheses. The research examines the deficiencies of the dissemination of these accounts and balances as a main source of information for government. Realising, however, that proposals for reformation of these accounts and balances is not to be set by one individual, no intention, therefore, is made to set forth complete proposals for reformation of these accounts and balances. The emphasis will be on developing a critical approach that lends to improvements rather than on developing a complete set of principles, standards, rules and procedures for the construction of the national and financial accounting statistics examined in this study.
- (2) In examining the deficiency of national balance sheets, the research concentrates mainly on the recent report of the U.N. on sector and national balance sheets. This has been done in order to highlight the deficiency involved in this report in respect of sectoring the economy and the statistical sources and their relevance for developing economies.
- (3) The research deals with the general accounting framework of flow of funds accounts of both Egypt and Britain.
- (4) The Egyptian experience in gathering balance sheet data will only

be discussed in respect of particular sectors, ie the public enterprise sector and the organised private business sector. This is mainly due to the restricted availability of data and information, particularly in the present state of war in Egypt. For the same reason the Egyptian flow of funds accounts will only be investigated in the context of their conceptual and structural accounting framework.

(5) In examining the deficiencies of the published accounts of companies, the author deals only with business enterprises which are subject to direct government regulation and control. Also in dealing with the elements of the final accounts of the Egyptian public enterprises, the proposed modifications are limited to the area of financial accounting.

1.11 General Framework and Methodology:

With the research objectives and limitations in mind, a major part in each chapter dealing with national accounts and balances, identified in the research hypotheses, seeks to establish a sound foundation for the discussion to follow. This is achieved by inquiring into the uses made of these accounts and balances in economic analysis and for government policies as advocated by economists in the current literature of national accounting.

The text of this research is divided into eleven chapters. Chapter One is concerned with a general theoretical survey of the importance of the accounting information furnished by business enterprises. This importance has been discussed on three levels; international economy, developing economies and the management of national economy (developed and developing). The basic needs of government from the published accounts of public companies are also outlined. Chapter One is closed with the nature and

scope of this research.

Chapter Two reviews the uses made of national income accounts and identifies their major fundamental deficiencies as a source of information for government and economic analysis. Since national balance sheets and flow of funds accounts are a main focus of this research, five chapters are devoted to them. Chapter Three is concerned with a general review of the concept, development, structure and major advantages of sector and national balance sheets. Chapter Four is divided into two main sections. Section one examines the limited experience of Egypt in approaching national balance sheets, while section two identifies the main limitations that could impair the objectives to which national balance sheets are designed to fulfil. Special reference will be made to the U.N. report of 1974 on national balance sheets.

Chapter Five will be concerned with illustrating the accounting framework of flow of funds accounts for the national economy. It also investigates the major categories of their analytical uses for economic analysis and government policy. The extent to which these uses could benefit the developing economies will also be considered.

The flow of funds accounting system of Egypt compared with its British counterpart is the basis of Chapter Six. The first part of this chapter deals with the different accounting frameworks of the flow of funds accounts of OECD countries. Part two is devoted to examining the old and the new flow of funds systems of Egypt together with the problem areas that confronted the Egyptian compilers of flow of funds tables. The remainder of this chapter is devoted to a comparison between the Egyptian and the British flow of funds systems. The reason for this comparison is to highlight the essential differences between the structure and composition

of these accounts, their relevance to developing economies and the benefits to the users of these accounts. Chapter Seven is mainly devoted to identifying the current limitations of flow of funds accounts using the British and the Egyptian systems as a base for analysis.

Chapter Eight and Chapter Nine investigate, in detail, the deficiencies of the accounts of the public business sector in Egypt as a single important area comprising a basic input for the national accounting statistics. Chapter Eight deals with the problems of control and information gathering together with assessing their influence on the information communicated to the government. Chapter Nine identifies the major limitations that restrict the usefulness of these accounts, not only in Egypt but also with reference to the British nationalised industries' accounts, as a main source of information for government policy and in assessing the performance of these public undertakings.

An attempt will be made in Chapter Ten to remedy the current deficiencies of the structure of the final accounts of the Egyptian public enterprises. This is achieved by suggesting certain modifications in their financial statements to provide information relevant for government needs, including the compilation of the sector balance sheets.

Chapter Eleven consists mainly of a summary and conclusion of that which was discussed in the previous chapters.

1.12 Summary and Conclusion:

This chapter has been devoted to the importance of accounting information and its implication in the management of the economy. The nature, scope and objectives of this research have also been included.

Accounting information is one of the major factors needed for successful international business relationships (both at micro and macro economic levels) as well as the management of the economy. The increasing role of international organisations in financing development programmes, coupled with the government intervention in economic activity, particularly in developing economies, has resulted in increased demand for accounting information.

The implication of accounting information in the management of the economy has been discussed. The role played by cost accounting information was given as an example of how the accounting and the information it generates can assist in national planning, control and decision making.

Reference was made to the basic needs of government, including the compiler of national accounting statistics, from the published accounts of companies, particularly those of public ownership.

Because the accounting information may have a significant influence on the government when making decisions, the identification of its current limitations is a major basis for this thesis. However, the absence of an assessment of the recent developments in national balance sheets and flow of funds accounts and their relevance to developing nations, together with the very limited national experience in gathering data for balance sheet purposes represents a serious deficiency. The selection of Egypt as a case study to describe, investigate and analyse her experience in these two areas may be justified.

CHAPTER TWO

The Uses and Deficiencies of Economic Information of National Income Accounts

2.1 Introduction:

This chapter investigates the major fundamental deficiencies in the present structure of national income accounts. This investigation may reveal that the information generated by these accounts may not be ideally suited to the purpose assigned to them by economists.

The deficiency of these accounts is examined from two major standpoints: firstly the deficiency in and the lack of the basic data needed for their construction; and secondly the nature, structure and composition of these accounts.

National income accounts are a large subject, on which a number of texts exist at varying levels of development. The present chapter would not add to the weight of this material. In other words, this chapter will neither discuss the composition, structure and methods of presentation nor the theoretical and economic basis of these accounts as these subjects can be found in macro economic theory and national accounting textbooks. Nevertheless, this chapter will refer very briefly to their development and utility as a source of information for both economic analysis and the formulation of national economic policy. The deficiencies of these accounts will be discussed at a later stage in this chapter. It should also be clear that it is not intended to suggest practical solutions for these

deficiencies. The main purpose for the investigation carried out in this chapter is to identify the extent to which these deficiencies are influencing the quality of information conveyed to government and economic analysts through the media of national income accounts.

It is proposed to discuss these deficiencies in an opening chapter before proceeding to examine what national balance sheets and flow of funds accounts provide for national policymakers which they can not obtain from national income accounts.

2.2 The Historical Development of National Income Accounts - A Brief Review:

National income accounts are simply the sum of all individual incomes occurring during a certain period. Their origins go back to the 17th century, when the British 'political arithmetician' Gregory King made an inquiry into "The Annual Income and Expense of the Nation", for the year 1688. The French physiocrat, Francois Quesnay saw that the strengthening of economic sectors could not be achieved without the preparation of a tableau economique (202, 98).

The essence of national income accounts is that they provide a means of estimating the annual and/or quarterly flow of income and product. National income accounts are one component of the system of national accounting, the other components are:

(a) national balance sheets

(b) flow of funds accounts

(c) input-output tables

- (d) balance of payments.

The system of national accounting, then, is concerned with the provision of a general statement about the economic activity which has been taking place in the economy as a whole within a certain period. It has been defined as follows (68, p.11):

"Social accounting, then, is concerned with the statistical classification of the activities of human beings and human institutions in ways which help to us understand the operation of the economy as a whole ... (It) embraces ... also the application of the information thus assembled to the investigation of the operation of the economic system".

The interest of economists and politicians in preparing national economic tables, to give a statistical view in a series of aggregates for successive time periods, of the level of national income and its distribution among the various sectors of the economy, was further fostered by the British economist John Keynes (1883-1946).

The Keynesian approach in economic analysis marked the beginning of the development and structure of national income accounts. Researchers at that time were concerned with estimating the factors that determine the following:

- (a) size of national income
- (b) level of employment
- (c) equivalence of national saving and investment
- (d) relationship between supply and demand.

Subsequently, the use of national income accounts for economic policy and in economic analysis has developed at an increasing rate; starting at the time of the Great Depression and accelerating during the Second World War.

The desire to produce aggregate estimates of consistent and coherent national income accounts over the past few decades has been accelerated by:

- (a) the spread of the Keynesian idea and the macro economic approach
- (b) the pressing and complex economic problems, encountered during and immediately after the Second World War
- (c) the need of the government to monitor the effects of its economic policies.

The post-War period saw an even faster rate of acceleration. During each of these periods, governments were faced with many economic problems which necessitated the formulation of specific economic policies. In this connection information was required both on the total income and expenditure in the economy. National income accounts have been used to supply this information and became an indispensable instrument of national economic policy and management.

The work of A.L. Bowly in Britain and Simon Kuznets in the U.S.A. are examples of the efforts of this period. Following on from these efforts many interesting developments have taken place. One of these was the design of a framework of a system of national accounting by Richard Stone of Cambridge University.

After realisation of the potential value of national income accounts, and the fact that economic structure is different from country to country, an international committee of experts was called to improve, spread and standardise their conceptual basis and structure. The efforts of these international experts resulted in the following five national accounting systems which differ in detail and validity for application at the international level:

- (1) The first system was presented as a report to the United Nations in Geneva in 1947 under the title "The Measurement of National Income and the Design of Social Accounts". This was supplemented by a report from Richard Stone.
- (2) The second system was presented to the OECD at Cambridge (1950) under the title "The Simple System of Social Accounting".
- (3) The third system, a revision of the second, was presented to the OECD in Paris (1952) under the title "A Standardised System of National Accounting".
- (4) The fourth system was presented to and approved by the United Nations in 1953 under the title "A System of National Accounts and Supporting Tables" - commonly known as SNA, (108, pp.80-81).
- (5) The fifth system, a revision of the 1953 SNA, was presented and approved by the United Nations in 1968. This is commonly known as "The Revised SNA".

It should be noted that the revised SNA (1968) gave consideration to the changes required to make the system suitable to the circumstances of developing economies.

Nowadays, national income accounts are used almost universally. The general thought behind the spread of these accounts is their growing role as a basis for economic policy and management. The extent to which these accounts are designed to fulfil certain objectives will be briefly and generally reviewed in the next section.

2.3 The Functions and Uses of National Income Accounts:

Before discussing the limitations of national income accounts as a source of economic information for government and other interested parties, it may be desirable to state some of the uses made of these accounts.

One of the most crucial objectives of national income accounts is the creation of a framework of collecting and presenting economic information which could be suitable for describing the economic system of a nation during a period of finite length. On the basis of this information policymakers and economic analysts may formulate their decisions. Ruggles and Ruggles, (1970, p.1) mentioned that:

"National economic accounting has as its prime objective the creation of an information framework suitable for analysing the operation of the economic system".

Furthermore:

"In analysing the operation of the economy or in evaluating its performance the economist must consider information on this flow of transactions as a major part of his basic data".

While Stone, (1981, p.7) considers national accounts as: "a basis for collecting economic information".

One should not conclude that the collection of economic information and its presentation in the form of national accounts is an end in itself, rather it is the beginning from which this information will be used for a variety of purposes.

From this prime objective of national income accounts follow many others. A great deal of work, much of it by Stone, (181), Stuvell, (183), Bruns, (35), Ruggles and Ruggles, (172), Yanovisky, (202), Porter, (155), Barkay, (24), Mukherjee et al, (136) and many others, has considered the principal uses of national income accounts in economic policy and analysis in developed as well as developing countries.

Most economists have recognised that the information generated by national income account is essential in the study of income determination, monetary policy, capital formation, balance of payments, taxation policy and other similar problems necessary for economic management.

Ruggles and Ruggles, (172, p.10), for example, drew an analogy between the usefulness of the information disseminated in national income accounts and that of business accounts. The information generated from the latter is necessary for the successful management of a firm. Unless management is aware of production and plant capacity as well as the financial position of the firm, they are in no position to formulate policies. Similarly, the information of national income accounts is essential for the formulation of workable national plans and to study the results achieved and then make use of past errors to correct future policies.

Almost all countries now, whatever their economic system, have used national income accounts in their national economic policy.

In the capitalist developed economies, national accounts data is extensively used as a basis in the formulation of annual budgetary and fiscal policies, and as guides for forecasting the way in which the principal aggregates can be expected to change in the coming financial year assuming that other things remain equal.

In the socialist economies, where the state controls through regulations and directives (for example, the level of savings, the amount and composition of output and investment, and the structure of prices), the role of national accounts data is vitally important. In this classic type of centralised planning and control, the statistical information presented in the national income accounts is used not only as a guideline in the preparation of plans but also as a control to ensure that in each economic level action has been taken in accordance with the plans laid down at the centre.

In developing economies the achievement of their objectives, ie rapid industrialisation and accelerated economic growth, require a detailed and comprehensive framework of national accounting data. To achieve these objectives the availability of national income data is of paramount importance, the absence of this information will severely constrain the construction of their national development plans. But as Barkay, (24, pp. 357-358) comments the uses of national income data in these countries is conditioned by certain factors, such as: simplicity of the accounts' construction, accuracy of the data and the ability to be constructed in a reasonably short period. Although some of these conditions may not exist in the current practice of national income accounts of the majority of developing economies, some, including Egypt and India, still rely on the information derived from these accounts to formulate their economic planning and growth policies.

The areas of economic analysis and policy where the information generated by national income accounts plays a dominant role can be summarised in the following table: (p. 44)

The table clearly shows the extent to which national income data is used in different areas of economic analysis. The results obtained from this analysis may be used in:

- (a) interpretation of past trends
- (b) revision of an economic policy
- (c) economic forecasting and planning
- (d) explaining of an economic phenomena.

The information provided by national income accounts is not only indispensable in describing economic changes that occur in the economy but it would contribute to the formulation of many forms of sound economic policy.

In spite of the usefulness of national income data in the above areas, deficiencies in the method, content and presentation of these accounts could lead to misleading results and consequently inappropriate economic policies and analysis.

It is proposed to identify a set of basic deficiencies embodied in the current composition of national income accounts which deter from their value as a main source of information on which the accounts are designed to fulfil.

Table (2.1)
Areas of Economic Analysis and Policy in Relation to the National Accounts

Accounts	1	2	3	4	5	6	7
Activities	1,2	3,4	5,6	7,8,9,10	11,12	13,14	15,16
1. Financial claims 2. Net tangible assets				Studies of national wealth; analysis of productivity			
3. Commodities 4. Activities		Input-output analysis analysis of productivity	Consumers' demand analysis: studies of govt. spending	Models of stock- building and fixed capital formation; investment policy	Export Demand analysis		
5. Consumer goods/ purposes 6. Income and outlay		Production functions; analysis of productivity; analysis of factors shares	Distribution and redistribution of income; fiscal policy	Depreciation analysis; investment allowances	Studies of the return on foreign investment; double taxation policy		
7. Increase in stocks 8. Fixed capital formation 9. Financial claims 10. Capital finance	Studies of net worth		Analysis of saving behaviour	Monetary policy and liquidity preference	International finance and liquidity; long term foreign aid policy	Studies of capital gains and losses; capital gains tax policy	Studies of net worth
1. Current transactions 2. Capital transactions		Import demand analysis	Short term foreign aid policy	International finance and liquidity; long foreign aid policy	Analysis of balance of trade payments		
3. Financial claims 4. Net tangible assets				Capital revaluations			
5. Financial claims 6. Net tangible assets				Studies of national wealth; analysis of productivity			

Source: Compiled from Tables(1.6) and (1.7) in: United Nations "A System of National Accounts", United Nations, New York, 1968, pp.9,13

2.4 Major Fundamental Deficiencies of National Income Accounts as a Source of Information for Economic Policy and Analysis:

The deficiencies which could impair national income accounts for the uses for which they are designed will be generally examined from two major standpoints:

- (a) the inaccuracy or even the lack of the basic data needed for the construction of accounts
- (b) the deficiency embodied in the nature and composition of these accounts.

The current literature* has identified some of the limitations of national income accounts, examples are*:

- (a) lack of coverage for rural areas
- (b) problems associated with income distribution**
- (c) the treatment of services
- (d) accuracy and reliability of the basic data
- (e) aggregation problems
- (f) inadequate data base for measuring national income/output

* see for example, (11), (133), (144), (174), (150) and (146)

** An example is the lack of distinction between the income of small and large companies

Other deficiencies appear to have been either overlooked or inadequately detailed. Examples of these deficiencies are: publication delay, non-homogeneity in the accounts, by-product information and lack of coverage of both detailed financial transactions and stock variables. These deficiencies could be as significant as those identified in the current literature. Moreover, an up-to-date assessment of such a deficiency as the inaccuracy of the basic statistics used in the construction of these accounts would be of value in assessing the informational content of these accounts for government policy and economic analysis.

The usefulness of national income accounts may be diminished by one or more of the following factors:

- (1) inaccuracy and unreliability of the basic data
- (2) publication delay
- (3) aggregation and lack of homogeneity in the accounts
- (4) by-product information and deficiencies in the micro-set data
- (5) lack of coverage of financial transactions
- (6) the absence of stock variables (financial and physical)

Each one of these factors will be considered and analysed in some detail.

(1) Inaccuracy and Unreliability of the Basic Data:

When no accurate data is available from the middle level (imports, exports, corporate profits and production) accounts, the aggregate figures will have little validity or meaning. In other words, the quality of the basic data can either enhance or detract from the benefit of national income accounts.

The present input values of the aggregate figures can be illustrated by examining some errors involved in the basic statistics of some developed industrialised countries, namely the United States and the United Kingdom. The reason for this investigation is based on the belief that if these two countries, which are more likely to be best equipped with statisticians and data processing equipment, cannot produce accurate basic data, there is doubt that other countries, particularly developing economies, could do so. This doubt can usually be attributed to the shortage of trained statistical manpower and the difficulties in collecting statistical data from rural areas relevant for national income accounts construction.

One of the most important facts about all practical work in accounting - national no less than business - is that the data used as inputs to construct the accounts are deterministic. The users of the information in these accounts might suspect the reality of the economic phenomena being reported. This scepticism towards the results presented in the accounting statistics can be attributed to a belief that the real economic phenomena may differ more or less considerably from their reported conditions (79, p.180). Two cases are illustrated by a British newspaper, Labour Weekly, and by Sir Alec Cairncross.

An extract from Labour Weekly, (119, p.8), dated 15 October 1971 under the headline "Scandal of the missing exports", gives the general state of affairs of the basic statistics of national income accounts:

"HM Customs and Excise introduced a new system of recording export shipments this month. To those with short memories this may not seem much to write home about. But in fact is an event full of significance for the Labour Party, and its lessons deserve to be learnt and remembered.

"Victory for Labour in the last General Election seemed assured until, as George Brown said afterwards, it 'slipped through our fingers' in the closing stages of the campaign.

"And if one was asked to pinpoint the moment when Labour's popularity started to crumble, one might well say the Monday of election week - three days before polling day - when the Board of Trade published a surprisingly bad set of trade figures for May, which the Tories seized on to predict another devaluation and a 'ten bob pound' if Labour remained in office for another five years.

"The fact which did not emerge till November 1970 is that the trade figures for April and May - which went a long way towards losing Labour the election - were wrong. The Board of Trade was 'underrecording' exports and making the balance of payments figures seem worse than they were.

"This was not the first time: through most of the six years of the Labour Government there was persistent underrecording of exports by the Board of Trade, and this was an important factor in every sterling crisis in the Labour years.

"Incredibly, the Board of Trade system of recording exports - which was the cause of all this trouble - was only introduced by the Conservatives in 1963, a year before Labour came to power, and soon after the Conservatives came back to power in 1970, they scrapped the system and replaced it with a system similar to that used before 1963".

The article also included a table setting out the data in question.

An interesting point and relevant to the present discussion is the reliability of estimates which were developed by the U.K. Central Statistical Office (CSO) for its major components of national accounts. The reliability of annual estimates of exports and imports (goods and services) are given a "grade A" classification. The margin of errors which are allowed in these figures is ± 3 per cent, (126, pp. 39-42), the

level was clearly exceeded in the trade figures from January to May which were published by the Board of Trade in 1970*. The figures produced by the Board of Trade in respect of imports and exports is an example of the inaccuracy of this type of basic statistics.

For those who produce quarterly national income estimates based on these figures, the accuracy and reliability of their estimates are thus questionable. However, it might be argued that these figures are revised several times as more information becomes available and this will improve their accuracy.

These revisions could lead to a situation in which the users of these national economic statistics begin to estimate what the final figure might be. In this context, Sir Alec Cairncross writes (37, p.57):

"Even information that seems at first sight to be entirely reliable may turn out subsequently to be totally misleading because, after fuller consideration, the original figures are substantially altered. This has happened on several occasions in the U.K. and it happens, too, in the USA as well. One recent example is that of the statistics of British exports which were suddenly increased retrospectively by 2 to 3 per cent because it emerged that exporters were no longer filing returns as faithfully as they had done earlier. An error of 2 to 3 per cent may seem small, but it may make all the difference between a balance of payments surplus and a quite substantial balance of payments deficit".

In the United States the situation is similar to that of the U.K. Young, (204, pp.2-3) examined the reliability of the annual estimates of corporate profits in the United States before and after the July 1971 revision and presented them in the Table shown below:

* see the table in the article, p.8

Table (2.2)
Accuracy of the Corporate Profits in the
United States 1967-1970
 (Billions of Dollars)

	Annual Totals				Change from Previous Year		
	1967	1968	1969	1970	1968	1969	1970
Before July 1971	79.8	88.7	91.2	81.3	8.9	2.5	-9.9
Revised July 1971	79.8	87.6	84.2	75.4	7.8	-3.4	-8.8
Revision	-	-1.1	-7.0	-5.9	-1.1	-5.9	1.1

Source: Table (1) in Young (203, p.3)

The above table identifies the inaccuracy in the basic data. The table shows how the revision reduces the corporate profits by \$7 billion in 1969. Also the revision changes the corporate profits; from an increase of \$2.5 billion in 1969 (from the year 1968) to a decrease of \$3.4 billion. The inaccuracy of these figures would not only distort national income accounts, it would also mislead policy-makers.

These errors in the basic statistics are examples which throw some light on the accuracy of national income accounts in some developed economies.

In developing economies, the scope and the degree of the inaccuracy of their basic data may be similar or even worse to those facing the developed countries. The following Table provides some indication of the degree of statistical accuracy of countries grouped by continent.

Table (2.3)
Degree of Statistical Accuracy of Some
Countries in Various Regions

Accuracy Number	All 64	I 17	II 9	III 18	IV 20
<u>Continent</u>					
Africa	9		1	2	6
America, North	11	2	1	5	3
America, South	8		2	4	2
Asia	15		2	5	8
Europe and Oceania	21	15	3	2	1

Source: The Office of Statistical Standards of the U.S. Bureau of the Budget, as cited by O. Morgenstern (133, p.279)

Accuracy: I = very good, II = good, III = fair, IV = weak

It should be emphasised here, as Morgenstern states, that "bad" and "poor" in the degrees of accuracy were carefully avoided. If the degrees of accuracy are re-arranged as follows: I = good, II = fair, III = poor, IV = bad, it is possible to conclude that over 65 per cent of the national statistics of these countries are questionable. This is true of the statistics of African and Asian countries, as shown in the table.

The general state of affairs of accuracy and reliability of the basic statistics of these developing economies could be judged from the work carried out by Waterstone, (198, pp. 170-171) in "Development Planning : Lessons of Experience". Waterstone briefly deals with national income statistics of developing economies, He cited the following deficiencies:

- (a) absence of reliable statistics on the level of savings and investment
- (b) unreliable data on the level of unemployment
- (c) deficiency of the agricultural statistics
- (d) that reliable estimates of depreciation are not available
- (e) population statistics are often found to be inaccurate.

The extent to which the inaccuracy of these and similar basic statistics could mislead policymakers, and consequently not achieving the objectives to which national income accounts are designed, may depend on two major factors:

- (a) whether these statistics comprise a main input in their decisions
- (b) the size of the error.

Tables (2.4) and (2.5) discussed below provide evidence upon these two factors in Egypt:

Table (2.4)

Egypt - Government Services SectorAppropriation Account

<u>1970</u>			
Cr	£Em		Dr
Direct taxes	155.2	Current expenditure on goods and services	353.9
Custom duties	174.6	Wages and salaries	358.1
Indirect taxes	256.5	Social insurance	34.0
Surplus of business public sector	61.5	Interest	8.3
Interest	1.9	Expenses of reducing the cost of living	23.3
Other various sources	94.8	Subsidies and other transfers	122.0
Other transfers	27.3	Expenses - overseas	31.8
Revenue from overseas	110.0		
Deficit - current operations	49.6		
	<u>931.4</u>		<u>931.4</u>

Source: Ministry of Planning, "The National Plan for Economic and Social Growth for the Five Years 1967 to 1971", Ministry of Planning, Cairo, undated, p.197

Table (2.5)

Egypt - Government Services Sector Capital Account

<u>1970</u>			
Cr	£Em		Dr
Capital resources	5.9	Deficit - current operations	49.6
		Capital formation	33.4
		Transfers	14.4
Borrowing requirement	105.3	Loans - net repayment	13.8
	<u>111.2</u>		<u>111.2</u>

Source: same source as Table (2.4), p.198

Table (2.4) and (2.5) show the projection of the appropriation and capital finance accounts of the government services sector in Egypt for 1970. As can be seen from Table (2.4) that £E61.5m was estimated as a surplus of the business public sector. When the final accounts of the business public sector for 1970 were disclosed, it was found that the total loss of that sector was £E86m. This total loss of the public business sector illustrates the size of the error in these basic statistics. The estimated surplus has undoubtedly been considered as a basic input in the government's decisions. This error had affected both the deficit of the government services sector and its borrowing requirement.

Therefore, the problem of accuracy in the basic statistics from which national income accounts are constructed may not be overcome by using estimating methods. Estimating processes are found in practice to be significantly inaccurate not only in developing, but also in developed countries. In a recent paper published in the Review of Income and Wealth, September 1974, Glejser and Schavey (81, p.317), analysed annual revisions of national income accounts data for 40 countries of which 21 were developing and the rest developed. At the outset of their paper, they mentioned that:

"One of the problems encountered in the use of statistical figures for economic studies is the provisional character of the last years' data: the series published by the various statistical institutes are revised annually and substantial differences may arise between the first and the last estimations".

Their conclusion was:

"...first estimates are very often significantly biased downwards, especially private consumption, fixed investment, GDP and GNP ...".

The question which may arise, however, is whether the inaccuracy problem extends to commodity sectors as well? Regrettably, there is little evidence that the commodity statistics are particularly accurate. Morgenstern, (133, p.146) draws attention to some remarkable discrepancies in the statistics for gold shipments, between European countries and the U.S.A. The movement of gold in all countries is directly controlled by governments. The control involves prices, sales, purchases, production and the movements of gold in and out of the country, yet the statistics show errors (see Appendix 1).

Having realised the inaccuracy involved in the basic statistics which in turn affects the reliability of national income data, policymakers must not accept the latter data as ex cathedra for their decision making.

Unless the accuracy of the basic data of national income accounts is considered by policymakers, most of the uses made possible by these accounts may not be achieved as hoped. Perhaps, it was the inaccuracy of the basic data that lead Morgenstern, (133, p.259) to write:

"... it should be stressed that the present exaggerated practical applications (of national income statistics) must be avoided".

One should not conclude from the above discussion that the data needs to be absolutely accurate to be usable. One should remember the fact that some figures collected by government and used in the construction of national accounts are not accurate in the usual sense of the word (absolute accuracy can not be achieved) so long as these figures are estimated.

(2) Publication Delay:

Decision making may be handicapped not only by inaccurate information but also by the delay in producing this information.

Time is an important factor in economic management and plays a significant role in shaping government decisions. As the government is required to comment and take a decision as soon as a problem arises, up-to-date and timely information is vitally important. Sir Alec Cairncross, (37, p.39) comments that:

"Unlike academic and other commentators, governments cannot usually plead lack of time or the need for prior research before coming to a decision. They may set up a Royal Commission here and there but they cannot put policy making into commission".

The delay in producing and presenting information about the main sectors of the economy, is a problem associated with the use of national income information as a basis for current policy. Normally the information available to government is often many months or even years out of date.

The delay in producing these accounts may have serious effects on developing economies, partly because structural changes in their economies may occur from year to year, and partly because their economies are small and the activity of a large company may have a big effect, (200, p.49).

For the national income statistics to be useful for current policy purposes, they should be produced and presented to policymakers soon after the time period to which they relate. Unfortunately, there is no evidence that the present publication of these statistics of a number of developing economies has been made within a short time from their related date. The

following table illustrates the extent of publication delay of national accounts of some developing countries:

Table (2.6)

Publication Delay of National Income Accounts
of Sixteen Developing Economies

	Malawi	Tanzania	India	Botswana	Nigeria	Kenya	Sierra Leone	Ceylon	Egypt	Tunisia	Ivory Coast	Malaysia	Fiji	Mexico	Chile	Greece
Publication Delay	1	-	-	-	-	-	1	1	-	-	1	-	-	-	-	1

Source: Derek Blades, "National income priorities for low income countries from a statistician's point of view", in "National Accounts and Development Planning in Low Income Countries", OECD publication, Paris, 1974, p.68.

Publication Delay: 1 indicates that the country presently releases its final national accounts estimates within eighteen months of the year to which they refer.

The above table indicates that the majority of developing economies under consideration produce national income accounts within longer periods than eighteen months of the year to which they refer. Clearly, a wide range of national income statistics is always needed for economic analysis at the level of national policy making, and the latter cannot wait while basic data are being produced or prepared.

The early publication of the actual transactions of national accounts is significant for the users of this data. Cohen and Gainsbrugh, (53, pp.191-192) comment:

"In current business analysis, it is of great importance that the 'truth' be as closely approximated within the current period as possible. Revision a year later, while significant for historical purposes, comes too late for the analyst in his diagnosis and prognosis of current trends".

Indeed Arvay, (13, p.56) has underlined the significance of early presentation of national income statistics of developing economies when he states that accuracy is not the only factor that influences the information value of economic data. The information value of the data depends mainly on its uses and effectiveness in economic decision making. The president of the Hungarian Central Statistical Office, continues Arvay, emphasised that speedy publication of economic data, even if it contains some errors, may be as helpful and valuable for policy-makers as the later publication of more accurate data.

Although some developed countries produce national income statistics at quarterly intervals, the degree of accuracy is questionable. The Director of the CSO in London (137, p.15) justified the inaccuracy involved in the rapid publication of national economic statistics, when he mentioned that:

"It is the price to be paid for getting out first estimates as quickly as possible and for seeking to improve their accuracy as soon as more information becomes available".

Prompt data, although useful, should not be produced at the cost of accuracy. Any decision making based on prompt data with limited accuracy might have serious side effects. In the case of government decision, one has to look beyond the immediate impact of its decision to the ultimate effects on the major sectors and resources of the economy. Moreover, Webster, (199, p.49) comments:

"Because delay in producing the accounts limits their usefulness it is likely that it also limits the resources which governments are prepared to devote to improving them".

Publication delay affects also the international comparability of national income accounts. A survey of the Year Book of the National Accounts Statistics 1975 of the United Nations revealed that there is a considerable delay in the publication of these accounts or their major components between the member countries of the U.N. Table (2.7) provides information on the years for which data is available on national income accounts of these countries.

Table (2.7)
Publication Delay of the National Income Accounts
of the Member Countries of the U.N.

Latest years for which the accounts are published	Number of Countries
1964	1
1966	1
1968	2
1969	3
1970	7
1971	9
1972	8
1973	20
1974	73
No of Countries	124

The above table illustrates the extent of which these countries experience delay in producing their accounts. It can be seen, for example, that only 73 countries had published their accounts for 1974. Of these 16 were unable to publish the complete data for that year (ie certain

components of national income accounts were missing). The table shows also that 40% of the U.N. member countries were not able to produce their accounts for later than 1973.

It is likely that delay in publishing the accounts may limit their usefulness for the purpose of international comparability, and a consequence of this delay may be that the movement of resources from one country to another or the assistance offered by international organisations to developing regions is adversely affected.

(3) Aggregation and Lack of Homogeneity in the Accounts:

The nature and structure of national income accounts may influence the value of their information content for governments and other users.

National income accounts are presented on the basis of aggregated or consolidated accounts of the individual transactions. How this aggregation is processed is of the greatest importance. If there is insufficient aggregation, the account will be disordered by unnecessary and confusing details. If aggregation is too sweeping or constructed by combining the wrong transactions, the account will also lose elements of similar dynamic behaviour that users of these accounts wish to observe. In other words, to be useful for economic analysis and policy-making the national income accounts must, as far as possible, supply information of a homogeneous and disaggregated nature, so that the behaviour of either the transactions or the transactors of the system can be identified and understood.

Dividing the economy into sectors must, therefore, be based on the assumption that most of the economic units comprising a sector behave

in a sufficiently similar manner to make aggregation of their activities meaningful. Thus one would expect each component of a sector to be generally similarly motivated and to react in a reasonably similar manner to external influences. This is an essential requirement in the construction of a sector account if it is hoped to get useful and meaningful information. This is an important criterion which underlies the whole object of the construction of national accounting statistics in their aims to identify and explain the economic behaviour of the various sectors working in the economy.

It is obvious that the "aggregate" behaviour of a sector will not be a fair representation of all the components it comprises especially where the sector has a diverse population. Consequently, a study of the effect of a specific policy or decision on the economic behaviour and motivation of groups of economic units within specific sectors is not easily obtained. If, for example, "Households savings account" is presented according to similarity in their circumstances (by income group, for example), their aggregation could represent more accurately their behaviour and motivation.

Generally, aggregation on the basis of unhomogeneous behaviour of the different groups or economic units comprising a sector would detract from the value of the information generated by these accounts.

To what extent does the revised SNA overcome the problem of non-homogeneity of the sector accounts? Although the revised SNA provides a comprehensive and disaggregated framework of accounts and supporting tables for the institutional sectors and sub-sectors of the economy, the concept of homogeneity seems to have been overlooked in certain types of accounts and supporting tables.

For example, the proposed income and outlay and capital finance accounts of nonfinancial enterprises, corporate and quasi corporate, (191, p.159), are presented on a non-homogeneous basis for not only the components comprising that sector but also the activities they perform. This sector includes the following components and activities:

- (a) private and public enterprises, including large and small enterprises
- (b) goods and services
- (c) industrial, trade and agricultural.

In the "Supporting and Supplementary Tables to 111. Income and Outlay and Capital Finance Accounts", one would have hoped to find that the deficiency mentioned above was removed in the supporting tables to the sector accounts, because the main objective of these tables is to breakdown the sector accounts into its main sub-sectors especially in a disaggregated form. Surprisingly, the supporting tables to the sector accounts are designed to exhibit the same deficiency as that in the sector accounts. And what is more, they have further constrained the concept of homogeneity of this sector (non-financial enterprises, corporate and quasi corporate).

To illustrate, in Table 18 "National and Disposable Income" part b: "Distribution of National and Disposable Income", the non-financial enterprises sector, though it is divided into private and public sub-sectors, is further constrained by adding to it another institutional sector, ie the financial institutions sector. The different types of transactions carried out by private enterprises, public enterprises and

financial institutions are aggregated in Table 18 under "Non-financial corporate and quasi corporate enterprises and financial institutions", divided between private and public.

Similarly, in Table 19 "Capital transactions of the private and public institutions", one cannot distinguish between capital transactions of the individual sub-sectors of the non-financial enterprises sector. The table includes the transactions of not only these two sub-sectors but also other private and public institutions. Examples of the public institutions which are included in the table are monetary institutions, central government and other sectors.

Furthermore, Table 20 "Income and outlay and capital transactions of non-financial corporate and quasi corporate enterprises, by kind of economic activity" do not present any information related to the two major sub-sectors (privately and publicly owned or controlled enterprises) of the institutional sector of non-financial enterprises. While Table 24 "Financial transactions of the detailed sub-sectors", presents the financial transactions of the individual sub-sectors of the non-financial enterprises in a separate column.

This aggregation not only destroys the homogeneity concept on the basis of which the economic behaviour of the sector could be observed or measured, but also degrades the information content of the sector accounts and tables, and, in consequence the account and/or the supporting tables would not be able either to fulfil the purpose for which they are designed to serve or to convey the information needed to answer the decision makers queries, particularly at the international level, because the published accounts and the supporting tables of a nation may represent the main source of information for them. Decision makers, for example, may want

to know the extent to which the individual sub-sectors of the non-financial enterprises, according to kind of economic activity contributed to either the operating surplus or saving of the sector as a whole, or the extent to which either each sub-sector or the activity of that sub-sector contributed to the gross fixed capital formation or increase in stocks of that sector. This information could be of value in assessing their potential contribution as the economy progresses.

The present structure of either the accounts of the non-financial enterprises sector or its supporting tables does not furnish information relevant to answer this and similar types of policymakers' questions.

In "The Design of Economic Accounts", Ruggles and Ruggles, (170, pp. 2,4), mentioned two important criteria for the usefulness of national income accounts. In the introduction of their book they stated that:

"The transactions data must be organised and presented so that the behavior and interaction of the major parts of the system will be revealed and the structural changes taking place in the system can be understood ... To be useful in economic models that are intended to analyse the interactions among different parts of the economic system, the national accounts must provide suitable methods of disaggregation and deconsolidation so that these interrelationships can be observed and measured".

Further that:

"Without analytically useful constructs, the content of the national income accounts becomes meaningless. Instead of providing the analyst with a coherent body of useful information, it will merely contain a confusing mass of details".

The disaggregation or deconsolidation of national income accounts has been considered by Ruggles and Ruggles as a condition for the beneficial use of their informational content in economic models and in understanding

the behaviour, interaction and structural changes taking place among different parts of the economy. Furthermore, they suggested that unless the accounts are constructed for analytic purposes, their content becomes meaningless and contains confusing details. But when Ruggles and Ruggles proposed a new system of National Income Accounts for the U.S.A., they did not appear to take notice of their earlier arguments. If one looks at their proposed Enterprise Income and Outlay Account for the U.S.A., (see Appendix 2) one can see that they have separated the Account into its main sources, ie corporate, non-corporate, Government Enterprises, non-profit institutions and the income generated from the rest of the world. But when it comes to the enterprise capital formation account, their concepts of "disaggregation and deconsolidation", and "analytically useful constructs", seems to have been neglected. For no information is presented to show the capital formation of each one of the various components of the Enterprise sector.

Furthermore, in the "Households Income and Outlay Account" for the U.S. in 1966 proposed by Ruggles and Ruggles, one can not distinguish between the activity of farm and non-farm households. It should be noticed that this distinction has been made by Goldsmith in his national balance sheets of the United States, as will be seen in the next Chapter. Whether their proposed system for both the enterprise sector and the households sector is in harmony with what they have previously stated may be questioned. Appendix 2 presents the structure of both the Enterprise and Households Accounts as proposed by Ruggles and Ruggles.

Whether the present accounting information recorded into a non-homogeneous sector account of either the SNA of the U.N. or the system proposed by Ruggles and Ruggles is, in the words of Jaszi, as cited by Young, (203, p.11):

"... solid enough to give a correct indication of the direction in which aggregate economic activity is moving and of whether the change is large or small".

may be debated and may also depend on the purpose of analysis. The crucial questions are whether the present accounting information disseminated into one account of aggregated form and of non-homogeneous activities, is sufficiently representative to provide relevant information for policy-makers and for the study of the economic behaviour of that sector. Would this accounting information of a non-homogeneous nature satisfy the economic theory which is (or ought to be) based on observations of facts?

To those who are interested in fact finding to measure the economic behaviour of a specific sub-sector, in particular the sub-sectors of non-financial enterprises sector, in terms of development, performances and its influence on the economy, the lack of suitable disaggregated and homogeneous data in certain sectors in either the SNA or the proposed system of Ruggles and Ruggles is an obvious handicap.

One may conclude that the non-homogeneous concept embodied in the present structure of national income accounts (in terms of kind of economic activity and institutional sub-sectors) may impair their informational content as a base for the formulation of detailed plans and policies, particularly at the international level. If the national policymakers are solely reliant upon national income data, their policies may also be constrained by lack of information.

The uses of national income data may also be constrained by a lack of homogeneity of the social structure of a nation. This deficiency has been clearly stated by the economist, Ward, (196, p.457) who writes:

"The national accounts framework allows a description of a non-homogeneous social structure where there may be differences in population groups, employment, income elasticity of demand, etc, but herein also lies its fundamental weakness because - as such - the system may be too general to be of any significant use in formulating detailed policy".

Aggregation of the accounts could also detract from the value of their informational content. There may be little benefit in adding together figures for activities which are playing a key role in the economy with those that have a minor role.

Disaggregation of accounts has been recognised and recommended, especially for developing economies, by the Report of the Workshop on National Accounts of the Seminar on Statistical Policy in Less Developed Countries. Understanding the interaction between economic activities and sectors of the economy is considered by the report, (109, p.3) as: "... the starting point of formulating development strategy". Obviously, the more the accounts are disaggregated and presented on a homogeneous basis, the smoother and more effective the information, and the greater value it could be to national policymakers.

Finally, it should be stated that the concept of homogeneity is not restricted only to national income accounts, but it has been given special consideration in the area of sector and national balance sheets. For example, it has been argued by Goldsmith (89, p.25) that the decision of sectoring the economy should regard the reconciliation between the principle of motivational homogeneity of a sector (which implies that all its units have a reasonably similar structure of assets and liabilities, and that they may, in consequence, react in a similar way), with the desire to keep the sectors sufficiently broad to be useful for economic analysis.

Further, Revell, (163, p.13), has implicitly considered the concept of homogeneity of a sector when he states that the scheme of classification must, among other things, "... group the units in such a way as to fulfil the main purpose of the study, the explanation of economic behaviour". Obviously, the explanation of economic behaviour, for which the national balance sheet is primarily designed, may not be realised if heterogeneous economic units are grouped in one sector. Dorrance also (62, p.174) has underlined some fundamental criteria for sectors when he discussed, "Balance Sheets in a System of Economic Accounts". He states that:

"The definitions of sectors should include in each single sector all the economic units that are likely to have similar reactions to changes in their balance sheet relations, while excluding from that sector all units with different desires".

Furthermore:

"... splitting of the accounts of individual units, and the inclusion of disparate entities in single sectors in balance sheet accounting, would destroy the individualities that sector balance sheets should underline".

It follows that the concept of homogeneity is desirable in all components of national accounting systems if their uses are to be realised.

(4) By-Product Information and Deficiency in the Micro-set Data:

It is sometimes claimed that the basic data underlying the national income estimates are not collected mainly to serve the construction of national accounts, and that the deficiencies that do exist are primarily the results of deficiencies in the basic micro set data rather than in the statistical methodology, (153, p.6).

The information required to construct the national accounts is derived largely from those sectors which keep accounts, publish their financial statements, make tax returns and provide data for census of production and distribution. Other sectors do not keep accounts and have no market for their transactions (eg barter and subsistence activities); imputations for these transactions are, therefore, necessary. In other words, the national accounts are a consolidation of the accounts of the former sectors and the imputed transactions of the latter sectors.

Obviously, if the accounting data at the micro levels of any one of the former sectors are defective, disorganised or unrealistic, it would be expected that the sector accounts, and consequently the national accounts, would show the same flaws. Hence, the information derived from them may be less than useful and may lead to decisions or conclusions with harmful effects on the economy. The existence of reliable and relevant micro set accounts is therefore essential for sound national accounts.

Although adequate information may be found in the micro accounts of some developed economies; national accounts in most developing countries are severely handicapped by lack of information in the present status of micro accounts. Many writers, eg Waterstone, (198), Enthoven, (75), and Seidler, (177), have commented on the absence, inadequacy and the unreliability of the developing countries' data, with particular reference to business accounting.

It may be argued that national income accounts can be compiled on the basis of statistical inquiries and returns rather than the accounts of the economic units. Regretably, there is little evidence that these sources of information are particularly more accurate and relevant, especially in developing economies. This point will be further discussed

later in this section and in Chapter 4*.

The by-product approach, used in the collection of statistics needed for the construction of national accounts, is a problem which is recognised by two writers, a statistical consultant and an academic economist. In his article, "Accounting and the Evaluation of Social Programs : A Critical Comment", Francis, (78, p.254) has argued that the degree of error found in information used in the social field is derived from the fact that data collected for completely different purposes is used to assess social well-being. Morgenstern, (132, p.40) analyses the many reasons for errors in economic statistics. One of the most common sources of error is that economic and financial statistics are merely by-products of business organisations, households and government activities, and the users have no choice but to accept them as they stand, even though they may not have been designed and presented for the users needs. Therefore, they often record, measure and disseminate economic events that are not exactly the facts (or the phenomena) in which the user is interested. In fact these economic statistics are prepared and disseminated as largely required by law. Hence, they are presented on a legal basis rather than by reference to economic definitions of process. Whether the information required by law matches the requirements of economists is an interesting area of debate.

Although in theory the national accounts are no more than a consolidation of the micro accounts of individual enterprises and other economic units, in practice they are not built up in this fashion either in developed or in developing economies.

* see section 4.3, sub-section (1).

In the United Kingdom, for example, the greater part of the structure of national income statistics is built up from indirect sources. Four major annual sources are used to construct the U.K. national accounts. These are (126, pp.33-36):

- (a) Inland Revenue data for tax assessment
- (b) the census of production and distribution and inquiries carried out by the Department of Trade and Industry
- (c) the Central and Local Government Accounts
- (d) Balance of Payments accounts.

In the United States, national income and expenditure accounts are largely built up from the following main sources (118):

- (a) The Federal Income Tax Administration which provides information on corporate and non-corporate incomes
- (b) The Social Security Administration which provides the main sources of information on employment incomes
- (c) The Censuses of Manufacture, Business, and Agriculture
- (d) The Government's Accounts

Young, (203, p.8) has commented on these various sources of information needed for the U.S. national accounts as follows:

"In considering sources of error, particularly those related to coverage and definitions, one should not overlook the nature of the U.S. statistical system. The system was not designed to meet the needs of national income accountants. The statistics available to national income accountants in the U.S., are, by and large, data that, over the years, have been designed to meet a variety of needs. The statistics have grown out of different traditions in different government departments. In many instances, the statistics are collected to carry out administrative programs, so that the coverage and definitions are designed to serve specialised administrative needs. As a result, the component parts of the statistical system are quite varied in coverage and definitions as well as in frequency and quality. Thus, the national income accountant in the U.S. is faced with the need for much painstaking piecing together and adjusting of numbers".

Because there are various sources of information (mainly to meet the differing needs of the data collection agencies) there may be considerable difficulties both in achieving consistency and in finding missing data. Thus the data used in national income accounts could, on occasion, not be truly representative of the true facts.

In developing economies, the sources of information needed for the construction of their national accounts are almost similar to those of developed economies. Webster, (199, p.44), for example, mentions with reference to developing economies that:

"Some of the statistics used in constructing national accounts arise as by-product of an administrative process and are collected by officials not directly under the control of the statistical authorities. Other data have to be collected by statistical surveys or built up from informed guesses where surveys are not available".

These sources of information from which national accounts of developing economies are constructed may present even greater shortcomings as regards

the data covered, and in consequence, may affect the objectives of these accounts for which they have been designed. To illustrate, the data derived from censuses or administrative statistics may suffer from the omission of certain information, which may be unnecessary for the administrators' purposes but could be regarded as an essential need for national accounts. In a recent article in the *Journal of Income and Wealth* (September 1976), the data derived from the individual censuses, in developing economies, was attacked as an adequate source of information for national accounts construction in these countries. Among the factors that restrict its use, the following may be demonstrated (144, pp.141,142):

- (1) The minimum size of the establishment is usually fixed in advance as a definition of the statistical unit. This may tend to ignore a large proportion of activities which are not included in the statistical unit, and consequently their activities would be excluded from national accounts.
- (2) Data collected by census normally suffers from missing data, deliberately or due to the inability of respondents to understand the questions put to them. Hence their quality may be doubtful for national accounts needs.
- (3) In the dynamic process of development, characteristic of most developing countries, the data derived from the census may become less representative with the passage of time.

Webster, (199, p.44) on the other hand, gives two examples of the dangers of constructing the national accounts on administrative statistics without further investigation or adjustment to meet their needs. Trade statistics which are mostly derived as a by-product of customs control

provide the first example of the difference between the statistics needed for administrative purposes and those needed for national accounts construction. An artificial value is often fixed to a transaction for the purposes of customs duty. This value may differ more or less from the actual transaction value. This value is recorded without adjustment in the trade statistics which are subsequently used for national accounts purposes. The other example is taken from mineral statistics. These statistics are mainly collected by mine inspectors whose duties, among others, are to make reports used to assess taxes leviable on mineral production. Since the provision of a mine can not be subject to taxes until it is sold, inspectors report the value of sales as the value of the mine's production. Obviously sales may not necessarily come from the production of the year in which the sales take place, but from the accumulated production of previous years. Hence taking the value of sales as the value of production at the mine may be unrepresentative of the actual value of the mine's production with which national accounts are most concerned.

It may be concluded that the "by-product" information used in the construction of national accounts may not help to fulfil their objectives. The information derived may not enable economists or others to analyse or observe the economic behaviour of relevant transactions.

(5) Lack of Coverage of Financial Transactions:

The present structure of national accounts is mainly concerned with transactions of goods and services which have occurred between the different parts of the economic system. Transactions in financial assets and liabilities which accompany income and expenditure have no place in national income accounts. This could be considered one of the weaknesses of these accounts as a description of economic activity and as

a source of sufficient, meaningful economic information. Neglecting the incorporation of the financial transactions within the present framework of national income accounts seems to be based on the assumption that the detail in the financial activities taking place in the economy is less important than that associated with the activities of goods and services. This, many economists would feel, is not a realistic assumption. On the one hand, in a developed economy financial transactions play a very important role in the economic activity (eg the U.K.). On the other hand, changes in the financial assets and liabilities held by the different economic sectors are of considerable significance to those who are interested in the financial aspect of the economy and of the financial behaviour of the different sectors in the economy. Therefore, national income accounts cannot provide a suitable description or an adequate detailed picture of the economic activity of a nation. It follows that national income accounts must be accompanied by flow of funds accounts which map out financial transactions between economic sectors.

(6) The Absence of Stock Variables (financial and physical)

The practical relevance of a set of national income accounts must be judged by reference to its utility for drawing up the appropriate economic policy as well as furnishing the necessary data for national position analysis.

The flows of economic transactions within a certain period and the stocks of assets and liabilities held by the economic sectors for that period have been considered the two basic variables that are needed by any economist who wishes to analyse, measure and explain the economic behaviour of a specific sector, or a nation as a whole. An economist or a financial analyst who uses only one of these two basic variables to analyse

an economic phenomenon or the operation of a specific sector will produce at best an incomplete analysis. Therefore, national income accounts as they stand today may not provide effective and meaningful information for the purpose of economic analysis and for understanding the working of the economy, unless they are also supplemented by balance sheet data showing the assets and liabilities held by each economic sector.

In fact, in addition to being essential and complementary part of the system of national income accounts, (86, p.8) sector and national balance sheets in their own right have many uses for national economic planning and management as well as economic analysis. These uses can not be realised from the present structure of national income accounts.

If one argues that there is no relationship between flow and stock variables, one may state that all flows entering the system of national income accounts are, by definition, attributed to the stocks of assets and liabilities held by a nation at the beginning of her economic activities. This relationship between the flows in national income accounts and the stocks in balance sheets are of great interest to economists.

2.5 Summary and Conclusion:

This chapter was intended to characterise the implications of the hypothesis stated at the end of the previous chapter, namely whether the accounting information disseminated in the present structure of national income accounts does fulfil its objectives. This assumption is tested by investigating basic fundamental deficiencies in the structure, composition and methods of compiling these accounts.

Although the current literature has identified certain limitations of national income accounts, other deficiencies appear to have been either overlooked or inadequately detailed.

In summary the deficiencies of national income accounts discussed in this chapter are:

- (a) Inaccuracy and unreliability of the basic data
- (b) Delay in the publication of the accounts
- (c) Problems associated with aggregation and homogeneity of the account
- (d) "By-Product" nature of the information used
- (e) Lack of coverage of financial transactions
- (f) The absence of stock variables (financial/physical).

Finally, it is important to ask whether the present framework of national income accounts provides relevant information for the real needs of national policymakers especially in developing economies. In practice it has been found that many of the national accounts tables turn out to be for the satisfaction of the international organisations and not in accordance with national planners' needs. The Report of the Workshop on National Accounts of the Conference on Statistical Policy in Less Developed Countries held at the Institute of Development Studies University of Sussex (12-16 May 1975) states (109, p.1) that:

"... most of the less developed countries that have partially adopted SNA, have done so not because it caters to their needs but out of the desire to meet the needs of the international agencies like U.N, I.B.R.D, I.M.F. and others. This tended to impair the functioning of the national statistical offices to look inwards for accounting and data requirements of their countries geared to the needs of planners and policymakers".

Barkay, (24, pp.355-356) also has considered this when he comments on the lack of complete, accurate, consistent and up-to-date information that is essential to perform the planning function in less developed countries. He argued that many statistics that are currently produced in these developing nations are for the convenience of the international statistical requirements and not in harmony with the actual needs of either national planners or policymakers*.

The above arguments indicate not only that the present complicated framework of national accounts inhibits the limited statistical resources

* In January 1976, an interview was carried out by the author with the Director of the National Accounts Department at the Central Agency for Public Mobilization and Statistics in Cairo. The Director was asked about the extent of the relationship between his Department and the Ministry of Planning as far as the flow of information needed for the planning process was concerned. The answer was that the main task of his Department was to collect information and statistics, to construct the national accounts of Egypt and to forward them to the international organisations such as the U.N. Statistical Office, the World Bank and the I.M.F. Any information needed for the planning function was collected, processed and developed by the Ministry of Planning itself. He added that he had never been asked to prepare or to forward information to any sponsoring Minister who might use it in his decision making process.

of developing economies in preparing the necessary statistics badly needed for national economic policy, but also that the deficiencies embodied in these accounts may make them of little use in achieving most of the objectives which they have been designed to fulfil.

Unless the limitations investigated in this chapter are solved they could impair the uses of national income accounts assigned to them by economists.

CHAPTER THREE

National Balance Sheets - A General Review

3.1 Introduction:

The previous chapter has been mainly concerned with the deficiencies of national income accounts for economic management and analysis. One of these deficiencies makes it evident that for many purposes national income accounts must be accompanied by other forms of economic accounts, amongst which is the national balance sheet.

The integration of the national balance sheet with the system of national income accounts is essential. There are two main reasons for this:

- (a) information on stock data is required
- (b) the national balance sheet is needed for economic analysis.

The object of this chapter is to furnish a short review of the academic and practical development of national balance sheets in the U.K. and the U.S.A., together with the proposed system of the United Nations. It describes and compares the structure of the systems outlined in the works of Revell and Goldsmith. Two basic problems in compiling national balance sheets will also be reviewed.

The chapter ends with a theoretical survey of some of the economic needs to which sector and national balance sheets are designed to fulfil.

The potential uses of these balance sheets for developing economies will also be investigated.

This chapter contains much that is essential both for the subsequent assessment of the limited attempt of Egypt in approaching this area and in investigating the current limitations which may constrain the uses advocated for national balance sheets. Both subjects will be discussed in the following chapter.

3.2 The Academic Inquiries and Development of National Balance Sheets:

Information obtained from sector and national balance sheets, used in conjunction with economic data from other accounts (such as national income and flow of funds) is of paramount importance to economic analysts and national planners.

Stocks* (tangible and intangible) have always played an important role in economic thought, theory and analysis. An example of such importance is the capital stock figures that are necessary for production functions. Stocks of tangible assets have also been used for capital output ratios. Stocks of money which have been held for either liquidity or speculative purposes have also been used in models of consumption and saving functions (89, p.10).

* This term has been used by Revell, (163) and Goldsmith (90) and will be used throughout the present study - Assets are considered stock which always take positive values, while liabilities are stock with negative values. Flow covers such items as income, output, consumption and investment.

Estimates of stocks were not included in the early work of national accounting systems; the systems concentrated on flow variables. Stock variables and their inclusion in a form of balance sheet seemed to have been overlooked by the early national statisticians.

The imbalance of the early work in the development of the other components of national accounting systems led economists to inquire into a parallel development of national balance sheets.

It was as early as 1906 when Fisher, (77, p.ix) wrote:

"We are now ready to consider the 'capital accounts' employed in business. It is strange that any treatment of these accounts is generally omitted from economic textbooks. There seems to be no systematic study of capital accounts in any work on political economy".

In the mid 1930's Hicks, (106, p.399) emphasised the need and concept of national balance sheets when he wrote:

"My suggestion is that monetary theory needs to be based upon a similar analysis (to that of value theory), but this time not of an income account, but of a capital account, a balance sheet ...".

In the first edition of "The Social Framework", Hicks, (105, p.101) mooted the concept of a national balance sheet. He mentioned that the information needed for estimating the national capital of Great Britain is of lesser quality than that of other information required for other economic calculations.

In the early 1950's Boulding, (30, p.231) suggested that assets are actually more important than income, yet little has been done to produce statistics involving them.

The view expressed by Hicks in 1942 together with that of Boulding has evidently carried some weight, because in the second edition of "The Social Framework", Hicks (104, p.277) wrote:

"The construction of a respectable national balance sheet does seem to me ... to be a more possible task than has often been supposed. And...it is well worth having, if we can get it".

In 1959 the Radcliffe Committee (54, p.281) commented on the imbalance of development of national income data as compared with balance sheet data, and accused the monetary authorities of not paying sufficient attention to the statistical coverage of stock variables. Even the existing data, commented the report, had not been published nor had it been presented with the consistency and comprehensiveness normally associated with national income data.

Dorrance, (65, p.256) of the IMF suggested that the balance sheet must be considered as an essential part of the economic statistics and its development is necessary.

Stone, (182, p.16) remarks on the increased demand for national balance sheets in the immediate postwar years; at this time most governments were concerned with problems of production, employment and reconstruction rather than with problems of finance and flow variables; they were very much concerned with physical assets and their distribution among the different sectors of the economy. The availability of this type of data obviously relies on the formation of national and sector balance sheets. Recently, Stone and Stone, (180, p.158), argued that one must account for stocks in order to obtain a complete system of accounting. Stocks should be defined not only in a limited sense of products awaiting sale but in the sense of assets and liabilities existing at a specific

period, ie in the form of a national balance sheet.

In view of the varied and important demands for national balance sheets, academic economists, statisticians and even the Economic and Social Council of the United Nations, began to pay considerable attention to the stock aspect of national accounting.

For the United States Hicks, Hart and Ford, (107, p.126) constructed a rough sketch balance sheet for the year 1939. Although the estimates were based on uncompleted and unreliable data they considered it to be quite helpful. It was worth having an idea of the national balance sheet, even if it was approximate, commented Hicks and his associates, rather than to have no idea at all. Meanwhile, Goldsmith, (90,86) had developed a combined balance sheet for the U.S. economy and its main sectors.

For the United Kingdom similar attempts have been made, the work of Hicks and Morgan has been regarded as the first attempt to construct a national balance sheet. Meanwhile, Revell, (163, pp.46-55) had been developing his own conceptual framework on national and sectoral balance sheets. The culmination of his efforts was the development of a comprehensive set of national and sector balance sheets for the United Kingdom covering the years 1957 to 1961. The work of Revell was further continued by Roe, (168), using as a basis the system advocated by Revell in "The Wealth of the Nation". Roe's balance sheet estimates extended up to the year 1966. His balance sheets included 34 sectors, 8 types of tangible assets and 43 types of financial claim, (168, p.57). A summary of this work, giving balance sheet estimates for the broad economic sectors, was presented by Revell and Roe (165, pp.xii-xiv) in an article published in the May 1971 issue of Economic Trends.

The work of Revell made a basic contribution to the growing number of endeavours to construct sector balance sheets. Along the lines in his book "The Wealth of the Nation", progress was made by the Bank of England, the Central Statistical Office and the Royal Commission on the Distribution of Income and Wealth. The Bank of England (18,19) published balance sheet estimates for the banking sector and investment trust companies. The Central Statistical Office (49) made provisional estimates of balance sheets for the personal sector at 31 December 1975 and 1976. The Royal Commission on the Distribution of Income and Wealth (169, p.73, Table 27) has also compiled estimated values for personal sector balance sheets for the period 1971 to 1973.

In 1968 national balance sheets began to gain increasing recognition from the Economic and Social Council of the United Nations. The revised SNA of 1968 proposed among other things, the complete integration of national balance sheets with national income accounts. But the conceptual structure of these balance sheets was not fully discussed and these aspects have been left for further consultations. For six years the conceptual and compositional structure of national balance sheets were discussed and debated by the Statistical Commission of the U.N., by the end of 1974 a final proposal was issued under the title of "Draft International Guidelines on the National and Sector Balance Sheet and Reconciliation Accounts of the SNA". In the introduction of this draft, the Secretary-General, (192, p.5) states:

"It is thought that the draft international guidelines set out in this document have reached the stage where the Statistical Commission might consider their adoption".

In view of this work carried out by Revell, Goldsmith and the U.N. one would have expected to find similar efforts being made in other countries. Surprisingly, the national balance sheet had not gained sufficient popularity among national accountants and economists of other countries. Such lack of interest is evident in the relatively few examples of empirical work in this field.

It has been argued by Patrick, (151, p.178) that estimates of capital stock or wealth for any under-developed countries are not yet available neither over time nor for a specific point in time*. But in the last few years, some attempts have been made in developed and developing economies in this area. For example, Goldsmith, (85, p.125) has made "A Synthetic Estimate of the National Wealth of Japan 1885-1973". Such an estimate may be regarded as an essential step for the construction of a national balance sheet. In Egypt, the Central Agency for Public Mobilization and Statistics investigated this area but mainly concentrated on the statistical sources as the basis of national balance sheets.

3.3 The Structure and Presentation of National Balance Sheets - Current "versus" Proposed:

An appropriate definition of a national balance sheet is essential for the understanding of its basic structure. Three definitions will be considered:

As expressed by Revell, (163, p.8), a national balance sheet is:

"... a social accounting table showing the balance sheets of a number of sectors of the economy, including the external sector, with some degree of specification of the form of assets and liabilities, it has a column showing the row totals over all sectors, and it may or may not have a second total column for all national sectors (all sectors except the external)".

* except for India, as reported by Patrick

Goldsmith, (89, p.14), on the other hand, defined the term as follows:

"The national balance sheet can be conceived as the combination of the balance sheets of all economic units within a country".

The United Nations revised SNA, (191, p.6), has described a national balance sheet as follows:

"Reduced to its simplest term a balance sheet shows for a sector or set of sectors such as a national economy:

- (i) the written down value of tangible assets held plus the excess of financial claims held as assets over financial claims issued as liabilities, and
- (ii) the net worth of the sector".

These definitions agree in principle although they would appear to differ on the structure and detail of the national balance sheet.

Revell's definition explicitly states that the scope should extend to include not only the consolidated balance sheets of the national sectors but also the balance sheet of the external sector. Tables (3.1) and (3.2) in Appendix 3 present the model adopted by Revell for the United Kingdom. It can be seen that the U.K. model is presented at two levels of aggregation and in two stages of development. The first level of aggregation (Table 3.1) summarises the major sectors of the economy; these are:

- (a) Persons and non-profit
- (b) Finance
- (c) Non financial companies

(d) Public

(e) External.

Each is further broken down into main headings. The second level of aggregation (Table 3.2) is a detailed sectorised national balance sheet with finer classification of both sectors and balance sheet headings. The second stage of development is shown in Table (3.3) in Appendix 3. This table is a summary of balance sheet estimates for the new development of national accounting sectors made by Revell and Roe (1965).

Appendix 4 illustrates the basic structural characteristics of the system adopted by Goldsmith. It can be seen that Goldsmith's structure is presented in two stages of development as far as sectoring the economy is concerned; the economic sectors have been reduced from eleven to only seven main sectors.

Comparison between the structure of the balance sheets of the U.K. and the U.S.A. leads to the following conclusions:

- (1) The economic sectors distinguished in both balance sheets are not identical either in number or in the names of the institutional sectors.
- (2) Some sectors which exist in one country do not exist in the other, eg the agricultural sector in the U.S.A. has no equivalent in the U.K. balance sheet. The same is true of the overseas sector which is not included in the U.S.A. system.
- (3) The scope of some sectors in the U.K. differ from those of the U.S.A. For example, the public sector in the U.K. includes central government,

local government and public corporations, while in the U.S.A. the public sector is divided into two separate sectors, namely federal government and state with local government.

The above differences may perhaps furnish two important facts in respect of a national balance sheet. The first fact may imply that the nature of an economy, the governmental system of a nation, the relative importance of economic activity and the degree of government intervention in the economic activity are some of the main factors that should be considered whenever an attempt is made to divide the economy into sectors for the purposes of national balance sheets. Indeed most of these factors were considered by both Revell and Goldsmith in their balance sheet structure. The second fact is that at the time that the national balance sheet was in a developmental stage there was no agreement on standardisation of either the itemisation of assets and liabilities or sectoring the economy, even between countries in the same degree of economic development, as evidenced by the U.K. and the U.S.A. balance sheets.

The proposed standard balance sheets detailed in the final version of the U.N. Draft International Guidelines of 1974 are presented in Appendix 5. The basic features of the U.N. proposal are:

(1) The presentation of consolidated accounts for the nation which include: opening balance sheet account, capital finance account, reconciliation account and closing balance sheet account.

(2) The presentation of a balance sheet and a reconciliation account for each of the institutional sectors. The standard accounts for each sector include: closing balance sheet account and reconciliation account. As far as the classification of the institutional sectors are concerned,

no amendments were made from those presented in Table 5.1 of A System of National Income Accounts, (191, p.78).

(3) The dissemination of more detail on the balance sheet and reconciliation items in supporting tables.

Whether the present or the proposed structure of national balance sheets so far described can fulfil the many uses advocated and whether the U.N. classes of transactors are the most relevant for developing economies, will be discussed later in the next chapter.

3.4 Basic Problems in Compiling National Balance Sheets:

The basic problems associated with the compilation and structure of national balance sheets would cover, for example, such matters as:

- (a) sectoring the economy
- (b) classification of assets and liabilities
- (c) statistical sources
- (d) valuation basis
- (e) form of presentation of national balance sheets.

These problems have been the subject of a relatively extensive discussion by various writers*.

* see, for example, (163), (89), (189), (190), (192), (62), and (160)

This section will review briefly two important problems. They are:

- (1) sectoring the economy
- (2) statistical sources.

The reason for choosing only these two aspects is that they are the main areas where Egypt has gained the majority of her experience in national balance sheets. It may be possible in discussing Egypt's limited experience to provide advice for other developing economies.

(1) Sectoring the Economy:

The decision of sectoring the economy for national balance sheet purposes raises immediately the question of identifying the statistical unit which makes independent financial decisions, (such as income spending, capital formation and its finance and the decisions of borrowing and lending). The definitions and classifications of the statistical units needed for the national balance sheet have already been discussed and developed in the current literature*. This section will discuss certain factors which need to be considered in the decision of sectoring the economy for balance sheet purposes.

For statistical convenience and economic analysis, in dividing an economy into sectors, the following factors should be considered:

(a) The Objectives of Sector or Sub-Sector Balance Sheets:

Because sector and national balance sheets are purposely compiled to

* see, for example, (189), (191), (192), and (163)

measure the extent to which the economic sectors react financially against certain economic and financial policies, it follows that the concept of homogeneity in the sector's components must, as far as possible, be ensured. Having secured this factor, it is likely that the economic units grouped into a single sector will be sufficiently homogeneous in respect of both the kinds of assets and of liabilities incurred and the kind of economic activity that they perform. Thus meaningful analysis might be achieved from their combined balance sheets.

(b) Integration of the System of National Balance Sheets into the System of National Income and Flow of Funds Accounts:

In order to fulfil its function, a balance sheet needs to be presented with other components of the national accounting system such as national income and flow of funds accounts. This implies that a sector which has been identified for purposes of a balance sheet must be accompanied by its income account and flow of funds account. This necessitates that the balance sheet sectors must take account (ie not be radically different) from those sectors identified in both SNA and flow of funds accounts.

(c) The International Comparability:

Sectoring the economy also raises the question of international comparability. International guidelines and a recommended system for the institutional sectors and sub-sectors should be taken into consideration in the formulation of national definitions.

(d) The Economic Circumstances of the Country:

Dividing an economy into sectors must be largely dictated by the

special economic circumstances of the economy in question. For example, if the prime activity of most people in a nation is farming, one may expect an agricultural sector (or farm households sector) to be clearly distinguished in the national balance sheet of that nation.

(e) The Availability of Data Needed to Construct a Sector Balance Sheet:

The emergence of balance sheets as a part of the SNA requires the collection and processing of statistical information. This information is entirely different from that needed for the flow accounts. Unless a comprehensive programme is planned and executed by the national statistical authorities to secure the availability of the data needed for national balance sheets, it may not be easy for the private investigator to obtain such information, particularly in developing economies where the restricted availability of public accounts may be a common phenomenon. Information on assets and liabilities held by the various economic sectors is, therefore, the heart of the balance sheet, without which there may well be no balance sheet. The task of the data collection bodies in the country concerned will be an important function for the compiler of balance sheets. The former are concerned with originating, summarising and recording all data coming from all levels of the economy. The compiler of the national balance sheet, on the other hand, is concerned with classifying, sorting, valuing and building up national balance sheets.

These are the minimum factors that should be considered in any attempt to build up a national balance sheet as far as sectoring the economy is concerned.

(2) Statistical Sources of National Balance Sheets:

One of the serious problems facing the compiler of sector and national balance sheets is the lack of relevant statistical data. When the economic units fail to present their accounts to the compiler, he will have to make an estimate to compensate for that data loss. To achieve his objective, he can use two main channels of information; the direct and the indirect approach. Each approach will be reviewed briefly for two main reasons; firstly, to assess the initial method adopted by Egypt in approaching national balance sheets, and secondly, to recommend which approach would be relevant as a starting point for other developing economies in their prospective attempts to construct national balance sheets.

A. The Direct Approach:

This approach which initially may be attractive to the statistical authority, is based on the use of sources which themselves produce balance sheets. These balance sheets, together with supplementary data (determined from registers from administrative sources and statistical inquiries), comprise the main sources of information from which the direct compilation of national balance sheets may be feasible.

The balance sheet has been attacked by the U.N. on the grounds that it has many deficiencies, particularly, in the area of business accounts. The following is a summary of the major types of these deficiencies, as reported by the U.N., (190, pp.3-7 : 192, pp.103-104):

(a) The lack of balance sheets for certain economic sectors such as the government, households and the external sector. The absence of these balance sheets represents a difficult problem for the compiler of national

balance sheets. The more sectors in which balance sheets are not available then the greater the degree of estimating what will be required and consequently far more difficulties will be encountered. Revell, (163, p.36) comments when he states that one of the causes of these difficulties is the lack of balance sheets of individual economic units and this includes the personal and the external sectors.

Despite this deficiency, one should remember that in the case of the other sectors, balance sheets have been prepared by their individual economic units as part of their business accounts. Thus balance sheets may be available from those sectors which follow traditional business accounting practice. Examples of these sectors are companies, banks, insurance companies, non-profit organisations and public/nationalised enterprises. These balance sheets, together with the possibility of constructing a balance sheet for the government sector, may reduce the effect of the unavailability of balance sheets on the direct approach of compiling a national balance sheet. If, on the other hand, the compiler of national balance sheets is successful in obtaining and constructing a balance sheet for an individual person from whatever sources of information are available (such as estate duties, and from some academic experience in constructing a balance sheet for the rural person and an urban person*) a household balance sheet may be constructed. If this attempt is coupled with similar attempts to seek information to construct a balance sheet for the external sector, the direct approach may be considered preferable to other approaches.

* some attempts are now being considered by a team from Alexandria University in Egypt headed by Professor M. Dowidar assisted by a team from the National Institute of Planning in Cairo, to construct a balance sheet for an individual person

(b) But even if balance sheets of a great number of economic units are available, they may not solve the problem of the data needed for national balance sheets. The fundamental needs must first rest on the detail and harmonisation of the data disseminated in the former balance sheets with that needed for the latter. The insufficient detail (in respect of fixed and financial assets/liabilities) given by conventional balance sheets has been considered another deficiency that constrains the direct approach in compiling national balance sheets.

(c) The freedom given to the economic unit as to the end of their financial year is considered a third deficiency. In principle, the dates to which the balance sheet relate should be common if they are to be used in the direct approach. The U.N. has suggested that special returns should be made by companies to provide the information required on the date for which the national balance sheets are being constructed.

(d) The methods of valuing companies' assets/liabilities, either privately or publicly owned, raises the question of their usefulness for national balance sheets' purposes. The different methods of valuing balance sheet items and the need for adjusting or replacing their values provides another reason for rejecting them as the primary source. Valuation of these assets and liabilities in terms of market value has been considered the most relevant method.

(e) The balance sheet of certain companies may cover more than one economic unit and they may be operating in different economic activities. For example, if a company balance sheet includes such activities as insurance, production of goods and banking (home or abroad), it can not be used directly but will have to be divided to provide subsidiary balance sheets for each area of activity. This information is required to be incorporated in the

appropriate institutional sector/sub-sector identified for national balance sheets.

The lack of this information in the present structure of the balance sheets of companies as well as organs of general government has been considered another deficiency that restricts their uses for the direct compilation of national balance sheets.

(f) The tendency of certain enterprises to "window dress" their accounts, via the temporary changes in their asset structure over the balance sheet date, for the purpose of increasing their apparent liquidity, raises another problem. The "window dressing" phenomenon may hinder one of the main objectives of national balance sheets, ie the explanation of economic behaviour.

(g) The delay in publication of companies balance sheets, which may extend to six or twelve months from the date to which they relate will lead to a delay in producing the balance sheets for the national economy.

In conclusion the U.N. reports are not in favour of using the balance sheets of companies and other economic units as part of the direct approach in compiling national balance sheets, due to the limitations identified above.

But the question which has not been considered by the U.N. is the possibility of improving the existing balance sheets of companies and similar economic units in ways which may not differ significantly from their current practices and are acceptable within the system of business accounting. If the possibility of improving the balance sheet may not be feasible for companies in the private sector, it should, at least, prove feasible for

those in the public sector. This is particularly important in countries where these companies play a key role in their economies.

Though the "Draft International Guidelines on the National and Sector Balance Sheet and Reconciliation Accounts of the SNA", comments on the effective and reliable sources of information of micro balance sheets for compiling national balance sheets, their current deficiencies have been regarded by the Draft, (192, p.104) as "... of little value in compiling the data under discussion ...". Furthermore, the Draft advanced certain constraints by which improvements in the current micro balance sheets are not feasible. These constraints are as follows, (192, pp.104-105):

- (a) it is impractical to ask enterprises to file balance sheets that differ radically from their current practice
- (b) the proposed improvements in balance sheets may not be acceptable in business accounting
- (c) it is not feasible to require all companies to prepare their balance sheets at a given date or to value their assets at market value.

In fact some of the above constraints proved their feasibility within the very limited experience of Egypt in approaching the system of balance sheets in two major and important economic sectors; these are the public enterprises sector and the companies of the organised private sector. It should be emphasised that the efforts of Egypt to improve the presentation of these balance sheets did not remove all the deficiencies in the balance sheets of business accounting; nevertheless, they did ameliorate some of the important deficiencies, details of which remain to be discussed in

section 4.2 in the next chapter.

Faced with the inadequacy of micro balance sheets data, for the reasons identified, indirect methods have been recommended.

B. The Indirect Approach:

The indirect approach is based on compiling national balance sheets without resorting to the individual balance sheets, as used in the direct approach, of the sector's components. The reason for eliminating the individual balance sheets as a direct source is mainly to avoid the many deficiencies which have been mentioned above. Hence, it has been hoped that the likely distortion in national balance sheets may be avoided or at least reduced.

The main sources of the data required for the indirect approach to compile a national balance sheet may be summarised below, (192, pp.113-114 : 190, pp.14-15):

(a) Estimates of the capital transactions of the institutional sectors and sub-sectors are made in the national income accounts. This information is not directly obtained from the balance sheets of the enterprises in the sector (if this is the case then the data could be considered to be based on the direct approach) but is collected by special inquiries from other administration agencies (such as Inland Revenue, Statistical Office, etc). It is important that the direct approach of using two successive balance sheets to generate this information is not used. Examples of the transactions which may be available from national income accounts are, changes in stocks, gross fixed capital formation and depreciation of fixed assets. This information would be of value for the construction of national balance sheets

provided that coordination and integration between capital transactions and balance sheet accounts are ensured.

Revell, (190, pp.14-15) argues that in the absence of detailed information on the sub-divisions of each class of asset and liability of each economic sector, (although a price index would be used in the absence of this information) the results obtained should be compared and checked against full balance sheet information when it is available, no matter what price index has been used. If capital formation and capital consumption figures, continues Revell, of the institutional sectors are not sufficiently detailed to provide information on all sub-sectors, then this information may be obtained from the differences of balance sheets of private accounts. His argument implies that the balance sheets of business accounting are also needed in the indirect approach of compiling national balance sheets.

(b) Because national income accounts are not likely to provide all the information needed for national balance sheets, supplementary sources of information on the transactions seem to be necessary. These sources might include special inquiries and/or information registered and maintained for administrative purposes. Examples of this information are deposits, bonds, equity securities, loans and accounts receivable and payable. This type of information is usually registered with banks, corporations, government bodies and other similar agencies.

(c) A series of price indices to evaluate the balance sheet assets. This information is supposed to be available from the Statistical Office in many countries. The more detailed the classification of price indexes on various types of assets, the more valuable the price indexes will be for compiling national balance sheets.

(d) For purposes of compiling reconciliation items, information may be obtained from certain inquiries addressed to government bodies, companies and other administrative departments. This information is necessary to cover such items as national growth of timber, plantations, fisheries and new discoveries of subsoil, etc.

Thus, one may identify that the indirect approach in compiling national balance sheets depends on four main sources of information. These sources are:

- (a) benchmark data from the balance sheet of the economic sector or sub-sector
- (b) capital transactions from national income accounts
- (c) supplementary sources of information primarily based on information registered and maintained for administrative purposes together with that derived from special inquiries or statistical surveys
- (d) a series of price indexes to evaluate balance sheet assets.

Whether these major sources of information are qualified to serve the objectives of national balance sheets and whether they are workable in developing economies remain to be discussed in the next chapter.

Having collected all the information via the indirect approach, the compilation of a national balance sheet centres around the following equation: Estimates of benchmark data (opening of balance sheet) + capital transactions (from national income accounts and similar sources) +

revaluations of these transactions (using price indexes) + other reconciliation items = Entries of closing national balance sheets. The closing balance sheet entries could be considered as the opening entries of a further equation for the next period.

3.5 The Major Advantages and Practical Uses of Sector and National Balance Sheets:

In the last two decades there has been a growing interest, among economists as well as officials, in obtaining and using estimates of national wealth as an essential step in the formation of national balance sheets*.

This interest was based on the hope that these balance sheets might help to increase the understanding of the working of the economic system and the provision of a useful background for economic planning and policy formulation.

This section aims at reviewing some of the uses advocated for national balance sheets. These uses are discussed under the following main headings:

- (1) Analysis of tangible assets and their structure
- (2) Studies of productivity and capital coefficients
- (3) Financial (monetary) analysis and behaviour
- (4) Check against other economic accounts

* see, for example, references (163), (90), (86), (165), (85), (84), (141), (18), (19), (49), and (169).

- (5) Construction of flow of funds accounts
- (6) International comparability
- (7) Studies of the pattern of finance in the economy
- (8) International trade and negotiation
- (9) Studies of the growth and trends of the net worth
- (10) Other general uses.

The extent to which sector and national balance sheets benefit developing economies will be outlined. Each of these uses will be generally discussed below:

(1) Analysis of Tangible Assets and their Structure:

Analysis of the constitution of tangible assets for an economy or for definite sectors, has been considered by Goldsmith, (84, p.74) as probably one of the most important uses of sector and national balance sheets. Goldsmith argues that this importance may derive from the fact that the composition of the stock of tangible assets is classified into reproducible and nonreproducible assets. Information on assets of different age and life expectation are needed in the fields of capital, interest and money.

Analysis of the composition of tangible assets of a nation or even of a sector, if combined with national/sector products, may indicate a significant qualitative aspect, ie national/sector economic strength and welfare, (141, p.15).

A systematic and periodic analysis of the tangible assets and their structure in national balance sheets may display some measure of stability of either assets or of economic sectors, (163, p.5). This kind of analysis may also help to measure the economic progress of a nation.

This type of information may be of particular importance to developing economies. Policymakers may assess the capacity of the economic units comprising a sector in performing their functions and in achieving their assigned targets. Changes in the composition and structure of tangible assets and their distribution among the national sectors over time, resulting from different economic policies may then be studied and analysed.

Moreover, because the economy of a developing country will normally exhibit rapid growth there is a possibility that the tangible assets and their associated incomes may be concentrated in the hands of a few members (sectors) of the country. National balance sheets with their detailed presentation of tangible assets of each economic sector may help to illustrate the direction in which the wealth and consequently the income is concentrated. This information may help policymakers to take remedial action.

Furthermore, the dissemination of detail on tangible assets in national balance sheets could be of great benefit to a developing economy. For example, national planners in these countries may use economic models for national planning. The difficulties arising from such models in these nations are that the models make use of aggregated variables, (such as capital, production, income, employment) and some times make use of non-economic factors, (eg traditions and institutions). Because the economies of emerging nations are, most likely, characterised by imperfections in the

market, aggregation may on occasions hide more than it reveals.

One of the most important factors considered necessary for a production model is the "strategic factor". This factor is usually capital. Production is determined by the capital production ratio, which is termed the capital coefficient. This coefficient is often used in establishing development programmes. For the coefficient to have any meaning the numerator and denominator must of necessity be homogeneous.

To illustrate, the term "capital" in itself does not exist, and is by nature and use, heterogeneous. The broader and more heterogeneous the group of capital assets, the more difficult it will be to respect the condition of structural homogeneity. The heterogeneity of the components of capital implies the heterogeneity of its products, and consequently, raises the problem of their inclusion in the estimated product of capital.

This problem could greatly limit the usefulness of models in the specific circumstances of the developing economies. The classification scheme of sector and national balance sheets in respect of tangible assets and their various components together with data on stock of raw materials, work in progress and finished goods may be most helpful to planners in these countries. The planners would have the choice among several homogeneous components of capital to incorporate into their models. They may, for example, limit the nature of capital to be used to reproducible durable assets alone, they may not give the same importance to the various components of the reproductive assets, or they may wish to include certain intermediate consumption goods. Indeed, it is the balance sheet and its homogeneous presentation of the various components of capital, either for a nation as a whole or for an industrial sector, that does produce homogeneous and useful information that could be used directly in the capital output ratio.

Additionally, the types and volumes of physical and financial assets together with their distribution among the various economic sectors also represent elements of policy in the long term. The information presented in sector and national balance sheets is therefore especially useful for developing nations in carrying out their long term plans. For this information can be used in guiding the economy in such a way as to close the gap between the desired development and the development that is actually reflected in national balance sheets. Thus models for long term planning in these developing nations are, in reality, dependent on the availability of national economic statistics amongst which are balance sheets, national income accounts, etc.

(2) Studies of Productivity and Capital Coefficient:

Details of the various components of capital stock shown in sector/ national balance sheets together with the total output derived from national income accounts furnish the information needed to derive two important ratios:

(a) Capital-Output ratio (the capital coefficient)

(b) Output-Capital ratio (the capital productivity)

Both ratios have been calculated and used in many countries for the purpose of projections, economic analysis and comparative studies for different periods or between countries (76, p.158). Obviously, these ratios will also be of value for developing nations, because changes in these ratios may be used either to reveal situations that need correction or to indicate the effect of alternative policies.

(3) Financial (Monetary) Analysis and Behaviour:

One of the most crucial uses of sector and national balance sheets is their utility in exploring and analysing the financial behaviour of both the financial system and the different sectors of the economy (89, p.14).

From this major function arise many others. The financial and monetary analyses which are made possible by sector and national balance sheets are illustrated below:

(a) Price Levels and Interest Rates:

The data derived from a complete sector and national balance sheet could be used to explain the movements of price levels and interest rates and, in general, the major mode of operation of the money and capital market. This may be achieved by studying the liquidity of the different sectors of the economy in conjunction with the actual and potential changes in it. This use has been termed by Goldsmith and Lipsey, (89, p.12), as "The most powerful - and in the long run perhaps the most decisive - demand for national balance sheets".

(b) The Size of Financial Activity:

Balance sheet figures of sectors as well as a nation may be used for the purpose of determining the size and density of the financial activity in the country concerned. This is measured by the ratio:

$$\frac{\text{Value of Financial Claims}}{\text{National Wealth}}$$

The resulting ratio has been termed in the literature as the "Financial Interrelations Ratio"* (F.I.R.). This ratio has been used in:

- the study of the financial development of a country and the changes in her financial structure between two or more balance sheet dates. It is also used for international comparisons. It is within this context that Goldsmith, (87, p.102) has considered this ratio as: "... the first and possibly the most important single use that can be made of national balance sheets for intertemporal and international comparisons".
- the study of the balance and development of financial and physical assets. The ratio may reveal developing imbalances between these assets, (141, p.18).
- the variations of the F.I.R. between economic sectors. The study may reveal the sectors which finance their capital formation from external funds (high ratio) and those sectors which are self-financing (low ratio).

But the value of the F.I.R. for economic analysis may be conditioned by certain factors such as:

- (a) the composition of both numerator and denominator should be expressed in current prices, (164, p.22)
- (b) the accurate estimates of assets

* Revell and Goldsmith use slightly different methods of calculating this ratio. The former dividing the total value of financial assets held by all economic sectors, including the external, over the physical assets of the nation plus or minus foreign balance. While Goldsmith's ratio is derived by dividing the value of all financial assets over that of all physical assets located within national boundaries. Perhaps the major reason for this difference results from their definition of the term national balance sheet, to which previous mention has been made.

- (c) the stability of price levels over time
- (d) the method of sectoring the economy for national balance sheets system and the degree of consolidation in the accounts used for the system (163, p.301).

The absence of these factors may deter the value of F.I.R. and may lead to an inaccurate ratio as reported by Revell, (164, pp.22-23). Goldsmith* disaggregates this ratio into three main elements; the ratio of new issues by non-financial domestic and foreign issues to GNP, the ratio of the issues of domestic financial sector to national product, the third ratio is made up of three operators**.

In developing economies, one of the main objectives of financial policymakers is to promote domestic savers to channel their assets (savings) into productive uses. The encouragement of savers to hold their savings in the form of financial rather than unproductive assets has been considered one of the appropriate financial policies to achieve this objective, (151, p.185). The financial structure and composition shown in sector and national balance sheets may illustrate certain important facts. These are:

- (a) the role played by the financial institutions in these countries
- (b) the extent to which each economic sector responds to the financial system
- (c) the various motivations, attitudes and preferences of the economic sectors.

On the basis of this information policymakers in these countries may either support the economic sector that led the growth of the financial system or activate the role played by the financial institutions.

* see R.W. Goldsmith, "Financial Structure and Development", New Haven and London, 1969

** for more details see Goldsmith, op. cit.

(c) Studies of Portfolios:

In an attempt to defend the national balance sheet against criticisms made by theorists on the analytical value of national financial statistics, Roe, (167, pp.407-411), comments that in order to assess the extent to which instabilities of portfolios occur*, relatively detailed financial statistics, including balance sheet accounts, are needed. Portfolio shifts could give rise to financial difficulties** in one sector of an economy, and may easily communicate these difficulties to other sectors. Understanding the implications of portfolio instabilities may be conditioned by the availability of disaggregated financial statistics, which most likely can be found in sector and national balance sheets.

(d) Explaining the Financial Behaviour of a Sector:

The Bank of England Quarterly Bulletin, (22, p.496) explains how national balance sheets can be used to explain the financial behaviour of a sector. The Bank specified that comprehensive sector balance sheets together with sectoral flow of funds accounts provide a new analytical tool which may enable the users to identify some of the connections between various types of transactions and to understand the behaviour of economic sectors. The availability of cash transactions of a particular sector together with figures of the structure and composition of its assets and liabilities, has been considered by the Bank as a prerequisite if a

* unstable portfolios may occur as a result of the changing of liquidity preference which, in turn, occur as a result of the shift of expectations.

** the consequences of portfolio instabilities has been discussed by Roe, (167), details of which are beyond the scope of this thesis

meaningful economic interpretation of the sector's transactions is desired. Study of the behaviour of the economic sectors and the working of the markets in the different types of financial claims, continued the Bank, may not be achieved unless accompanied by a balance sheet covering the levels of both real and financial assets for every sector of the economy. The relationship between national balance sheets and flow of funds accounts will be examined later in this thesis*.

Moreover, the volumn of financial assets and liabilities held by the personal sector, for example, may have an impact on their future consumption behaviour. Also, their stocks of consumer durables may be taken as an indication of their standard of living (192, p.8).

(e) Monetary Analysis and Policies:

Because national balance sheets furnish information on the level of holdings of "money" and "quasi money", they provide valuable information to those who are concerned with the role of money. It may help them to propose useful and acceptable definitions of both terms. This type of information also provides a useful background for understanding how various monetary policies affect the transactions in these assets of different economic sectors. Consequently, it may contribute to the formulation of better and more effective monetary policies.

Moreover, information on the maturity of the debt structure may also be useful for both monetary and financial analysis. This information together with that related to the potential sources and uses of funds is important not only in analysing the money market conditions but also in formulating the appropriate policy (141, p.17).

*—see Chapters 4, 5 and 6

(4) Check Against other Economic Accounts:

The instrumental uses of national balance sheets have been considered by the U.N. as a check on the internal consistency of the accounts. Typical examples of these checks that must be carried out are (189, pp.16-17):

- (a) each type of financial claim held as an asset should equal the same type in issue as liability
- (b) the total revaluations of both financial assets and liabilities should be equal.

While Goldsmith, (83, pp.77-78) argues that one of the uses of national balance sheets, provided they were periodically made on a consistent basis, is that they could be used as a check on the figures of saving or capital formation which are published in national income accounts.

(5) Construction of Flow of Funds Accounts:

The construction of flow of funds accounts of a sector or a nation is largely derived from sector or national balance sheets as the difference between their entries at the beginning and end of the period.

(6) International Comparability:

International comparability of national balance sheets is considered of particular importance for all countries. Most of the internal uses made of a national balance sheet could be used for external comparative studies between countries in a similar and/or different stage of economic development. Information derived from these comparisons would be a

valuable instrument for the national planner. He may use this information to assess the extent to which the economy is progressing in terms of capital structure, particularly of reproducible tangible assets, financial assets, liabilities and net worth; and compare this with other countries in the same stage of economic development. Planners, may then, distinguish between accumulation of capital due to price rises and that due to the real increase in tangible assets without such price changes.

For developing economies, the interpretation provided by these comparisons may lead national policymakers to reconsider investment programmes under consideration. The comparison may also reveal certain constraints that are currently in operation.

It is within this context, that the U.N. report on balance sheets considered that the international comparability, when its whole structure is covered, becomes of prime importance because of the uses to which it may be put (189, p.14).

(7) Studies of the Pattern of Financing in the Economy:

The pattern of financing in the economy may be obtained from national balance sheet data by examining the excess/deficiency of financial assets over liabilities of each economic sector. This examination would provide information indicating which sectors have a deficit/or surplus. Revell and Roe, (165, p.x) present a table showing the excess of financial assets over financial liabilities of the U.K.'s sectors. This table is reproduced over:

Table (3.1)

Excess of Financial Assets over Financial Liabilities
of the U.K. Economic Sectors

	£ thousand million									
	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
Personal sector	36.0	42.1	50.1	48.9	51.8	53.3	57.2	55.3	58.1	58.8
Financial companies	-0.2	0.5	0.1	0.2	-0.8	0.4	0.9	1.0	0.6	0.3
Industrial and commercial co's	-7.8	-11.3	-18.0	-16.9	-18.7	-19.9	-25.1	-22.0	-23.3	-21.9
Public sector	-26.6	-28.9	-29.5	-29.4	-30.0	-31.9	-32.9	-33.0	-33.7	-34.9
Overseas	0.4	-0.3	-0.1	-0.6	-1.1	-1.2	-1.4	-1.3	-1.5	-1.9

Source: Table C from J.Revell and A.R. Roe, "National Balance Sheets and National Accounting - a Progress Report", Economic Trends, May 1971, pp.viii-xix.

The table provides some information on the extent to which the public sector and the industrial and commercial sector are dependent on the personal sector in executing their investment programme.

This information would undoubtedly be of prime importance in developing economies, by indicating the extent to which each economic sector is dependent/independent in financing its capital formation. The sector that plays a key role in the financing process may be supported by the government to perform its function more effectively.

(8) International Trade and Negotiations:

The composition of the tangible and financial wealth of a sector or a nation may provide indicators both of its resources and liquidity. If data is available on the level of the nation's external debit/credit it will allow other parties to assess her credit worthiness (192, pp.8-9). This information may be important in negotiating with international organisations.

(9) Studies of the Growth and Trends of National Net Worth:

The structure of national balance sheets enables the analysts to derive the total net worth of either the economy as a whole or for its individual economic sectors. The net worth can be derived as the difference between the market value of assets and liabilities. Goldsmith (89, pp.109-115) uses national balance sheets to measure the trends in, and the growth of, net worth among the main sectors of the American economy and the influence of price changes on net worth.

For developing economies this use may provide valuable information to policymakers. They may use the net worth of each economic sector as a criterion to assess the extent to which the development programmes have influenced the growth (or decline) as well as the diversity of the net worth among the main sectors of the economy. The growth of the net worth of each economic sector can then be analysed into its two main components, ie the growth which is related to a real increase in the net worth and that which is mainly related to the changes in price level.

(10) Other General Analysis:

By its very nature a national balance sheet is designed to serve the needs of many users. But because of the limited experience in compiling and using sector and national balance sheet data, it is true that every need of every user can not be anticipated in advance. This is true since different users may well have different requirements, one single national balance sheet would not serve all users equally.

Nevertheless, in the current literature there have been suggestions of other general uses made possible by national balance sheets. These

suggestions are outlined below, (83, pp.76-77 : 192, p.7):

(a) National balance sheet data may be used to contrast the ownership and management of tangible and other assets. From the economic policy point of view identification of the ultimate owner of an asset is less important than the identification of who is controlling and managing that asset. In the modern economy most tangible assets are owned and managed by mainly business corporations. Thus these assets are controlled by the managers of the firms who are a smaller group than the ultimate owners, the shareholders, who because of their diversity have a weak control over the firm.

(b) The pattern of investment already held by an institutional sector would undoubtedly have its impact on the funds available for investment in that sector. Similarly, the existing pattern of indebtedness of a sector would be considered, by lenders, if that sector needs finance. The availability of balance sheets will help to provide this type of data.

(c) The balance sheet of the producing economic sectors provides data on the level of the stocks of raw materials held by each of these sectors. This data together with that covering the products of the same sector, may be used in analysing the financial requirements and in scheduling the production and purchases of this sector. Also, the data furnished by balance sheets covering items on mineral deposits, agricultural timber and urban land, may be used as valuable information in dealing with problems of the availability, exploitation and the management of these resources.

(d) An overall rate of return on capital employed in each economic sector may be obtained by constructing sector balance sheets.

These are a few of the major analytical uses to which sector and national balance sheets may be put, mainly in the areas of economic analysis and management.

Many uses can not be foreseen but become apparent as the available data improves in quality; examples would be greater accuracy, disaggregation by sector; and breakdown by region.

3.6 Summary and Conclusion:

It has been demonstrated in this chapter that the importance of national balance sheets has been growing as a result of the repeated demands made, primarily by economists, to include stock variables within the framework of national accounting systems.

It has been shown that the chief motive for the early inquiry into national balance sheets did not lie in the necessity of considering it as a complementary part of a national accounting system, but in the many uses it can serve. It is evident that the rational inquiry made by the early economists was to find solutions to the problems brought to the community either by a forceful manner (Second World War) or by the pressure of economic conditions. The desire to find solutions to some of these problems and to help the government to formulate its economic policies as well as managing the economy in a more effective manner are two reasons for the growing importance of sector and national balance sheets.

In their present form sector and national balance sheets are attributed to the pioneering work of Revell in the U.K. and Goldsmith in the U.S.A. The structure of their systems together with that of the U.N. were outlined in the chapter. The comparison between Revell's and Goldsmith's balance sheet revealed that certain factors have played an important role in dictating the structure of their balance sheets.

These factors are:

- (a) the nature of the economy
- (b) the governmental system of the nation
- (c) the relative importance of the households activity
- (d) the degree of governmental intervention in the economic activity.
- (e) the lack of agreement, at the time their balance sheets were constructed, on standardisation either of the itemisation of assets/liabilities or sectoring the economy.

The results of this comparison would lead to a further major conclusion, the structure of a national balance sheet should adhere to the needs, requirements and structure of the national economy if its uses for national economic policy is to be realised.

Two basic problems in compiling national balance sheets were mentioned. These are sectoring the economy and the statistical sources of information. Some important factors are recommended to be considered in sectoring the economy for balance sheet purposes. The statistical sources, both the

direct and indirect approaches, for compiling balance sheet accounts, have been briefly outlined. Due to the many deficiencies embodied in the balance sheets of private accounting, they have not been recommended for use as part of the direct sources of information. But the possibility of improving the existing balance sheets in such a way that the trade off between the needs of the national balance sheet system and the requirement of not differing radically from the present practice within the context of acceptable business accounting has not been given consideration by these writers and the U.N. The indirect approach has been considered by them to be more valuable for national balance sheet purposes. Their recommendation will be further investigated in the next chapter from two points of view: its relevance to the circumstances of developing economies and its value in fulfilling the objectives of national balance sheets.

This chapter ends with a general review of the areas of use to which national balance sheets are put. The possible uses of national balance sheets for developing economies has also been discussed.

The value of this chapter may be summarised below in the course of providing:

- (a) A review of the academic and practical developments of national balance sheets and the factors that influenced their structure
- (b) Highlighting a few examples of the usefulness of balance sheet systems for policymakers in developing economies
- (c) Identifying certain factors that need to be considered in sectoring an economy for balance sheet purposes.

CHAPTER FOUR

Deficiencies of National Balance Sheets: with Reference to the Limited Experience of Egypt

4.1 Introduction:

The purpose of this chapter is twofold:

(1) To examine and analyse the efforts made by Egypt in approaching national balance sheets. The theoretical considerations that provide the foundation for the Egyptian experience towards national balance sheets will also be investigated.

It is considered that Egypt's experience in this field is very limited and at present is in an early state of development and therefore can not be directly compared with the experiences of either the U.K. or the U.S.A. Nevertheless, Egypt has tackled two important problems in approaching the concept of national balance sheets. These are sectoring the economy and the statistical sources of information. It is hoped that their discussion may throw some light on the work in progress of a developing economy in gathering data and preparing the way for compiling balance sheets. This may well fill the gap identified by the recent report (1974) of the U.N. on balance sheets of the very limited national experience in gathering and compiling balance sheet data.

The limited experience will, therefore, be discussed in terms of its relevance to the circumstances of the Egyptian economy, its suitability for the concept of national balance sheets, and whether or

not it may be used as a model for other developing economies.

(2) To examine two of the main hypotheses of this thesis. These argue that the present structure and composition of national balance sheets are constrained by certain limitations that could impair the objectives for which, in theory, they have been designed and that the recent recommendation (1974) of the U.N. on the statistical sources and methods may not be suited for the circumstances of developing economies. To test these hypotheses, an analysis and identification of the current limitations of these balance sheets and a criticism of the U.N. recommendation and its relevance for developing economies seems to be in order. This analysis and criticism will be mainly concerned with the general framework and composition of national balance sheets as drafted by the U.N. in 1974. The deficiencies apparent in the Egyptian approach to the system will also be examined.

4.2 The Current Experience of Egypt : Sectoring the Economy and Gathering Data for Sector Balance Sheets:

In 1970 Egypt adopted the new SNA as recommended by the U.N. As a result, the Central Agency for Public Mobilization and Statistics (CAPMS) issued two directives, (42, 43), which defined and classified the accounts and the additional tables required for the national economic accounts of Egypt. Further, the institutional sectors and their sub-sectors were classified as can be seen in the following chart, (see page 122).

The chart shows that the Egyptian economic sectors and sub-sectors are almost the same as the classification of the institutional sectors in the SNA*. It can be seen that the CAPMS incorporated both corporate public

* see Table 5.1 of the SNA, pp.78-79



Illustration removed for copyright restrictions

Source: Central Agency for Public Mobilization and Statistics, "National Accounts Directory of Egypt : Definitions and Classifications used", Vol. 1, Ref. 03-110, Feb 1971, p.53, Cairo. Arabic Reference

and private enterprises in one sector and quais-corporate public and private enterprises in another sector. Both of these are considered as sub-sectors of non-financial enterprises, corporate and quais-corporate sector. The CAPMS considered these sectors and their sub-sectors suitable for the compilation of the Egyptian national economic statistics, including balance sheets.

At this stage it may be useful to refer to the factors which have been considered desirable in sectoring an economy for balance sheet purposes*, in order to assess the extent to which Egypt has treated these factors in her attempt to sector the economy. Each one of these factors will be discussed briefly:

(1) The Objectives of Sector or Sub-Sector Balance Sheets:

Egypt has ignored this factor in at least three sub-sectors. These are, corporate public and private enterprises, quasi-corporate public and private enterprises, and all resident households. Indeed, these three sub-sectors are not homogeneous and consequently their balance sheets may not be able to explain their economic behaviour. It was surprising that a separate sector covering public enterprises solely was not identified especially when one considers the size and role of these organisations in Egypt's economy**.

(2) Integration of National Balance Sheets with National Income Accounts and Flow of Funds Accounts:

Although Egypt has observed this factor as far as balance sheets and national accounts are concerned, her flow of funds accounts are presented

* these factors have been discussed in the previous chapter, see section 3.4

** see Chapter 8, where reference to the size and role of public corporations in the Egyptian economy is mentioned

in greater disaggregation of the sectors, particularly of the financial institutions, as will be mentioned later in this study*.

(3) International Comparability:

The adoption by Egypt of the institutional sectors and sub-sectors of the SNA, implies that the criterion of international comparability has, to a great extent, been observed in her attempt to sector the economy.

(4) The Economic Circumstances of the Country:

By her nature, Egypt is an agricultural country. The agricultural sector still plays an important role in the economic activity of Egypt. This fact seems to have been overlooked in the process of sectoring the economy. It was surprising that a separate sector covering the agricultural activity of the households was not suggested among the classification scheme of sectors and sub-sectors. Accordingly, information on assets and liabilities of farm households, and consequently an explanation of their financial behaviour, is neither available nor possible. This, together with the incorporation of public enterprises with private enterprises into one sector, represents a potential deficiency in sectoring the Egyptian economy and an example of where the economic circumstances of the country seems to have been neglected.

(5) Gathering Data for Balance Sheet Purposes:

When the SNA was generally accepted, the CAPMS commenced a comprehensive programme to collect and process part of the important data which may be

* see Chapter 6, where the structure and composition of the Egyptian flow of funds accounts is discussed

used in the future as a basic input for national balance sheets. Details of the data so far gathered are discussed below.

(2) Statistical Sources:

One of the main functions of the CAPMS is to collect, progress and publish financial and national statistics covering the overall economic activity in Egypt. This data has been prepared at an economic unit level and has been published according to kind of economic activity and institutional sector and sub-sector.

The purpose of the CAPMS is (42, p.A) and (44, p.A):

- (a) to promote the availability of the basic data required for the construction of national economic statistics including balance sheets
- (b) to provide an access for researchers, economic analysts and other interested parties to study and analyse the progress of one or all of the economic sectors and the type of economic activity operating in Egypt.

In 1974/75 the CAPMS published comprehensive data covering balance sheets of certain economic sub-sectors in Egypt. These are the public enterprises sector and companies of the organised private sector.

It would be useful to describe and assess the balance sheet data of these economic sectors and their relevance to the requirements of national balance sheets.

(1) The Balance Sheet of the Public Enterprises Sector:

The work of the CAPMS in compiling balance sheets for the public enterprises sector has been facilitated by the introduction of a unified system of accounts which has been applied to all public enterprises except banks and insurance companies*. The balance sheet of the public enterprise was purposely classified to serve, among other things, the needs of the construction of national accounting statistics, (40, pp.8-9). A specimen balance sheet is shown in Appendix 6. The public enterprise balance sheet has two important features:

- (a) conceptually it is not different from a normal corporate balance sheet
- (b) the data is set out in such a way that it can furnish part of the basic needs of sector balance sheets.

With the help of the regulations laid down in the unified system of accounts and the requirements of company law, Egypt has been able to overcome some of the basic deficiencies of the balance sheet, mentioned in the previous chapter, for the most important economic sector in Egypt, namely, the public enterprises sector.

The balance sheets of all public enterprises in Egypt have the following advantages for compiling a sector balance sheet:

- (a) all companies have an identical end to their financial year, 31st December
- (b) all assets and liabilities are categorised in a specified manner which provides sufficient disaggregation

* a brief outline of the unified system of accounts is discussed in Chapter 9

- (c) valuation methods for assets, liabilities, bad debts and depreciation are based on unified procedures
- (d) the problem of "window dressing" is removed by the requirement of Egyptian company law for the presentation of consolidated group accounts
- (e) a distinction is made between home and overseas lending and borrowing.

Based on these balance sheets, the CAPMS has been able to construct two types of balance sheet for the public enterprises as a sub-sector of the non-financial enterprises, corporate and quasi-corporate sector.

These are:

- (a) aggregated balance sheet (Table (16.1) in Appendix 16)
- (b) disaggregated balance sheet according to kind of economic activity (Table (16.5) in Appendix 16)

It should be observed that the first balance sheet does not furnish relevant information for the compilation of the institutional sector and sub-sector balance sheet in the sense that is recommended either by the U.N. or used by Revell and Goldsmith. This is mainly for the following reasons:

- (a) the presentation of data in aggregated form
- (b) the historical valuation basis of balance sheet items.

The second balance sheet together with its supporting tables (Tables (16.13), (16.14), (16.15), (16.16), (16.18), (16.19), and (16.20) in Appendix 16) furnish basic detailed data for the compilation of a non-financial enterprises balance sheet by kind of economic activity as recommended by the Draft International Guidelines of the U.N. (1974)*.

The second balance sheet together with the supporting tables have the following advantages for compiling a basic part of the data required for Table (31) of the U.N. proposed system:

- (a) detailed information on the different classes of stocks
- (b) information on overseas and home borrowing/lending
- (c) detailed classification of short-term loans
- (d) identification of certain types of financial assets such as:
 - (i) government bonds
 - (ii) other financial assets (not clearly presented, ie no distinction is made between deposits, bills and long and short term bonds)
 - (iii) investments in foreign financial assets (no detail of their type is given)
- (e) identification of currency and transferable deposits, but without identifying those held in national or foreign currency
- (f) detailed information on the components of accounts receivable and accounts payable, but no distinction is made between resident and non-resident creditors and debtors

* see Table (31) of the U.N. proposed system in Appendix 5

- (g) enterprises are subdivided according to kind of economic activity as recommended by the SNA
- (h) detailed information of the annual addition to the various classes of fixed assets (see Table (16.16) in Appendix 16).

On the basis of the balance sheet of the public enterprise, Egypt has progressed a long way towards overcoming a major part of the deficiencies in these balance sheets that were described earlier.

(2) Companies of the Organised Private Sector*:

Having compiled balance sheet data for the public enterprises sector according to kind of economic activity, a similar attempt has been made by the CAPMS to extend this balance sheet to the private organised business sector. All economic units working in this sector, including the foreign owned units, are requested to forward their balance sheets in a form similar to that of the public enterprises and in a consolidated form. Some of their data was re-classified to fit in with the unified system of accounts (46, p.1).

In 1975, the CAPMS published balance sheets of the companies of the organised private sector. Appendix 7 shows the balance sheets of these companies. Four balance sheets are presented:

- (a) by legal entity (Table 7.1)
- (b) by nationality of owner (Table 7.2)

* the economic units comprising this sector are required to keep accounts and balance sheets and are subject to the Egyptian company law

(c) by geographical location (based on Head Office) (Table 7.3)

(d) according to kind of economic activity (Table 7.4) as recommended by the SNA.

The first three balance sheets can not be directly used for the compilation of a sub-sector balance sheet. This is basically due to the lack of detailed classification of assets and liabilities and their inappropriate valuation basis (mainly historical cost).

The fourth balance sheet, in which the enterprises are classified according to kind of economic activity, was presented in detail and supported by supplementary tables (Table (7.5), (7.6), (7.7) and (7.8) in Appendix 7) splitting the major balance sheet headings into their constituent parts. Almost all balance sheet items were presented in greater detail. This detailed information will furnish basic parts of the data needed for the compilation of a sector balance sheet according to kind of economic activity.

From the above brief description it would appear that the philosophy of the CAPMS in preparing the way to compile a sector balance sheet is based on the fact that the starting point of such an exercise should be the securing of essential parts of the raw data.

Though balance sheets based on the institutional sectors of the SNA have not, as yet, been prepared in Egypt, the process of gathering the data according to kind of economic activity indicates the direction in which the exercise is proceeding and also furnishes a basic part of the information required for the compilation of Table 31 "a closing stocks and

reconciliation for assets and liabilities of non-financial corporate and quasi corporate enterprises", as recommended by the U.N. report of 1974. The availability of sufficient and uniformly detailed balance sheets from the economic units has been considered one of the most important factors in facilitating the work of gathering and furnishing basic parts of balance sheet data.

Undoubtedly, the balance sheets constructed by the CAPMS do not fully conform to the U.N.'s framework and concept of national balance sheets. In an interview carried out by the author with the Director of National Accounts (and his team) in Cairo they defended their approach; which essentially is the intention to build up a comprehensive stock of data that in future will be used as a basic input in the compilation of national balance sheets. They further argued that the work in progress was to published balance sheet data according to the institutional sectors and sub-sectors as identified in the Egyptian directory of national accounts. They further stated that their next step is to refine these balance sheets to conform with the framework proposed by the U.N. together with the reconciliation data required.

This limited attempt made by Egypt to gather statistical data in the form of private accounting balance sheets for two important sub-sectors of the non-financial enterprises sector has shown the following benefits:

- (a) the building up of a comprehensive inventory of data
- (b) the pin pointing of the lack and limitations of existing balance sheets as currently collected.

This identification of the deficiencies in the present balance sheets may stimulate further improvements in their format in order to overcome these shortcomings.

The balance sheet data so far developed by Egypt indicates two important facts:

- (a) because of the huge size of the public enterprises sector in Egypt, their balance sheet and reconciliation data together with that of the private organised business sector needs to be developed gradually, starting with gathering their basic balance sheet data
- (b) Egypt gave a different order of priority to institutional sectors compared with the U.N. recommendations of 1974*. ** This is primarily due to the requirements and statistical needs and circumstances of Egypt.

It may be suggested, therefore, that in any proposal for developing a system of national balance sheets, the strengthening of the existing structure of both the balance sheets of the major economic units (particularly of companies, financial/non-financial and government sectors) together with their capital finance accounts** should be assigned a high order of priority.

* The order of priority in developing a system of balance sheets and reconciliation accounts as recommended by the recent (1974) report of the U.N. are:

- (1) financial institutions and general government
- (2) corporate and quasi-corporate non-financial enterprises
- (3) private non-profit institutions serving households and households, including unincorporated non-financial enterprises
- (4) the rest of the world.

** The public enterprise in Egypt is required by the Unified System of Accounts to submit with its final accounts a detailed capital finance account.

An immediate approach in this direction may lie in the standardisation of the classification scheme of micro balance sheets particularly of the economic units where the government exercises direct control in terms of assets/liabilities, dates and methods of presentation, considering part of the statistical needs of sector balance sheets. This approach coupled with supporting tables; including further details of stock variables (fixed and financial) and capital finance account, would not only build up a comprehensive inventory of data but would go a long way to providing part of the basic inputs for the compilation of a sector balance sheet, and would also be most relevant for the circumstances of developing economies, because of:

- (a) the deficiencies in financial and economic statistics of their basic economic units
- (b) the inadequate source of information derived by the indirect approach for the compilation of national balance sheets, as will be discussed in greater detail later in this chapter.

Additionally, the balance sheets of business accounts have the following advantages for national balance sheets:

- (1) they reflect the economic behaviour of the enterprises, which national and sector balance sheets are mainly designed to explain
- (2) almost all of their items, financial and physical, are verified and audited by qualified persons, and sometimes by official inspectors
- (3) they provide a reliable source of information

- (4) their informational content comprises a common source of information and would have to be used, whenever they are available, in either approaches to compiling sector balance sheets and for both checking purposes and supplying information on opening balance sheet stocks (indirect approach)
- (5) they are available, in principle, for all economic units which follow conventional accounting practices. In certain cases their publication is obligatory by law
- (6) they effectively have no cost and are thus the cheapest source of primary data for national balance sheets
- (7) they are available on a regular basis (yearly or half yearly).

These advantages seem to have been overlooked by the recent report of the United Nations of 1974. Such advantages may outweigh the deficiencies currently in operation in balance sheets of business accounting. And if one considers the present application of the balance sheet, introduced in Egypt, by all economic units working in the business public sector, and its use: to collect information from the private organised business sector, one may conclude that the feasibility of improving these balance sheets to furnish a main part of the data required is not as difficult as it was initially thought by the U.N.

It should not be concluded from the above suggestion that the compilation of a sector balance sheet, in particular the non-financial enterprises sector, will entirely depend upon the balance sheets of the various economic units comprising that sector; other indirect information will certainly be needed in some cases such as the price index series, the life expectancy of the various components of fixed assets and other

reconciliation data not included in the capital finance account. In these and similar cases the reliance on special statistical returns is likely to be unavoidable.

The advantages of the balance sheet of business accounts, discussed above, combined with Egypt's limited attempt in gathering data in the form of balance sheets of business accounting provides justification for further thought in re-considering this important document as a basic source of information.

Because of the importance and role played by the public/nationalised companies in the economy of a great number of countries it is suggested that their balance sheets should be the first to be modified to meet a basic part of the needs of national accounting. The direct governmental influence in such concerns will of course facilitate the changes required.

Finally, it may be stated that for sector balance sheets to be more of a valuable instrument in economic analysis, it could be useful to obtain direct observations of the economic phenomena that need to be explained. It follows that the more the sector balance sheet is compiled directly from the balance sheets of the economic units comprising that sector, the better it may serve its main objective. This, of course, is conditioned by both the availability of balance sheets of these economic units and in a form that is relevant to the concept of a sector balance sheet.

4.3 Limitations of National Balance Sheets : With Reference to the U.N. Report of 1974:

The identification of the major deficiencies which impose certain

restrictions on the uses which national balance sheets are designed to fulfil is the main objective of this section.

The main theme of this section is not to evaluate and suggest major modifications to the present U.K./U.S.A. balance sheet systems. It is considered beneficial, however, to criticise the U.N. proposed national balance sheets and the supporting tables of 1974, to indicate the general problems and limitations that must be given consideration when deciding upon the uses and the goals that the system is designed to achieve. The statistical sources of information and their relevance for developing economies will also be investigated.

The potential uses advocated for national balance sheets may be limited by the following factors:

(1) Direct, "versus" Indirect Approach and the Developing Economies:

It has been shown earlier that, due to the limitations embodied in the balance sheets of private accounts, they have been attacked, and consequently are not recommended as a part of the direct approach of compiling national balance sheets. As a result, the U.N. has suggested an alternative source of information to overcome these limitations. This suggestion was expressed by the U.N. (192, p.109) as follows:

"In view of the limitations in the balance sheets available from the administration of private and government bodies and the needs for special inquiries ..., consideration might be given to conducting coherent annual sample inquiries in order to gather suitable basic data for the purposes of compiling the balance sheet, capital finance and reconciliation accounts and supporting tables".

The annual sample inquiries have been recommended for both the direct and indirect approach for the purposes of gathering data for the compilation of balance sheets.

Evidently this suggestion may not yield the required information and, therefore, may not be practical for the objectives of national balance sheets. Experience has shown that this type of enquiry suffers from difficulties as well as deficiencies, not only in developed but also in developing nations.

Barna, (25, pp.10,13,33) made an attempt to measure the fixed assets in the British manufacturing industry in 1955 using a postal questionnaire. 228 questionnaires were despatched and 138 replies were received; 90 of which proved to be of use, the remainder were mainly refusals to supply the required information. Various reasons were given by companies for refusing to give information, examples were: confidential nature of the information, their staff were too busy and working under pressure, or that the information requested had already been supplied to the government or other bodies. Barna concluded that the major difficulties inherent in this type of enquiry are:

- (a) not all firms are capable of supplying satisfactory answers
- (b) the data collected may, on occasions, require interpretation by the designer of the questionnaire.

It may be argued that compulsory returns to the statistical authorities may overcome some of these difficulties and will increase the response rate. In fact compulsory returns could in certain instances lead to incorrect answers being provided with a consequence that the end result

may be meaningless. In this context, Barna states: "... in this field it is better to be satisfied with voluntary answers that risk the inclusion of compulsorily obtained but meaningless data".

A similar situation was faced by the Sandilands Committee (161, p.253) in their recent report on Inflation Accounting in Britain. Out of 242 questionnaires sent to both private and nationalised industry, only 122 replies were received (just over 50 per cent).

Moreover, in a recent article published in June 1977 by a group from the Central Statistical Office in London, the data collected from each industry has some deficiencies in the present estimates of capital stock and capital consumption for the U.K. (102, pp.123-127). Because both estimates are important ingredients in the construction of balance sheets, deficiencies in their estimates will, by definition, leave their impact on the informational content of national balance sheets. Similarly it has been reported by Lützel, (123, pp.63-77) that the various gaps in the statistical sources in the Federal Republic of Germany has created a situation in which the capital stock calculations are not satisfactory in terms of accuracy and reliability. Lützel argues that the main problems of measuring capital stock by sector are:

- (a) the statistical data base is incomplete
- (b) the gaps in the source material
- (c) lack of information on the capital expenditure of small enterprises, part of business services and private non-profit institutions

- (d) the considerable costs involved in conducting a comprehensive census of the stock of fixed assets and the many difficulties which could be expected in connection with such a census.

Finally, Lützel comments that it is doubtful that a comprehensive census would substantially improve the quality of capital stock estimates.

Furthermore, it has been argued by Revell, (163, p.35) that in his attempt to collect information necessary to construct the U.K. national balance sheets, statistical information relating to past years was needed. But the response to requests for these statistics was, as expressed by Revell: "never good". While the Royal Commission on the Distribution of Income and Wealth (169, p.74) argued that the low response rates and inaccurate information received from respondents are the two major problems that affect sample surveys.

The experience detailed above may be used to illustrate the general attitude of companies to these inquiries and the difficulties which may result in connection with such a statistical inquiry or a census. Thus caution should be exercised when generalising on the results obtained from such inquiries or census.

It should be clear that one should distinguish between the objectives to which these inquiries are carried out. If the objective of the exercise is to obtain information to explain general trends or to test a specific hypothesis, then a limited response may be adequate if it can be shown to be a representative sample of the population. The problem however is proving the representativeness of the returns. In the field of national balance sheets the lack of and deficiencies in the available statistics have to be remedied by collecting the required information, almost

invariably on a sample basis. But the size of sample population in the latter case should be far greater than that in the former case. This is mainly due to the nature and objectives to which national balance sheets are designed to fulfil. In this context, Revell, (1963, p.37) argued that:

"The amount of sample investigation necessary for national balance sheet work is certainly far greater than that for financial transactions tables. When considering transactions it is often quite sensible to neglect the smallest economic units because their contribution to the total of transactions is usually negligible, although an occasional study ought to be made to verify this. In national balance sheets one is trying to find holders for all the financial claims in existence, and small holders in aggregate may account for fairly large amounts even though they are inactive; they cannot be neglected with the same assurance".

Thus, a limited response to these sample inquiries may not furnish suitable information for national balance sheet purposes.

Although the theoretical problems associated with this type of inquiry apply equally to both small and large countries, it is considered that the practical problems are considerably greater in a developing country.

Though it is not proposed to discuss these problems in depth, the work of Ward, (197, pp.217-220), which outlines the limitations of these forms of surveys and inquiries, may be pertinent. He analysed the limitations of censuses, surveys and inquiries as a basis for measuring capital stocks in less developed countries, and commented as follows:

- (1) Due to cost constraints, the information obtained may not be superior to that already available from financial records.
- (2) Conducting a special survey of capital assets in developing economies

will normally only be made in association with a more general census of industrial activity, thus the other sectors of the economy, ie agriculture, transport, services will generally be excluded. Consequently, information on their capital stocks will not be available for balance sheet purposes. Even when certain information is obtained, its quality and usability may be questionable.

(3) The decision to conduct a direct inquiry will raise practical problems. Examples are:

- (a) the problem of costs
- (b) the importance of drawing up a set of definitions understandable to all who are required to provide the answers
- (c) the existence of a large number of subsidiaries of international corporations with different accounting practices and valuation methods will impose difficulties of consolidation, valuation and comparison of this data.

To this may be added the problem of the availability of trained and skilled statisticians in these developing economies.

(4) The special difficulties involved in the survey carried out in Lesotho, a small underdeveloped country, prove that even in a country without a substantial capital asset structure the practical problems of

data collection by direct survey on inquiry would be too immense*.

Moreover, it has been argued by Noriega, (144, p.135) that the majority of Latin American countries have periodically carried out censuses in various economic sectors such as mining, agricultural, industrial, commercial and services. But the quality of the information collected in terms of coverage, accuracy and relevance is often deterred by the inappropriate approach and conduct of the inquiry. Furthermore, the basic statistics made available fail to meet the needs of the system of national income accounts, consequently the requirements of the system of national balance sheets will also not be met.

In view of the difficulties involved in the application of statistical inquiries in developing economies, it would appear that this source of information is not only irrelevant in these countries, but also may not be sufficiently valid to produce data for national balance sheet purposes, as recommended by the U.N.

It would appear that the argument that suitable data on:

- (a) changes in stocks
- (b) gross capital formation
- (c) depreciation of fixed assets of economic sectors

is available from national income accounts, does not have adequate support (see Chapter 2). In support of this comment, Seers, (176, p.2) in a

* Details of the difficulties involved in the Lesotho survey can be found in Ward (197, pp.218-220)

statement to the Conference on Statistical Policy in Less Developed Countries postulated that the SNA led many developing economies to produce "very bad statistics, just to complete the accounts". Similarly, the work of Noriega (144) on "The Present State of National Accounts in Latin America", gives further support*.

Furthermore, in their attempt to investigate the current availability of supporting basic statistics and national accounts data in sixteen developing economies, Blades and Marczewski (29, p.71) have argued that the quality of these basic statistics is "so low in an absolute sense" that it has a direct impact on the compilation of meaningful tables of national income accounts for the countries considered.

It follows that despite the advantages of using the indirect approach (of which the annual sample inquiries and national income accounts information comprise a main statistical source) for compiling sector and national balance sheets, its practicability in emerging nations may not yield reliable and relevant data for balance sheet purposes. The successful application of this approach depends on:

- (a) series of price indices
- (b) first benchmark data
- (c) sufficient detailed information on capital transactions.

This information may not be available either from special sample inquiries or the present state of national accounts in some developing economies.

* see also the deficiency of the basic statistics in developing economies, discussed in Chapter 2

The indirect approach, based on the perpetual inventory of fixed assets, has generally been criticised for developing economies by Ward, (197, p.215) on the grounds that:

"... most developing nations have insufficient capital formation data and inadequate price information to compile a perpetual inventory model of their capital stocks. The capital formation figures are usually neither sufficiently detailed by asset, sector and industry nor sufficiently comprehensive to enable a proper and meaningful analysis to be undertaken. And, much more important, such series rarely extend back far enough for a complete inventory to be compiled".

It should be clear, however, that if there is not sufficient data for compiling sector or national balance sheets, a considerable amount of estimation will be necessary. Thus some of the balance sheets objectives may not be achieved.

It may be concluded that the stage of development in the areas of annual sample inquiries and national income accounts in many developing economies is unsatisfactory in terms of not supplying detailed information on stock variables and capital transactions, and their recent evaluation by economists indicates that their informational contents in terms of quality and quantity has fallen behind the requirements of the SNA.

The whole picture of national balance sheets becomes more meaningless if these sources of information in developing economies, as recommended by the U.N. report of 1974, are used in their compilation. Thus, based on unreliable, incomplete, undetailed, inaccurate, insufficient size of sample population, and inadequate sources of information, national balance sheets in these developing economies may not achieve the objectives for which they are designed.

The emergence of national balance sheets combined with the present state of their statistical sources reveals the efforts required if their information is to serve economic planning and policy. Clearly, little benefit can be made from these balance sheets unless their basic statistics are improved and detailed in scope. This is the crux of the problem towards which one would have hoped that the U.N. could have made greater efforts, particularly for the emerging nations.

As a suggestion in this direction, it would appear necessary to place greater efforts and resources on the general framework of balance sheets, particularly of economic units working in the non-financial enterprises and the organs of the government agencies to provide a valuable extension and starting point for national balance sheet systems. This may overcome many of the deficiencies inherent in the main sources of information of the indirect approach.

It may also be stated that the balance sheet of the micro economic units, particularly of enterprises, has now reached such importance in the macro economic environment that it can not be left solely to the administration of a private group. This implies that the presentation of these balance sheets should bear the interests of the compiler of the sector balance sheet in mind. Nevertheless, one should remember that in certain economic sectors, such as the personal sector, the compilation of balance sheets, using the indirect approach as a basis, may provide reliable and accurate sources of information for producing estimates of aggregate personal wealth than the direct approach.

From the above discussion, it may be stated that a rational modification to the balance sheets of business accounting is needed to remedy a main part of the problems associated with using the indirect approach, especially in

a developing economy. The possibility of compiling balance sheet items directly from the balance sheets of business accounts for a developed economy (U.K.) has recently (June 1977) been expressed by a team working at the CSO in London. They commented, (102, p.117) that:

"... the possibility that with the development of commercial accounting direct estimates of capital stock may be derived from enterprise accounts at some future time. For the present, however, an indirect perpetual inventory approach is followed".

If writers on balance sheets are recommending the use of standard definitions, accounts and classification in national balance sheets, why can not they also consider possible improvements including standardisation of the general classification framework of balance sheets of business accounting? Why cannot a common set of classifications of balance sheet items be adopted for use, initially, in certain economic sectors, in both developed and developing nations? And why can not this balance sheet be sent to the national statistical authorities and the accounting professional bodies for comments? Not only would uniformity of definition and classification of balance sheet items of business accounting add to the facility of economic analysis, it would also contribute immeasurably to the compilation of the non-financial enterprises balance sheet.

Experience has shown, however, that the balance sheet of the individual economic units within each sector has been used as a main source of information for the compilation of national balance sheets. For example, it has been argued by Revell, (163, pp.35,36) that in spite of the deficiencies of the published balance sheets of the economic units, they have been used to fill the gaps in the statistical information needed. He further argues that the main source of information used in his work to construct national balance sheets for the U.K. was the balance sheets drawn up by each of the economic units comprising a sector.

One of the main objectives of this research is to suggest modifications in the present structure of balance sheets of private accounts, basically for public/nationalised companies. The modifications will be made for two main purposes:

- (a) as a remedy for their basic deficiencies for national balance sheet purposes
- (b) conceptually not to be radically different from current business accounts practice

Details of this will be discussed in Chapter 10 in this study.

(2) Deficiency of the Standard Accounts and Tables of the Institutional Sectors of the U.N. International Guidelines of 1974:

In annex 9.2 of the "Draft International Guidelines on the National and Sector Balance Sheet and Reconciliation Accounts of the SNA", models of the consolidated accounts for the nation include the following accounts:

- (1) Account 7 - opening balance sheet account, including opening assets, liabilities and net worth
- (2) Account 5 - capital finance account, including accumulations and the finance of these accumulations
- (3) Account 8 - reconciliation account, which is supposed to cover all the differences between the opening and closing balance sheet-accounts of assets and liabilities which are not treated on the capital finance account

(4) Account 7 - closing balance sheet account, which is the sum of the above three accounts.

The sequence of the above balance sheet accounts not only furnishes useful information with which the users could identify the different factors that contributed to the closing figures of certain assets/liabilities, but it could be used to derive any account provided the other three are known.

But when it comes to the balance sheet accounts of the institutional sectors and their supporting tables (Tables (30), (31), (32) and (33)), one of the deficiencies in these accounts and tables is that the U.N. omitted both the opening balance sheet account and the capital finance account. It follows that the accounts and tables for each institutional sector will have only two types of accounts, namely:

(a) closing balance sheet account

(b) reconciliation account.

Surprisingly, despite the consideration given by the "Report of the Fifth Session of the Working Group on National Accounts and Balances", (201, p.44) that the accounts of the individual sectors, as for the nation as a whole, should show the sequence of the balance sheet equation. That is the accounts should show:

(a) opening balance sheet

(b) transactions on capital finance account

(c) revaluations and other adjustments

(d) closing balance sheet.

The report of the U.N. of 1974 seems to have overlooked their earlier recommendation.

The main reason for omitting these two accounts from the institutional sector accounts and tables was, as reported by the U.N. (192, p.68), that the opening balance sheet would be the same as the closing balance sheet for the previous period and the capital finance account would appear in the standard transaction account of the sector concerned for the period in question.

It would appear that the omission of the transactions on capital finance account by the U.N. has been established on the assumption that the capital finance account of the institutional sectors and their sub-sectors, which is part of national income accounts and their Supplementary Tables, would be available at the time when the balance sheets of these sectors/sub-sectors are published. This assumption is unrealistic for two main reasons:

(a) There is a considerable delay in the publication of national income accounts of developed and especially developing economies, (see the survey carried out by the author in Chapter 2, section 2.4). In this situation the value of sector balance sheets could be impaired by delay in the publication of the sector capital finance account.

(b) It has been suggested by the SNA, (191, p.147) that it is

desirable that certain standard tables of the system be compiled once every three to five years. Since capital transactions are incorporated in these tables, their absence would influence both the annual compilation of the sub-sectors balance sheets and the completion of the balance sheets sequence. Examples of the tables which have been recommended for compilation once every three to five years are 19, 20 and 23, on the income and outlay and capital transactions of the public and private sectors, and subdivisions of non-financial corporate and quasi-corporate enterprises and households. These could limit the usefulness of the proposed Supplementary Tables to national balance sheet suggested by the U.N.

One approach to appraising the deficiency of the sector balance sheet accounts for each one of the institutional sectors and their standard tables is that, unless the capital finance account and the opening balance sheet of the sector concerned are available, part of the balance sheet value for economic analysis may not be fulfilled. For example, the users of this information may not be able to identify the extent to which the differences between the closing balance sheet and the reconciliation account are the result of the opening balance sheet rather than changes in the total acquisition of assets or incurred liabilities.

The U.N. (192, pp.70,73) proposed that the whole sequence of balance

sheets should be presented in the case of publication only. The report further suggested that the sequence should be incorporated in the same table in the situation where it was considered necessary to study the changes in the composition of the balance sheet of the various sectors/sub-sectors for a given period. They did not indicate, however, that the publication of the full sequence was mandatory, rather they suggested that it was desirable.

In fact the incorporation of the whole sequence of the balance sheet for each singular sector/sub-sector in the same account and table is not only desirable but essential for achieving the analytical uses advocated for national balance sheets.

One of the main deficiencies of the standard and supplementary tables proposed by the recent U.N. report is that they did not incorporate the essence of tables (29) and (30) which have been initially proposed by Revell, (189, pp.91,92). The structure of these two tables are reproduced in Table (4.1) and Table (4.2) over:

Table (4.1)
Opening and Closing Stocks, Net Accumulation and Revaluations of Non-Financial Assets

Code	Type of asset	Opening stock			Net accumulation 2/	During year			Closing stock		
		Original cost	Accumulated revaluations	Current values		Revaluations			Original cost	Accumulated revaluations	Current value
						Price changes	Adjustments	Other net increases			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
10.1.1	Residential buildings										
10.1.2	Non-residential buildings										
10.1.3	Other construction works										
10.1.4	Transport equipment										
10.1.5.1	Agricultural machinery and equipment										
10.1.5.2	Other machinery and equipment										
10.1.6	Livestock										
10.1	Reproducible fixed tangible assets										
10.3.1	Furniture, fixtures, etc.										
10.3.2	Major household appliances										
10.3.3	Personal transport equipment										
10.3.4	Other										
10.3	Consumer durables										
10.4	Military durables										
10.2.1	Goods producing industries										
10.2.2	Wholesale and retail trade										
10.2.3	Other industries										
10.2.4	Stocks of government services										
10.2	Stocks										
11.1	Land										
11.2	Forests and plantations										
11.3	Subsoil assets										
11.4	Water installations and fisheries										
11.0	Non-reproducible tangible assets										
12.1	Patents, trade marks and copyrights										
12.2	Other										
12.0	Non-financial intangible assets										

Source: Table (29) of "The Proposed Balance Sheet and Revaluation Accounts of the System of National Accounts (SNA)"
Report of the Secretary-General, Statistical Commission, Sixteenth Session, Item 7 of the provisional agenda,
E/CN.3/398, 29 July 1969, p.91.

Opening and Closing Stocks, Net Acquisitions, Net Incurrence and Revaluations of Financial Assets and Liabilities.

Assets								Liabilities								
Opening stock		During year		Closing stock		Opening stock		During year		Closing stock						
Cost of acquisition	Accumulated revaluations	Current value	Net acquisitions	Revaluations	Cost of acquisition	Accumulated revaluations	Current value	Nominal (face) value	Accumulated revaluations	Current value	Net incurrence	Revaluations	Nominal (face) value	Accumulated revaluations	Current value	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
Type of asset/liability ^{2/}																
Item																
1	Gold															
2	Currency and transferable deposits . . .															
3	Other deposits															
4	Bills and bonds, short-term															
5	Bonds, long-term															
6	Corporate equity securities, including capital participations															
7	Short-term loans n.e.c.															
8	Long-term loans n.e.c.															
9	Net equity of households on life insurance reserves and on pension funds															
10	Net equity in quasi-corporate enterprises															
11	Trade credit and advances															
12	Other accounts receivable and payable															
13	Other															
													Total			

Source: Table (30) of the same source as Table (4.1).

The main advantages of the previous tables are:

- (a) the presentation of detailed information relevant for the users' needs
- (b) clarifying the main composition of the balance sheet entries, thus enabling a nation to compile the different components of the closing balance sheet entry.

Table (29), however, should have been recommended not only for each institutional sector (as proposed by Revell), but it should also be required for each sub-sector of the institutional sectors. This is mainly to:

- (a) observe the concept of homogeneity of a sector
- (b) provide more disaggregated data relevant for productivity analyses which may be impaired if the analysis is carried out at the aggregated level. In this context, Lützel, (123, p.64) comments:

"It is generally true that productivity analyses, owing to changes within the sectorial structures, have relatively little informational value if the analysis is made at a high level of aggregation. For that reason, productivity analyses should be carried out in as much sectorial detail as possible".

- (c) furnish data relevant for the circumstances of a developing economy. The provision of the capital stock in a more detailed breakdown by institutional sub-sectors will permit national planners in these countries to observe the progress made in the sectoral distribution of capital formation in connection

with the development programmes being carried out in the country.

Finally, it would have been hoped that certain differences in terms of character and structure in the standard accounts and tables would have been set out to suit the circumstances of developing economies. Such circumstances have already been recognised and considered by the SNA in "Adaptation of the Full System to the Developing Countries". Regretably, there is little evidence that neither the "special circumstances of the developing countries" nor their basic feature of "economic dualism"*, have been considered by the recent U.N. report on national balance sheets.

(3) Sector Components and the Objectives of National Balance Sheets:

The concept of non-homogeneity of the accounts, which was discussed earlier, may be considered one of the most serious drawbacks to the usefulness of the information in national balance sheets.

The grouping of specific economic units into a sector can satisfy some, but not all, of the objectives. For example, the consolidation of central government/local government and public corporations into one sector may be of value for the purpose of identifying the borrowing requirements of the whole public sector, or the extent to which the net worth of the public sector contributes to the national debt. But for the purpose of explaining their separate economic behaviour towards certain situations, their consolidation may not be able to furnish sufficient detail.

* see Chapter 9 of reference (191)

In Table (30) "closing stocks and reconciliation for assets and liabilities of private and public institutions", which has been proposed by the U.N., the composition of both private and public institutions contain non-homogeneous economic units, which in turn will affect their information value for economic analysis.

Within this context, the question which must be asked is: "Do the public institutions' components operate on a homogeneous basis as far as their economic activities are concerned?" If the answer is no, then, how could their economic behaviour be judged from a single balance sheet? There is a possibility, however, that the phenomena that occur in the economy may not have an equal effect on all the various economic units comprising a sector. Consequently, the desire of one group of economic units for changes in their balance sheet structure may not be the same as the desire of other groups.

This non-homogeneous concept in the composition of the institutional sectors, and to a lesser extent in their sub-sectors would appear to exist in all the systems investigated in this thesis, ie the U.K.*, U.S.A., Egypt and U.N.

* It should be clear that the balance sheet system of the U.K. which was initially proposed by Revell in "The Wealth of the Nation" (included 31 sectors grouped under 14 main sectors) has to a great extent observed the concept of homogeneity in the sector's components, (see Appendix 3, Table 3.2 and reference (163, pp.372-441)). Also, the system developed by Roe in reference (168) has observed the homogeneity concept through the enlargement of the U.K. sectors to include 34 sectors grouped under five main sectors. This enlargement was presumably made to ensure, among other things, the degree of homogeneity. But the five balance sheet estimates for the broad U.K. sectors, which are shown in Appendix 3 in Table 3.3, exhibit non-homogeneity as far as their sector's components are concerned. Thus in their own right they may not be used either to explain the economic behaviour of the broad sector or its individual components. These broad sectors clearly combine heterogeneous units and groups of units.

One may conclude that if the concept of homogeneity in grouping the economic units that comprise a sector for balance sheet purposes is ignored, the sector balance sheet may not produce adequate information to meet the main function for which it was designed, ie the explanation of economic behaviour*.

(4) The Objectives of the Accounts : Balance Sheet "versus" National Income:

The previous chapter has outlined the fundamental objectives which sector and national balance sheets are designed to fulfil. It has also been mentioned that balance sheet sectors must take account of those sectors distinguished in national income accounts.

One may ask whether the objectives of balance sheets are the same as those of national income accounts. Dorrence, (62, p.173), presents a clear and definite answer to this question when he argues that there are fundamental differences between the purposes of balance sheets and national income accounts. The purpose of the former is:

- (a) to measure the past accumulation of assets and liabilities of economic units

* It should be made perfectly clear that in reality no sector would expect to be completely homogeneous, each economic unit is to a great extent unique. So the compiler of a sector balance sheet, while observing the concept of homogeneity by ensuring that there is no diversity between the economic units, as far as their economic behaviour, comprising a sector exists, he must keep the number of sectors sufficiently small for economic analysis purposes. So, some kind of reconciliation or balance between these two variables must be made by the compiler if an optimum utility from sector balance sheets is to be achieved. See reference (62, pp.172-175) for further details.

- (b) to determine the economic units reactions to changes in the levels of their assets and liabilities
- (c) to show the changes in financial relationships that take place with changes in expenditure patterns of economic units.

While national income accounts are mainly designed to provide a systematic presentation of the major economic flows (production, consumption, investment, saving and capital formation). Such presentation facilitates the understanding of both the statistical relationships among these flows and the allocation of resources among types of end use.

Thus each set of accounts must be directed towards the achievement of its own objectives. It follows that the ideal economic groups to form a sector for national income accounts may not be the same as that for balance sheets. But the reverse situation may be true. In other words, the institutional sectors for national balance sheets may satisfy national income accounts purposes, while the institutional sectors for national income accounts may not fully satisfy balance sheet purposes. This situation arises because of the different objectives of each system.

The different purposes to which each set of accounts is designed to fulfil seems to have been overlooked by writers, including the U.N. proposed system of 1974, on national balance sheets. In the design and construction of national balance sheets, they ensured the consistency of its economic sectors with those of national income accounts. For example, the sector classification scheme recently adopted by Revell and Roe for the U.K. national balance sheets has been mainly made to ensure consistency with the revised SNA. The recent report (1974) of the U.N. on balance

sheets has recommended that the classification scheme of institutional sectors and sub-sectors of the SNA are suitable for purposes of balance sheets. Egypt has also considered that the institutional sectors and sub-sectors designed for the purposes of national income are those needed for balance sheet purposes.

It is obvious that consistency between balance sheets and national income accounts is necessary. But consistency, however, should not be achieved at the cost of not fulfilling the aims and objectives of national balance sheets. It has been argued by Kendrick, (115, p.61) that in the process of planning for gathering data for wealth and balance sheets, altering the structure of the income and product accounts in some respects may be useful. He further comments that: "Provision for consistency is not a one-way street". The main deficiency in the current balance sheets recommended by the U.N. is that the economic sectors identified may not satisfy their objectives, because of the problem of aggregation and non-homogeneity.

The U.N. report (192, p.25) of 1974 mentioned the importance of dividing the non-financial enterprises sector into private and public enterprises because of their differences in their financial sources and management. The report also considers it useful if a distinction is made between nationally and foreign owned enterprises. Non-financial enterprises are also suggested to be classified by size. Obviously, the main reason behind these suggestions is to enable either the policymakers or the analysts to study the financial behaviour of these homogeneous components and thus to formulate suitable financial policies.

But the fact remains that none of these suggestions are incorporated either in the balance sheet of the non-financial enterprises sector or in the standard tables. These suggestions, if incorporated in the standard accounts and tables, are likely to be of value in achieving the objectives of balance sheets.

(5) Problems Associated with Current Market Valuation:

Though the problem of valuation has not been discussed, it may be useful to identify general considerations and problems which are inherent in the valuation concept of balance sheet items and may, in consequence, impair the value of their informational content.

Market value is considered the basis of valuing balance sheet items. The following represent some of the conceptual and practical difficulties of market value which may either limit their usefulness for balance sheet purposes or represent problems to the compiler:

(1) In reality market prices of a number of commodities are set at local rather than national levels (204, p.77), and some differences between these two market prices may exist. The level at which the balance sheet items should be valued may represent a problem for the compiler because both prices explain economic decisions.

(2) Market prices may fluctuate daily, especially financial assets, and this may be caused by factors other than the normal variables (ie the interaction between willing buyer and willing seller). Examples of these factors are political and other economic issues. But the U.N. report of 1974 dictates that commercial considerations should be the only determinants of market price if this value is to be used in national

balance sheets. In such cases, although these market prices reflect the transactions of willing buyer and willing seller, the users of these accounts may give considerations to these factors when explaining the economic behaviour of sectors or their sub-sectors.

The Stock Exchange has been considered as ideal for the purposes of valuing balance sheet items (192, p.46). In the real world the Stock Exchange is often subject to other external pressures, nationally or internationally (political or economic), which sometimes play an important role in determining the movement of prices. In this context, it has been suggested that the use of average prices on the stock market may be more appropriate rather than those prices applying at the balance sheet date, (201, p.6). But this suggestion would have consequences for the integrity of the SNA would be affected. For the use of averages in one component of the system would mean that it would have to be similarly applied to other components of the system.

(3) Price indices may impose difficulties when valuing balance sheet items. The problem arises when industries as diverse as cement, furniture, bricks and glass are all treated as a single industry when indices are used. The question which may arise is: "Do the prices of all goods within an industry move together?" In reality the prices of all goods do not move together or even in the same direction. Hence the lack of an appropriate price index may be considered another handicap if a single heterogeneous industry index is used for valuing balance sheet items.

(4) In specific instances the market price may not be considered suitable for attempting to explain economic behaviour. Examples could be:

(a) monopoly prices

(b) commodities subsidised by government

(c) prices determined centrally by government

(d) prices quoted from an imperfect market.

These prices may not represent the market value which is in mind when economic decisions are taken, hence they might not explain the economic behaviour which is the main aim of balance sheets.

(5) Stock valuation of private enterprises based on LIFO, as advocated by the U.N., would not appear to give an acceptable current value. It could be argued that the U.N.* should have suggested the use of FIFO so that the book value of stocks could be nearer to current market prices. LIFO, however, could be acceptable where stocks are turned over quickly and where prices are relatively stable: in an inflationary environment, however, LIFO will tend to greatly underestimate the current market value of stocks.

(6) Difficulties in International Comparisons of National Balance Sheets:

It has been mentioned earlier that one of the most interesting uses of national balance sheets is comparison between countries.

For the effective use of national balance sheets for international comparison there are specific conditions that should be met, examples are:

- (a) The statistical unit used in the compilation of balance sheets must be the same for the countries being compared. The greater the difference in the basic definition the greater the chance that the comparison will generate meaningless results.

* the U.N. recommended LIFO, did they mean FIFO?

- (b) The balance sheet must use the same principles of valuation for all assets.
- (c) The information should be sufficiently detailed to allow meaningful comparison,
- (d) The composition of the institutional sectors should be sufficiently homogeneous.

Unfortunately the current literature does not give sufficient information to show the degree to which these conditions are met for all of the countries that produce national balance sheets. The only two countries whose national balance sheet can be compared are the U.K. and the U.S.A. This comparison, however, can not be carried out directly, the structure of the data has to be modified. Revell, (1963, pp.95-96) details the adjustments required in order to achieve standardised balance sheets for the purpose of comparison.

If one considers the structure of the economic sectors of both the U.K. and the U.S.A., compared with Egypt, one may conclude that unless the balance sheets of these countries are adjusted to a common basis in terms of the magnitude and composition of each economic sector, comparison between them may not produce meaningful information. Table (4.3) illustrates the economic sectors of these three countries:

Table (4.3)

A Comparison Between the Main Economic Sectors of
The U.S.A., U.K., and Egypt for National Balance Sheet Purposes

U.S.A.	U.K.	EGYPT
<ul style="list-style-type: none"> - Non-farm households - Non-farm unincorporated Business - Non-financial corporations - Finance - State and local government - Federal government - Agriculture 	<ul style="list-style-type: none"> - Personal sector - Industrial and Commercial Companies - Financial Institutions - Public sector - Overseas 	<ul style="list-style-type: none"> - Households sector - Non-profit private institutions - Non-financial enterprises, corporate and quasi corporate - Financial enterprises - General government - External sector

Sources: U.S.A.: Table (4.2) in Appendix 4
U.K. : Table (3.3) in Appendix 3
Egypt : Chart (1) in Chapter 4

It can be seen that not only the number of economic sectors is different, but the components of some sectors also differ.

Any analysis of the differences or similarities between countries by comparing, for example:

- (a) the total value of financial assets with the value of physical assets for each economic sector
- (b) the share of each economic sector in the total value of physical assets (reproducible and non-reproducible)
- (c) financial assets, liabilities and net worth of each economic sector

must therefore proceed with considerable caution; taking due account of the magnitude and importance of the economic units comprising the sector of the country being compared.

The international comparison of national balance sheets is evidently restricted by:

- (a) the absence of national balance sheets of the majority of countries which results in an inadequate sample size to characterise the various stages of economic development and types of financial system
- (b) the different approaches of direct and indirect bases for national balance sheets may well result in different degrees of accuracy

(c) the freedom given to nations by the recent U.N. report (1974) in respect of the conceptual structure of national balance sheets. Examples are:

(i) Their desire is not reflected in the necessity of dividing the non-financial enterprises sector into private/public enterprises and nationally/foreign owned enterprises in the standard accounts and tables.

(ii) The lack of firm recommendations in respect of the standard tables and the presentation of data. The report, (192, p.73) states that: "... the format of certain standard tables is not intended to furnish guidelines in respect of the presentation of the data. The main objective is to indicate the series which should be compiled".

(iii) The indecisive advice on the necessity of presenting the whole balance sheet sequence in the institutional sector accounts and tables.

(d) the role played by the national government may dominate the financial behaviour of the transactors*.

Unless these factors in the countries being compared are considered, comparisons of their balance sheet structure may not achieve its objectives.

* In Egypt, for example, companies (private and public) are required by law to invest 7% of their surplus in government bonds and 5% in a legal reserve and the investments in financial foreign assets are controlled by the government.

Because national balance sheets have not yet been produced in many countries, the doubts on the benefits of international comparability of data on national wealth between countries have been expressed by the Working Party on National Accounts and Balances, (201, p.3).

(7) ' Delay in Producing and Publishing National Balance Sheets:

The delay in producing and publishing national accounting statistics is a problem which has been discussed earlier.

It is apparent that national balance sheets could not be produced within one or often two years from the data to which they refer. In the United Kingdom, for example, national balance sheets are not available for the last few years, except for the financial institutions sector, (58, p.34.6). It has been argued by Revell, (162, p.292) that, although the compilation of the U.K. national balance sheets is reasonably well served with the availability of statistical raw materials, a greater delay in publication, as compared with flow statistics, would be unavoidable.

Perhaps the problems associated with their compilation may justify their publication delay. However, it has been suggested that the use of the indirect approach may produce quarterly balance sheets, even though balance sheets have not yet been produced by the economic units themselves, (192, p.110). But it seems that the U.N. recommendations have overlooked the qualitative factors which sometimes devalue the information gathered by this approach. These qualitative factors, such as reliability and accuracy, have been considered by Revell, (190, p.13) as the key to the successful application of the indirect approach. If the annual or quarterly publication of these balance sheets proves feasible in a developed economy, it may not be so in a developing economy where there are problems

in the indirect approach (see section 4.3).

4.4 Summary and Conclusion:

This chapter is devoted to the investigation of two aspects of national balance sheets, ie description and analysis of the limited experience of Egypt and the identification of the limitations embodied in the International Draft Guidelines on Balance Sheets outlined by the U.N. in 1974.

Though the Egyptian experience is not sufficient to warrant special treatment in this chapter, her approach to national balance sheets (proposed but not as yet completely implemented) may throw some light on her philosophy in gathering balance sheet data in respect of particular sectors and according to kind of economic activity.

As far as the classification of the institutional sectors in Egypt are concerned it has been shown that they are mainly based on the classification of the SNA. This classification did not pay sufficient attention to:

- (a) the objectives which national balance sheets are designed to achieve, ie ignoring the concept of homogeneity of the accounts
- (b) the special circumstances of the Egyptian economy, ie ignoring the identification of the agricultural sector.

The philosophy of the Egyptian CAPMS in building up a comprehensive inventory of statistical data as a basic input for the compilation of national balance sheets has been outlined. This philosophy is based on two important factors:

- (a) in any attempt to construct national balance sheets, the starting point must be the securing of the basic raw information
- (b) refinement of the data to conform with the concept of national balance sheets.

On the basis of (a) Egypt was able to devise a balance sheet for the micro economic unit, through which it was possible to obtain basic information for two important sub-sectors (the public enterprises sector and the private organised business sector) of the non-financial enterprises sector. This information is presented for each one of these sub-sectors according to kind of economic activity as recommended by the SNA. Though this basic information is primarily based on business accounts it goes a long way towards providing a sound basis for sector balance sheets, particularly for a basic part of Table (31) as recommended by the U.N. Draft Guidelines.

The advantages of the balance sheets of the public enterprises in Egypt together with those of business accounting for national balance sheet purposes were outlined in the text of this chapter.

It may be suggested that the Egyptian method of collecting the information from the enterprises sector would be well worth investigation by other economies, in a similar stage of development, who are considering national balance sheets.

The Egyptian model of gathering data from non-financial enterprises may be useful to developing economies for two important reasons:

- (a) the advantages of the balance sheets used by Egypt
- (b) the indirect method or annual sample inquiries recommended by the U.N. for developing economies, has been shown to be inadequate.

The limitations of national balance sheets have also been discussed. Special reference to the deficiencies embodied in the recent (1974) Draft International Guidelines of the U.N. was outlined. These limitations could devalue the information content and consequently deter from the uses which these balance sheets are designed to achieve.

It has been shown that the chief factors that could detract from the value of the indirect approach in developing economies lie in:

- (a) deficiency of the basic statistics of their national income accounts
- (b) insufficient data of capital formation
- (c) inadequacy of price information to compile capital stocks based on a perpetual inventory method
- (d) the cost constraints involved in the annual statistical inquiries
- (e) the existence of a large number of international corporations with different accounting and valuation methods

- (f) the possibility of excluding basic statistics and certain economic units in the economy
- (g) the lack of statistical skilled statisticians and equipment to process the information.

These factors seem to have been overlooked by the U.N. when they advocated the indirect approach without considering its applicability and practicability for the circumstances of developing economies. This may represent one of the main shortcomings of the U.N. proposed balance sheets system.

The possible significance of this chapter, ie the importance of the investigation for the national balance sheet concept, may be summarised below:

(1) The description and analysis of Egypt's philosophy in her limited experience in approaching national balance sheets. This philosophy and experience could have the following advantages for national balance sheet concept:

- (a) fill part of the gap of the limited knowledge concerning national balance sheets in developing economies as was recently highlighted by the U.N.
- (b) it may be taken as evidence of the feasibility and practicability of eliminating some of the deficiencies of balance sheets of business accounts to gather basic data for sector balance sheets

- (c) if combined with other experiences of similar countries, international guidelines on the adaptation of national balance sheets, particularly sectoring the economy and the statistical sources and methods, for developing economies may be formulated.

(2) The suggestion made in this chapter in respect of the strengthening and standardising the general framework of balance sheets of business accounts may prove its feasibility and desirability for national balance sheet purposes. The improvements of the former balance sheets should initially start with the public/nationalised companies because of their size and important role in the economy of some countries.

(3) The current literature on national balance sheets lacks a rigorous analysis of the limitations of these balance sheets as a source of information for economic analysis and management. It is hoped that the analysis carried out in this chapter, with particular reference to the recent proposal of the U.N. of 1974, fills this gap.

(4) The arguments and evidence presented in this chapter in respect of the indirect approach for compiling balance sheet data, may justify the inadequacy of this approach to fulfil the balance sheet objectives particularly in developing economies.

Finally, it may be stated that the analysis carried out in this chapter has proved the hypotheses advocated at the beginning of this chapter.

CHAPTER FIVE

The Structure and Uses of Flow of Funds Accounting - With Reference to Their Application for Developing Economies

5.1 Introduction:

The object of this chapter is fourfold:

- (a) to illustrate the accounting framework of flow of funds accounts for the national economy, a subject recently described by Johnson, (112, p.865) as becoming:

"... fashionable in Britain, although few people understand it, and the statistics which it requires are confusing and incomplete".

- (b) to discuss the major uses of flow of funds accounts in the formulation of government policies and in economic analysis
- (c) to support the hypothesis advocated earlier, where it was postulated that there are specific differences between developed and developing economies in their needs and the benefits associated with flow of funds accounts
- (d) to provide background information to the hypothesis advocated previously, where it was postulated that the accounting information currently disseminated in the present structure of flow of funds accounts is constrained by certain limitations that could impair the uses assigned to them by economists. This will be examined in Chapter 7.

A brief reference to the funds statement of a firm will also be discussed.

5.2 The Flow of Funds Statement of a Firm:

The concept of flow of funds statement in a firm has emerged due to the limitations of the traditional profit and loss account and balance sheet for disclosing data on the source of funds available and how these funds have been used.

These financial statements fail to identify the various sources from which the funds were made available to a firm. Nor do they identify the various uses to which the available funds have been put. In this context, Lee, (120, p.6) states:

"... the profit statement can only tell part of the story so far as concerns total sources of new funds. It cannot reveal information relating to new funds derived from capital or loan issues, or increased credit facilities from suppliers, or the sales of fixed assets or investments. Nor can it disclose data describing the various uses to which such inflows of funds have been put - for example, uses such as the purchase of fixed assets, new or additional investments in subsidiary companies, increased levels of stock and work in progress, or increased cash resources ... the balance sheet, which reports on the financial position derived after these various inflows and outflows have taken place, cannot fully reveal their existence or nature ...".

It is true that a comparison of two successive balance sheets could provide valuable information in respect of changes that have taken place in the elements of the different assets, the components of different liabilities and the shareholders' rights. But this comparative data fails to make apparent the activities that caused these changes.

Because of these deficiencies, the desire to design a funds statement to clarify the movement (sources and uses) of funds within a firm has been considered essential for financial policies and analysis.

The funds statement, then, is a method of displaying inflows and outflows of funds within an economic unit. Study, analysis and evaluation of the uses of funds by the economic unit and how these uses are financed between two points of time would, then, be possible by the use of the funds statement. It has been argued that the statement can be more relevant to the users of accounting information, eg investors, bankers, creditors and government, than a conventional profit and loss account.

One of the main advantages of such a statement is its ability to combine data from the balance sheet and the income account into a single statement. This advantage would help to disseminate information that could be used to:

- (1) Identify the major changes in the types of resources held by the firm and the important changes in its financial structure. While some of this information can be obtained from comparative balance sheets, the funds statement can highlight these changes.
- (2) Identify the financial strengths and weaknesses of a firm, to show how, for example investment in assets has been financed and the degree to which external financing has been required.
- (3) Identify the importance of retained profit as a source of finance.
- (4) Contribute to the understanding of the financial policy being considered and to discover any defects that may impede the execution of this policy.
- (5) Provide useful information to the external users of the company financial reports especially those who are interested in the financial status of the company.

The main deficiency of a funds statement stems from the fact that only net flows, ie changes in assets and liabilities, are entered in the funds statement. It follows that the movement of funds (sources and uses), which could have taken place between the opening and closing balance sheets date have no place in the funds statement.

Flow of funds accounts of a sector or the economy as a whole possesses the same advantages as a funds statement of a firm. The accounting framework and advantages involved in the application of these accounts in the national accounting framework will be discussed in the next and the following sections.

5.3 The Accounting Framework of National Flow of Funds Accounts -

A General Review:

In the previous discussion the flow of funds account of a single firm was considered. In principle, the flow of funds accounts of all firms in any particular sector may be consolidated to form a set of accounts for the sector. These accounts, which have to be reorganised in a certain manner, show in detail (like the flow of funds statement of a firm) the sources and uses of funds for the sector. The sources and uses of funds of all sectors in an economy may be presented in a special table to form a national sources and uses of funds. This table explains the flows of financial assets taking place not only between the various economic sectors working in an economy but also between them and the external sector.

It has been mentioned earlier that a national income account is considered one of the most important sources of information on the working of an economy. Much of the data disseminated in these accounts covers such aspects as income, output, consumption, saving and investment. On the other

hand, the national balance sheets, discussed earlier, are concerned with the statistical coverage of all real (tangible) and financial (intangible) stocks, ie assets, liabilities and net worth of all the economic sectors working in an economy.

This means that neither the national income accounts, nor the national balance sheets are concerned with the measurement and analysis of flow of funds (monetary and financial instruments) activity between the various economic sectors in the economy.

Ignoring monetary and financial transactions that make goods and services produced possible is not a realistic assumption. On the one hand, the financial transactions play an important role in the economic activities in most countries, especially the developed countries (68, p.153). In these countries, financial transactions of many kinds, ie borrowing, lending and saving are becoming the extensive normal transactions of many economic units, including the government, at the present time. On the other hand, the monetary instruments have been considered essentially to achieve the ultimate objectives of the economy to obtain a high level of employment and increase in the real income, (157, p.215). The effective handling of these instruments undoubtedly relies on the availability of sufficient and detailed information covering the financial and monetary transactions that take place in the economy.

To illustrate the accounting structure and functions of flow of funds accounts of a nation, it is necessary to consider first the income and expenditure account so that its comparison with flow of funds accounts can be clarified. Table (5.1) contains a hypothetical income and expenditure account of a sector.

Table (5.1)
Income and Expenditure Account of a Sector

Income £m		Expenditure £m	
<u>A. Current Transactions:</u>		<u>A. Current Transactions:</u>	
Income received		-National insurance contribution	6
- wages and salaries	69	-Tax payment	13
- income of self employed	10		
- Rent, Dividends, interest	10	income available for spending	81
- National Insurance benefit	11		
	<u>100</u>		<u>100</u>
	<u>=</u>		<u>=</u>
income available for spending	81	current spending	73
	<u>81</u>	savings	8
	<u>=</u>		<u>81</u>
	<u>=</u>		<u>=</u>
<u>B. Capital Transactions</u>		<u>B. Capital Transactions</u>	
savings	8	capital spending	5
grant received	1	Tax on capital	1
		Income available for lending	3
	<u>9</u>		<u>9</u>
	<u>=</u>		<u>=</u>
<u>C. Borrowing & Lending</u>		<u>C. Borrowing & Lending</u>	
income available for lending	3	lending	16
borrowing	13		
	<u>16</u>		<u>16</u>
	<u>=</u>		<u>=</u>

Table (5.1) covers the major financial transactions of that particular sector. It presents the financial transactions (the current transactions and capital transactions) that take place and the financial instruments (lending and borrowing) that are created as a result of the sector activity. It provides the economic analysts as well as policymakers with valuable information on the characteristics of that sector. The table presents, for example, the amount of current spending compared with the income available, and the resulting saving (or deficit). It also disseminates the extent to which saving has contributed to the finance of capital transactions of the sector. As can be seen from the table the saving of the sector is the major source of funds to finance its capital expenditure or investment. The table also shows the amount of income available for lending. Finally the last part of the table shows that the sector has deposited with the banks and/or building societies more than it can afford. To cover this the sector has borrowed the difference. The table, however, is unable to identify whose borrowing facilitates the lending process of that sector, nor the channel through which the borrowing and lending transactions take place. The flow of funds account is needed to explain these latter aspects. Table (5.2) presents a simplified statement of flow of funds account of the above sector:

Table (5.2)
A Simplified Form of Flow of Funds Account of a Sector
in 1975

£m

Form of Financial Transactions	Sources	Uses
(1) Savings and investment	9	6
(2) Bills and deposits	2	3
(3) Loan	5	-
(4) Companies' securities	1	5
(5) Government securities	2	1
(6) Life funds	1	3
(7) Other instruments	2	4
Total	22	22

Table (5.2) shows that the total lending of the sector is £16m, while the total borrowing is £13m, thus the net lending of that sector amounts to £3m only. It should be observed that although Table (5.2) indicates the main financial transactions taking place between the sector and the other sectors of the economy, it can not actually identify the sectors involved in the transactions. In other words, the table is not able to identify from whom the sector is borrowing and to which sector it has been lending. In order to provide this information it is necessary to consider the flow of funds accounts of the economic sectors comprising the economy. Table (5.3) presents the income and expenditure accounts of a national economy.

Table (5.3)

A Simplified Form of National Income and ExpenditureAccounts of a National Economy in 1975

£m

	Companies Sector		Financial Sector		Govt Sector		Households Sector		Overseas		Saving	Investment
	CR	DR	CR	DR	CR	DR	CR	DR	CR	DR		
(1) <u>Income and Expenditure</u>												
- Payments to factors of production		1000	200				800					
- Transfer payment (taxes)		100		20	120							
- Personal taxes					50			50				
- Personal consumption	600							600				
- Government consumption	200					200						
- Exports and property income from abroad	100				50		20			170		
- Imports and property income paid abroad		150				100		15	265			
(2) <u>Domestic Investment</u>	600											600
(3) <u>Savings</u>												
Companies savings												
- Retained profits		200									200	
- Depreciation		50									50	
Financial sector savings				180							180	
Government savings						-80					-80	
Households savings								155			155	
Overseas savings									95		95	
Totals	1500	1500	200	200	220	220	820	820	265	265	600	600

Table (5.3) shows that the companies sector saved £250m towards the financial investment of £600m; the difference must have come from other sectors. The table shows, however, that most of the savings have come from households, the financial sector and the overseas sector. In the meantime, the government ran a deficit amount to £80m. But whose saving financed the companies investment or the government deficit is not obtainable from table (5.3). It should also be observed that it is difficult to determine whether the companies' investments have been financed by their own savings or other sectors' savings. Therefore, for more information concerning the financing processes and the movements of funds in the economy, a national flow of funds account must be constructed. Table (5.4) presents a hypothetical flow of funds account of a national economy.

Table (5.4)

Flow of Funds Accounts of a National Economy in 1975

£m

Sectors Financial Transactions	Companies Sector		Financial Sector		Government Sector		Households Sector		Overseas Sector	
	Sources	Uses	Sources	Uses	Sources	Uses	Sources	Uses	Sources	Uses
(1) Capital formation		600								
(2) Saving	250		180		-80		155		95	
(3) Financial Transactions:										
- currency & deposits		40	100			20		60		
- government deposits		20	20					10		
- government securities				40	100			85		
- corporate securities	205			55						
- bank loans	205			205						
	660	660	300	300	20	20	155	155	95	95

The previous table represents a simplified form of the accounting structure of flow of funds accounts of a national economy. The national flow of funds accounts possess several advantages*, these include clarity of presentation and a comprehensive description of the financial flows taking place between the sectors. The figures for saving shown in Table (5.3) are taken to be the opening balance for Table (5.4). It shows the saving/investment interrelationship between the sectors of the economy together with the channels through which this investment/saving was carried out.

The saving or deficit position of each sector is the link between income and expenditure accounts and flow of funds accounts. This means that the concept of national flow of funds accounts is closely connected with and is not understandable without saving, deficit and investment figures derived from national income and expenditure accounts. This connection is essential to show the manner in which one sector's saving is used to finance the investment or deficit of another sector. Similarly, the sector in deficit must find finance either by borrowing or by selling financial assets. Flow of funds accounts illustrate the way in which the various sectors of the economy use their saving or finance their deficit by disseminating the net transactions between them. The display of this information is the major basis behind the concept of flow of funds accounts.

Flow of funds accounts are usually presented in a matrix form where each row (or column) shows the transactions of two or more sectors in one particular financial instrument (asset or liabilities), while each column (or row) represents the transactions of one specific sector in all the financial instruments listed in the rows (or columns). Transactions in flow of funds accounts can be presented by two methods. Either as the net transactions of each of the financial instruments of all sectors or as a

* details of these advantages will be reviewed at the end of this chapter

sources and uses of funds as illustrated by table (5.4). In the first method the rows must, of necessity, sum to zero*, and the column sum will be equal to the saving or deficit of that particular sector. While in the second method the sources of funds of a sector must be equal to its uses or applications.

National flow of funds accounting was pioneered by Morris Copeland (56), who in "A Study of Money Flows in the United States" was the first to construct a flow of funds account for the entire economy. His work was considered the basis for all developments in the field of financial accounts.

In the United Kingdom the importance of flow of funds accounts as an essential instrument in the formulation of government policy has been recognised and accepted by the Bank of England. This importance has been fostered by the Radcliffe Committee's call for more detailed financial statistics on other financial instruments other than money, (54, p.132).

Chapter 6 will briefly survey the accounting framework of flow of funds in various countries before discussing the flow of funds accounts evolved by Egypt.

It may be desirable, however, to show how the flow of funds accounting approach works in practice, using the annual flow of funds transactions of the United Kingdom for 1975. Table (5.5) illustrates the U.K. accounts.

* each asset must have a corresponding liability

Table (5.5)
The Accounting Framework of Flow of Funds Accounts of
The United Kingdom for 1975

£ millions

Transactions \ Sectors	Public Sector	Overseas Sector	Personal Sector	Industrial and Commercial Companies	Banking Sector	Other Financial Institutions
<u>Capital account</u>						
Saving	+1,480	+1,702	+10,089	+8,682	+1,016	
Tax on capital and capital transfers	-127	-	-263	+406	-16	
Less:						
Gross fixed capital formation at home	-8,693		-3,074	-7,049	-1,290	
Increase in value of stocks & work in progress	-844		-567	-2,375	-7	
Financial surplus +/-deficit -	-8,184	+1,702	+6,185	-336	-297	
<u>Changes in financial assets and Liabilities</u>						
Assets: increase +/-decrease -						
Liabilities : increase -/decrease +						
Government debt to banking department	+84				-84	
Life assurance and pension funds			+4,420			-4,420
Loans by the U.K. government	-144	-80	-4	-107		+335
Central government external transactions:						
Direct official financing	-778	+778				
Other	+596	-596				
Other public sector direct official financing	-409	+409				
Banks' net external transactions (excluding securities)						
Borrowing for official financing		+292			-292	
Other		+867			-867	
Miscellaneous investment overseas	+459	-1,217		+991	-94	-139
Notes and coin	-673		+406	+408	-141	
Bank deposits of domestic sectors	+284		-78	+1,751	-1,717	-240
Deposits with other financial institutions	-1	+100	+4,430	+46		-4,575
National savings	-406		+406			
Tax reserve certificates etc	+30		-16	-14	-	-
Bank lending to domestic sectors	-438		+445	-700	+553	+140
Hire purchase and other instalment debt	-8		-57	+73		-8
Loans for house purchase	+791		-3,685		+60	+2,834

(continued)

Table (5.5) continued

Other loans and accruals	+235		-70	-135	-135	+150
Marketable government debt held by domestic sectors:						
Treasury Bills	-2,033			+277	+508	+248
Stocks	-5,217		+955	+93	+811	+3358
Other local authority debt	-1,228	+84	-256	-46	+865	+581
U.K. company and overseas securities:						
Capital issues		+38		-1,034	-111	-324
Other transactions	+567	+7	-1,655	+292	+119	+2101
Unit trust units			+118			-118
Identified financial transactions	-8,289	+682	+5,359	+1,895	+475	-122
Unidentified	+105	+1,020	+826	-2,231	-650	
Total = Financial surplus + /deficit-	-8,184	+1,702	+6,185	-336	-297	

Source: Bank of England, Quarterly Bulletin, Vol. 16, No. 2, June 1976, pp.188-189

The limitations of the accounting framework of the British flow of funds system together with its counterpart in the Egyptian system will be considered later in this study*.

The comprehensive structure of flow of funds accounts such as that shown in Table (5.5), is capable in principle of being used to give an insight into the financial activities of sectors. This information will eventually enable the economists to analyse the financial behaviour of a sector. The Bank of England, (20, p.12), for example, has emphasised the advantages of flow of funds accounts as being able to provide direct and explicit data on the effects of changes in monetary and financial policy on sectoral flows - a facility which is not possible within the aggregate framework of national income accounts. Some of the uses made possible by flow of funds accounts are discussed in the next section.

5.4 The Advantages and Uses of Flow of Funds Accounts for Economic Analysis and Government Policy with Reference to Developing Economies:

Flow of funds accounts have become the focus of attention of both governments and economic analysts as a direct result of the number of monetary problems and their effect on economic activity.

The interest of economists and governments in the concept of flow of funds accounts in both Eastern and Western countries stems from the greater role assigned to money and other financial assets which will have effects on the economy as a whole.

Accordingly, flow of funds accounts provide an opportunity to approach both monetary and financial policies and problems. Their usefulness in these areas has been recognised by policymakers and economic analysts,

* see Chapter 7

because they provide quantitative indicators which may serve two main purposes. The first is to facilitate the processes of goal definition and policy formulation. The second is to provide adequate means by which the implementation of policies and the subsequent attainment of goals can be monitored for planning and control reasons. In Britain, for example, flow of funds accounts have been used to analyse the financial development in the economy, to identify the effects of monetary policy, (eg credit squeeze) on the financing processes of certain sectors in the economy. Additionally, financial forecasts are built up in the form of flow of funds accounts. Such forecasts constitute part of the background necessary for monetary policy and government operations in the financial market (20, p.9).

It should be emphasised that national flow of funds accounts are built with developed countries in mind. It follows that most of the uses made of these accounts may be attributed to the circumstances and the special ideologies of these nations. Nevertheless one can still discuss the relevance and uses of these accounts for developing nations. Thus, by identifying the uses of these accounts for developing economies it is possible for them to gain greater benefits from flow of funds systems.

How the national flow of funds accounts could be used as an aid to the analysis of economic behaviour and the formulation of government policy is discussed below.

(1) Flow of Funds Accounts as a Framework for Data Collection:

Perhaps many users of the financial data disseminated in flow of funds accounts would agree that one of the main functions of these accounts is the provision of data concerning transactions that have taken place

in the financial markets in a neutral* form. From this data analysts can select a particular financial instrument and employ it in conjunction with other information to reach a conclusion relevant to their purposes, (16, p.1065).

The systematic collection and processing of this data, which is important for public policy decisions, would help to improve the statistical system which is the aim of all countries, developed and developing, seeking economic progress.

(2) Flow of Funds Accounts as an Instrument for Financial Planning:

In performing its function the government needs a guide to rationalise its action concerning the execution of certain policies. Examples of these policies are, taxes and their rates, loans and their interest rates, issues of banknotes, deficit finance and borrowing from internal and external sectors. This guide may help to identify certain ways which the government should follow for effective policy in order to achieve identified objectives and to overcome speedily the deviations from the planned targets.

Flow of funds accounts could help the government in the identification of the economic crisis from which the economy is suffering and consequently, contribute to the formulation of an effective policy. For example, if the economy suffers from chronic inflation or deflation, flow of funds accounts can identify which sectors are providing the stimulus to the economy. If flow of funds accounts show that certain sectors are reducing their liquidity and despite their increasing income are also increasing their short term borrowing, this information may help policymakers to identify those sectors which are providing the inflationary stimulus. Having defined

* By neutral it is meant that the accounts are not generally designed to answer specific questions.

which sectors are causing the economic crisis appropriate policies can be formulated to remedy the situation. However, a distinction should be made, particularly in developing economies, between temporary and permanent changes of the sector's holdings of liquid assets and compare them with the degree of economic growth in the country together with the international inflation/deflation pressure on the domestic economy*. In Yugoslavia, for example, it has been argued by Dimitrijevic, (61, pp.106-113) that the projection of flow of funds accounts was used as a first step in the planning procedure; this includes the projection of the sector's transactions. On the basis of this information projects of credit policy measures were made.

The structure of flow of funds accounts could help the financial planners to choose the most effective policy for the problem under consideration. The accounts can be used to determine the implications of any one of the many programmes that are available to overcome economic problems.

Flow of funds accounts, then, could illustrate the effects of considering a particular programme not only on the various economic sectors but also on the financial instruments which were considered most favourable to the economic sectors under this particular programme. The financial planner can then compare the results achieved from this programme with the results obtained from other programmes in previous years. He can also compare and evaluate the effects of executing different policies (eg tax relief, prices control, interest rates, etc) on the financial behaviour of the different sectors of the economy.

* for more details see (16, pp.1069-1071)

In developing economies, the aims usually are to encourage both the functioning of the monetary sector and domestic savers to hold their savings in productive assets (financial instruments) rather than unproductive assets (real estate, gold etc). Thus financial planners would attempt to avoid any monetary/fiscal policies that may restrain these objectives. A policy of low interest rates, for example, could reduce the size of deposits provided by individuals. In India, for example, it has been argued by Minocha, (130, p.44) that deposits of the banking sectors for the years 1964, 1965 and 1966 increased at an annual rate of 12-14%. One of the main reasons for this high rate of deposit growth in these years was due to an upward adjustment of interest rates on deposits. In discussing the "Analytic Basis of the Working of Monetary Policy in Less Developed Countries", Khatkhate, (116, p.550), argues that in these countries, it is important to enlarge the amount of transferable savings of the surplus units, mainly the households sector. To achieve this, continues Khatkhate, altering the structure of their savings is necessary. Flow of funds accounts (projected/actual) could show the influences of various strategies. These can be illustrated in two directions: firstly the distribution of monetary assets' transactions among the main sectors of the economy and secondly the development of the different types of financial transactions for each sector and in particular the households sector*. In India, for example, it has been reported by Bhatt, (27, p.61) that the structure of saving and flow of funds data has been actually used for the purpose of financial planning. On the basis of this information together with the sectoral rates of growth in income, the structure of the

* National balance sheets, if they are available, can provide:

- (a) distribution of the monetary assets among the different sectors in the economy
- (b) the types of financial/liquid assets held by each economic sector

sector's saving/investment and the pattern of household sector saving were projected for the period 1969-1974. Thus flow of funds accounts in these countries can both contribute to a better understanding of the functioning of their financial system and may help financial planners to take various measures to achieve their objectives, particularly to encourage the households sector to hold their savings in financial assets rather than unproductive physical goods and to diversify the structure of their savings.

It should be emphasised, however, that flow of funds accounts are not substitutes for the financial plan, rather the accounts provide the basic data on which the financial plan could be constructed. The availability of flow of funds data would, therefore, help financial planners, in developed and developing countries, to create or construct a financial plan for the economy.

(3) Relationship Between Financial and Non-Financial Sectors in the Economy:

Recent literature on economic and financial development has focused considerable attention on the role of financial institutions and their impact on economic growth (eg 164, 99, 151). It has been argued that the role of the financial institutions - such as commercial and saving banks, saving and loan associations, finance houses, insurance companies and others, is to channel funds from savers to borrowers by issuing their own debts (deposits, investment certificates etc). Thus where such financial institutions or intermediaries do not perform their functions effectively, the flow of savings into productive investment may be constrained with the possibility of adverse effects upon the allocation of resources, the level of income and employment, and on the rate of economic growth.

The data disseminated in flow of funds accounts could indicate that the financial sector does not play its proper role in the financing process in the economy or does not invest sufficiently in the domestic sector. Whether their activities are in line with the aims of the national financial plan or not can also be identified from the information published in the accounts. Such information may lead the government to take the necessary action to secure the funds needed for the domestic sectors or to correct the functioning of the financial sector in the economy.

In this context, the British Government has recently appointed a committee (Wilson Committee) to inquire into the role of the financial institutions including the Bank of England.

In developing economies, because the banking system has become responsible for the mobilisation and direction of savings to finance economic and social plans, their financial activities as well as their relationships with other economic sectors would be of interest to financial planners in these countries. In Egypt, for example, it has been found that the banking system does not actively participate either in the public enterprises' financial plans or actually promote the banking habit among individuals. For this reason, the banking system in Egypt since 1974 has been subject to laws and decrees. In June 1974, Law No 43 was promulgated regarding the investment of Arab and foreign capital. This law provides some liberalisation of the Egyptian banking system by granting Egyptians and foreigners the right to undertake banking business in Egypt (in the form of joint-venture, merchant and investment bank)*. The law also grants the banks various privileges in the form of exemption from laws governing

* it should be noticed that before June 1974 all banks and insurance companies in Egypt were governed by Law No 22 of 1957 which provided for the Egyptianisation of all banks with the aim of ending foreign control over the banking system in Egypt

foreign exchange, employment and taxes. Law No 120 of 1975, concerning the Egyptian Central Bank and the banking system, allows the acceptance of deposits for periods in excess of one year, this was not previously allowed. In July 1975 the Presidential Decree No 663 was issued whereby the public sector in Egypt was given the freedom to transact its business through banks of its own choosing. The object behind these laws and decrees was to encourage the banks in Egypt to promote economic development and stabilise the Egyptian economy (140, pp.241-246).

With the help of flow of funds data, policymakers could increase their knowledge of the nature of these interrelationships. Having outlined these relationships, they may avoid spending an inordinate amount of time on the analysis of financial flows which may have little effect on the economy, and thus concentrate on the financial sector as a whole which has a greater effect, as occurs in Britain and Egypt.

Figure 5.1 represents a schematic illustration of the total borrowing and lending flows between the main economic and financial sectors of Egypt in 1973. The size of the arrows indicate the order of the magnitude of these flows, details of which are given in Table (5.6). It should be noticed that the arrows show the total transactions being carried out. This pattern of presentation of aggregate flows, between the financial institutions and the other economic sectors, which has been developed from the data in Table (5.6), helps to indicate the extent to which the Egyptian financial sector engages in transactions with other economic sectors. Figure 5.1 illustrates, for example, the extent to which the Egyptian households sector uses the banking sector. Although their deposits represent the major source of funds for the banks, less than 10% of their deposits were used as advances by banks.

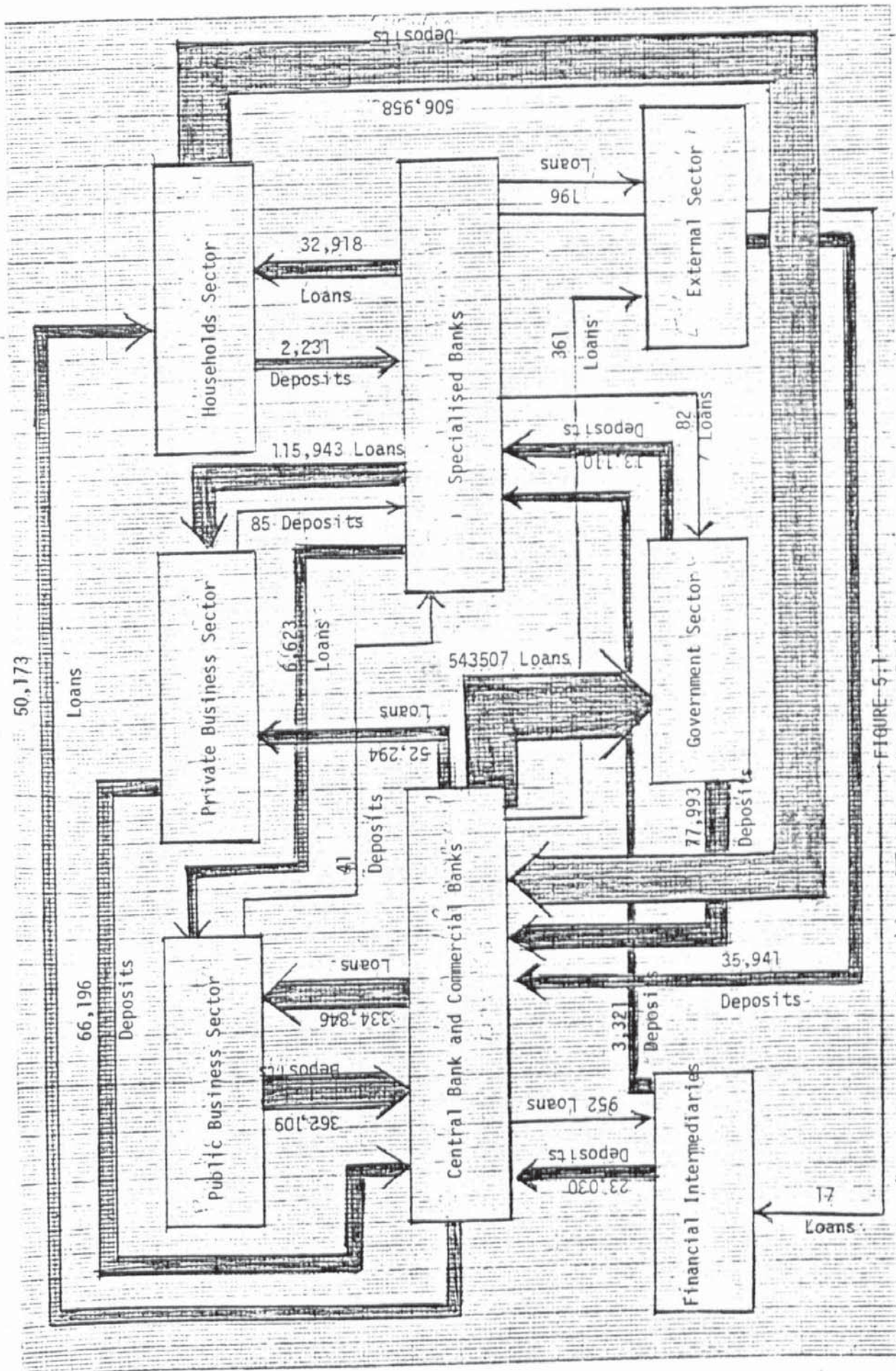


FIGURE 5.1
Borrowing and Lending Transactions Between the Banking System and the Economic Sectors in Egypt in 1973



Illustration removed for copyright restrictions

Figure 5.2



The relationship between the economic sectors and the financial institutions in the British economy in 1973 is illustrated in Figure 5.2. The figure identifies that the banking sector in Britain has a comprehensive relationship with the overseas sector and with both the personal sector and companies sector. In Egypt borrowing and lending transactions between the banking sector and the external sector, compared with Britain, are very small. Also, Figure 5.1 shows the extent to which the Egyptian Government relies on banks to finance its operations and its deficits. Obviously, it is the flow of funds system that helps the identification of these various types of relationships between the economic sectors.

(4) Analysis of the Financial Reaction of the Main Economic Sectors
Under Certain Conditions:

On occasions some economic sectors may be subject to unexpected and unavoidable pressures on their finances. The pressures may include financial (fiscal and monetary) and economic measures and conditions. The reactions of the different economic sectors towards these pressures may reveal valuable information. Such information may be used by planners as a basis for analysing short term effects of financial and economic measures, (eg credit squeeze, price policies, public expenditure cuts, increases in taxation, etc) on both financial surplus/deficit and the financial transactions of each sector in the economy.

Flow of funds accounts can furnish a main part of the information required to carry out this study and analysis. An example is the Bank of England's use of these accounts in 1969 and 1970 to analyse the "... unusual financial conditions" of the British economy within this period and its effects on the surplus/deficit and the borrowing/lending transactions of the economic sectors (20, pp.21-39). The accounts could also be used

to describe the effects of the Sterling crisis and the counter measures that faced the British economy during 1976 and early 1977.

In the United States, flow of funds accounts were used to explore both the government's sources and uses of funds during the Second World War, and the extent to which consumers, businesses and other non-banking sectors, had contributed directly in the financing of the war effort (57, p.195).

In developing economies and in the course of their economic development changes in their financial and economic conditions are likely to take place. The development processes in these countries will, normally, create an inflationary situation, which in turn will affect not only the financing process of certain economic sectors but also the investors' behaviour in the distribution of their available funds between assets (physical and financial). In this context, Minocha, (130, p.46) mentioned that:

"In India, in an environment characterised by inflation, real estate constitutes an excellent store of value. Trends in capital issues show private corporate sector has been finding it extremely difficult to raise fresh capital from the market since 1962 ... corporate shares and securities as proportion of the total financial assets of individuals declined from 14.2% in 1961-62 to 8.5% in 1964-65".

The flow of funds accounts of a developing economy will not only demonstrate the connection between issues such as the saving of the domestic sectors and companies finance, but also the financial instruments most influenced by the development process and the activities of the financial institutions. The financial reaction of both economic sectors and the financial instruments during the different stages of economic development could be traced in flow of funds accounts. This information would enable policymakers to coordinate and devise policies to keep pace with the development processes and to create a climate for the mobilisation of the

domestic saving and accelerate the role played by the financial sector in the economy.

(5) Analysis of the General Development of a Capital Market:

Flow of funds accounts have proved their usefulness in studying and analysing the general development of the financial system including the capital market.

The contributions of the data disseminated in flow of funds accounts to the analysis of the capital market are based on the advantages of the structure and presentation of these accounts which may be summarised as follows (148, pp. 276-277):

- Comparability : the accounts are prepared on a consistent basis from year to year.
- Official Preparation : enhances the perceived accuracy and reliability of the accounts. Preparation and presentation of flow of funds accounts could be beyond the efforts of some private research groups or organisations and cannot be produced without the help of the government statistical office. The official preparation of the accounts, for example by the Bank of England or the Federal Reserve, is of great importance for the purpose of capital market analysis.
- Comprehensive coverage of financial transactions : the flow of funds accounts include almost all types of financial instruments and not merely the major flows. This coverage enables the analyst to broaden his investigation to the degree of detail needed to describe the capital market.

Goldsmith (88, pp.3-21), used these advantages to study and analyse the development of the capital market in the United States in the postwar period, where he examined the effectiveness of capital expenditure during the period 1945 to 1958 on the volumes of internal and external financing. Then he considered the flow of funds accounts of the main five* components of the U.S. capital market to determine their outstanding features and their share of the total financial assets of the country. The analysis has shown that Treasury Securities occupied a special position in the American postwar capital market, while demand for State and Local Government Securities was limited to certain investor groups.

In the United Kingdom, Mason, (125, p.58) used flow of funds data to measure the size and development of the British financial market in three different ways:

- (a) the amount of the particular financial flow outstanding at a certain time
- (b) the increase in this total (or new instruments issued) during a period
- (c) the total purchases and sales of financial instruments that are taking place.

Her analysis for the U.K. financial markets in 1973 indicates that the most important group of markets, as measured by the amount outstanding at the end of 1973, was bills and deposits, followed by loans. Both

* These are Treasury Securities, State and Local Government Securities, Common Stock, Corporate Bonds and residential mortgages.

investments (£193.3b) represent over 60% of the total amount (£320.6b) outstanding at the end of this period. This analysis reflects the general trends in borrowing and lending in the financial markets in Britain. In the decade 1963-1973 the size of the market (borrowing and lending) increased ninefold.

The importance of the capital market in developing economies has been previously mentioned*. The promotion of the savers in these countries to hold their savings in the form of financial assets will equally require the promotion of the various components of the financial system in the country concerned. In this view the existence of a capital market together with the financial institutions may be considered as a necessary condition for economic growth and development.

The data disseminated in flow of funds accounts could be used to assess not only the financial instruments through which savings are channelled into investment, but also the extent to which either the capital market (eg capital equity) or the financial institutions are used to channel these savings to the required investment and expansion. The less able the enterprise to finance its investments from the capital market (capital issues), the greater will be the need for the services of the financial institutions. While the reverse could be true.

Thus, flow of funds data could be used to examine the connection between the growth of the capital market in terms of the structure of financial assets/liabilities and the different phase of economic development in the country concerned. This information would be useful for both forecasting the trends in the capital market and studying the past

* see Chapter 1, section 1.4

relationships between savers and investors. It would also enable policy-makers to set a proper basis for the operations and the expansion of a capital market to suit their own needs.

(6) Tracing Saving and Investment Processes:

As national income accounts show the degree of saving by the economic sectors, the flow of funds accounts can be used to trace the flow of saving and its influence on investment. Flow of funds can inform policy-makers or financial analysts what these sectors do with the proceeds of their saving, whether they use it for investment in physical assets or in financial assets. For a sector in deficit, flow of funds accounts show how this sector financed its deficit. The accounts could also provide other useful information such as where do the investment sectors obtain their funds to finance their investments, by saving or by borrowing. Financial planners can then assess the contribution of the sector's saving in financing its investment, (the degree of the financial independence of the sector) and the contribution of the other economic sectors to the financing process of that particular sector, (the degree of the financial interdependence of the sector).

In a recent study of the flow of funds in Britain, Mason (125, pp.26-51), uses the flow of funds system to examine the extent to which savings have contributed to the major source of funds of each sector in the economy, and the extent to which uses of funds are distributed between investment in financial assets and in physical assets.

In developing economies, because enhancing domestic savings could be

affected by a variety of factors* which shape individuals' decisions to save, it thus becomes the responsibility of government to effect and promote, to a significant extent, the rate of saving between the various sectors in the economy, (139, p.273).

In Egypt, for example, efforts have been made to encourage the growth of domestic savings. One of the most notable developments in this direction has been the introduction of savings certificates by the National Bank of Egypt in January 1965. The remarkable expansion in the sale of these certificates, holdings of which amounted to £E13.6m in 1965, £E95.6m in 1970, and £E274.7m in September 1975 (138, Table 1/1, p.436), illustrates the role that could be played by domestic savings in the financing processes of the investment sectors.

Flow of funds accounts in the developing countries can, therefore, depict changes in the arena of savings channels through which economic sectors distribute their savings between the various channels. In Egypt the distribution of net savings of the households sector among the main channels of savings is illustrated in Table (5.7).

* Examples of these factors are: underdevelopment of banking habits, liquidity motives and scarcity of financial institutions and their concentration in large cities.

Table (5.7)

Net Savings of the Households Sector in Egyptand its Distribution between the Main Savings Channels in 1971/72

£E000

	Net Savings of Households During the Year	% of GNI
<u>Banking System Channels</u>		
Savings Deposits	-1,541	-%0.1
Savings Bank Account	14,577	%0.5
Investment Certificates	29,611	%1.1
Total of Banking System Channels	42,647	%1.5
<u>Saving Organisations</u>		
Post office saving account	4,339	%0.2
Total of Saving Organisations	4,339	%0.2
<u>Insurance Companies and Organisations Channels</u>		
General organisation of social securities	85,867	%3.0
General organisation of superannuation	140,027	%5.0
Insurance Companies (life and capital formation branch)	4,024	%0.1
Total of Insurance Companies and Organisations Channels	229,918	%8.1
Total of the Main Savings Channels	276,904	%9.8
National Income Estimates at Current Price	2,821,800	

Source: Central Agency for Public Mobilization and Statistics, "Personal Savings at the Main Saving Channels in Arab Republic of Egypt 1971/72", Ref 6231/11/75, March 1975, Cairo

The above table indicates that investment certificates represent almost 70% of the total of banking system saving channels. This high ratio testifies to the importance of this channel for the mobilisation of domestic savings. The table indicates also the importance of compulsory savings which represent 8% of GNI, and 98% of the total of insurance companies and organisations saving channels. This type of information is most important to policymakers in developing countries, where they can promote their domestic sectors to increase their savings through a variety of savings channels to the extent that they can meet the investment programmes.

(7) Forecasting the Flow of Funds Transactions in the Economy:

As flow of funds accounts cover the historical financial transactions of the main sectors of the economy, the policymaker can derive useful information from them. Additionally, the comprehensive structure of the accounts has obvious potential for short term forecasting purposes. Policymakers can, for example, trace the financial implications of past and current events and eventually a short term financial forecast could be prepared, having regard to their own policies.

In a number of countries financial forecasts have been prepared in flow of funds form. Obviously, all flow of funds in the economy should be forecast in conjunction with forecasts of income, expenditure and saving. These in turn are based on the forecasts of output (current price) and expenditure.

Among the countries whose official financial forecasts have been compiled in the flow of funds form is the United Kingdom. Private investigators also forecast the financial trends in the economy in the

form of flow of funds accounts*.

- * In a recent article published in The Banker, Johnson, (111, pp.873-877), uses the flow of funds approach to forecast the course of the British economy (1976) in the light of the present Sterling crisis and public spending cuts. His forecast table is reproduced below.

Table (5.8)

The Forecasting of Flow of Funds in Britain in 1976

	Personal	Indus & Comm Cos	Banks	OFIs	Public	Overseas
Notes and coin	0.5	0.5			-1.0	
Treasury Bills		0.5	1.5	0.2	-2.0	-0.2
Government stocks	1.0		1.0	2.5	-4.0	-0.5
National savings	0.7			-0.3	-0.4	
Local authority debt			0.5	0.5	-1.0	
Bank deposits	2.0	2.0	-6.0	1.0	0.2	0.8
Building society deposits	4.2			-4.2		
Bank lending (not to public sector)	-0.5	-1.7	3.5	-0.8		-0.5
House purchase loans	-4.5			3.9	0.6	
Public sector loans		-0.2			0.2	
Unit trust units	0.2			-0.2		
Company securities						
New issues		-1.0		-0.5		
Other transactions	-1.5	0.5	0.2	2.0	0.3	
Life and pension funds	5.1			-5.1		
Official reserves					-0.8	0.8
IMF loans					-1.3	1.3
Loan by UK Government (net)					0.1	-0.1
Refinanced export and ship credit		-0.1			0.6	-0.5
Company investment overseas (net)		1.0				-1.0
Government Euro and loan					-0.9	0.9
Public corporations' overseas borrowing					-0.6	0.6
Sector surplus or deficit	+7.2	+1.5	+0.7	-1.0	-10.0	+1.6

Source: Christopher Johnson, "The Flow of Funds - No Fun in 1976", The Banker, August 1976, p.874

Indeed the forecasting of flow of funds in the economy would be most helpful to a policymaker. He may use these forecasts to assess the potential implications of the main forecast of the financial activity in the economy for monetary growth, for identifying prospective financial constraints, if any, on economic activity, and for changes in net liquidity.

The flow of funds projection might have a number of consequences and actions. It might cause the government to revise its monetary and/or fiscal policy. It may, for example, amend the present level of interest rates upwards or downwards, or it may increase or decrease tax rates. This is mainly to avoid undesired expansion (or squeeze) on liquidity, which, in turn, have an effect on inflation or deflation in the economy, (16, p.1081).

What is currently happening in Britain is pertinent to the usefulness of flow of funds projections. It can be seen from Table (5.8) that the banking sector will lend substantial amounts to finance the deficit of the public sector. That is, out of the £10b public sector deficit, over £6b comes from the banking sector, divided almost equally between banks and OFIs. This fact together with the inflationary pressure in the economy, has caused the Bank of England to call for additional special deposits from these financial institutions. Not only that but the minimum lending rate has sharply increased to 15 per cent. This monetary measure allied with cuts in public spending and some increases in taxation were made essentially to reduce the growth in the supply of money. This example indicates some of the measures which the flow of funds projection illustrates.

Of course, the uses made of flow of funds forecasts are not restricted to developed economies, but they are also applicable to developing economies.

The broad insight into the financial relations and conditions of the various economic sectors that are likely to emerge, gives policymakers, in both developed and developing economies, an early idea of the connection between their policies and the likely financial reaction from the various sectors. If the projected financial reactions of these sections are not in harmony with the adopted monetary policy and the present status of the economy (inflation/deflation), then the policymaker may reconsider his strategy in good time, and so reduce any likely disturbance to the smooth operations of the economy within the forecasting period.

(8) The International Comparability of Flow of Funds Accounts:

The existence of flow of funds accounts of a country enables her to compare and analyse the structure of her financial system to determine how it relates or differs from the financial structures that exist elsewhere.

Comparison of flow of funds accounts may be carried out between countries in the same or different stages of economic development.

It is clear that the broad structure of flow of funds accounts varies from country to country. This variation stems, for example, from the nature of the economy, the relative importance of each sector in the economy and the significance of borrowing and lending transactions in the economy. Nevertheless, some of the advantages of international comparability may be outlined below, (125, pp.166-185):

(1) Examining the importance of the financial systems that exist within the countries compared. This can be generally achieved by comparing either the outstanding financial assets with physical assets (or F.I.R.), or

borrowing and lending transactions (new) with GDP. The higher of either of these alternative ratios, the more important the current financial transactions in the country are.

(2) The extent to which borrowing (or lending) contributes to the total sources (or uses) of funds for capital formulation. This can be obtained by dividing the total new borrowing (= new lending) over the total sources (= uses) of funds. Differences in this ratio between countries may lead the analyst to investigate which sectors actively participate in the borrowing and/or lending processes and the magnitude of saving and investment of each sector of the countries being compared.

(3) Identifying the role played by the financial institutions of the countries concerned in the total of borrowing and lending transactions.

(4) Identifying the main character of the financial institutions used to perform borrowing and lending transactions of the countries concerned. The comparison should, in principle, reveal the transactions which take place outside the formal financial system (eg trade credit), and those in which dealings take place in the formal system of markets and institutions.

The international comparability of flow of funds accounts would be beneficial for both developed and developing economies. Among the chief benefits is that a policymaker may seek diagnosis of the differences of the working of his financial system from that of other countries. Having diagnosed the causes, a policymaker may attempt to find a workable solution. Without careful identification and diagnosis of the problems that impair the working of the financial system and their major causes, a policymaker may not be able to suggest the right treatment for his financial system.

(9) Input-Output Tables and Flow of Funds Matrix:

There is an obvious analogy between the input-output tables and flow of funds accounts in terms of the provision of the essential information for policymakers to construct both real and financial plans.

The input-output table explains the flow of goods and services between the various industries and the various economic sectors of the economy. It has been used by planners for the purpose of determining the total requirements of the production factors needed to meet identified final demand or certain investment plans. The use of input-output tables has, to a great extent, ensured the consistency of the plan, in the sense of comparing the desired output with the present available capacities and thus both under/over production and bottlenecks have been reduced or avoided.

Similarly, the flow of funds table could be used for financial projection, whereby any shortages or surplus of capital funds for the economy as a whole and for each economic sector could be identified.

Thus the flow of funds table has some aspects in common with that of the input-output table. This analogy prompts some economists to propose simple financial relationships based on fixed coefficients*, between particular uses and specific sources of funds. It may be possible, for example, to establish a relationship between investment in tangible assets

* One of the most crucial assumptions of the input-output analysis is that inputs are fixed. That is, fixed factor proportions are assumed between various industries. For example, if the input of industry 2 by industry 3 is valued at one fifth of the total output of industry 3, then it is generally assumed that this will be true in the future.

of the companies sector and the major sources which finance this investment. This relationship may reveal that the finance of this particular investment came from a number of sources in relatively stable proportions. If the existence of this kind of relationship in some economies is true, then (16, p.1071):

"A financial structure with these characteristics would lend itself to analysis by input-output methods, with a particular source of finance being treated as a necessary input for a specified use of funds. The amount of each input (source of funds) required per unit of each output (use of funds), would be a fixed technical coefficient of the system".

Stone, (182, p.21) argued the possibility of constructing a financial input-output table analogous to that used in industries. But he stated that:

"This flow table may not be very acceptable because of the highly restrictive assumptions of the model".

Recently, Roe, (168, p.15) has developed a simple financial relationship using input-output systems. His proposed model is developed for the purpose of:

"... gaining some insight into the nature and extent of financial interdependence and into the phenomenon of intermediation ...".

The model is based on the assumption that certain fixed relationships exist within the national balance sheet (16, p.1072).

To illustrate the model, Roe presents a numerical example based on the following table:

Table (5.9)

Relationships Between Investing Sectors and Financing Sectors

Investing sector Financing sector	Persons	Financial Institutions	Non-Financial Companies	Government	Rest of the World
Persons	1116	1000	761	1217	1145
Financial Insts	104	1324	409	649	765
Non-Financial Cos	39	202	1244	322	723
Government	32	104	243	1282	417
Rest of the World	19	140	121	293	1460

Source: Alan Roe, "The Financial Interdependence of the Economy 1957-1966", Chapman & Hall, November 1971, p.18

Roe, shows the effect of undertaking real investment by a sector on financial assets not only on the sector concerned but also on the other sectors of the economy. For example, column one in the table identifies the financial consequences (to other sectors) of a decision made by the personal sector to invest £1,000 in real assets. Roe then broke down the total increase in financial assets generated by increase in real investment by each sector into its components of financial instruments*.

It should be observed that the value of this approach depends upon the stability of the coefficient. Such stability does not usually exist in a complex and developed financial system such as the U.K., because of:

- (a) the influences of the frequent changes of interest rates
- (b) the emergence of new financial instruments, which may grow and replace those currently established

* For more details see Roe, (168) page 18 and Table 111.2 on page 19. The mathematical model upon which his model is based can also be found on pages 15-16.

- (c) the changing practices of government financing.

In fact, these difficulties have been recognised by Roe as serious and even harder to resolve. Despite these difficulties Roe carried out an empirical test of the stability of the coefficient in 1962 and 1966. His test proved that there were differences in some coefficients of certain sectors between the two years*. The factors which may have influenced these coefficients may include, as reported by Roe, (168, pp.22,24):

"... changes in interest rates differentials and tax arrangements which make certain claims relatively more or less attractive, changes in monetary policy encouraging the use of some types of financial claim at the expense of others, changes in the balance of payments situation which affect the portfolio of overseas residents and thereby the residual financing needed from domestic residents, and changes in sectoral tastes and fashions as regards financing".

If this approach proves to be less practical in developed economies, it may be relatively important for developing economies. It means that the approach may prove to be valuable for those countries whose financial systems have not reached a high degree of development and complexity. The use of input-output projection for finance in these developing economies, assuming unchanged structure, would help to identify:

- (a) shortages or surplus of funds for particular sectors
- (b) the action which should be taken by the authority to smooth the supply of funds to the different sectors.

Thus, the flow of funds accounts of developing economies could be used fruitfully, at least in short/medium term planning, and to develop certain

* for more details see table 111.3 on p.21, and table 111.4 on page 23 in Roe (168)

financial relationships based on unchanged financial conditions, which may be the normal characteristics of these countries.

(10) Flow of Funds Accounts and International Negotiations:

In addition to the uses already mentioned flow of funds accounts could be used as an instrument in negotiating international aid.

To illustrate, some countries may be faced with a number of uncomfortable indicators of the current state of their economy. Examples of these indicators are inflation/deflation, unemployment, growth of government deficit and the inability of the national sectors to cope with the present economic crisis in terms of providing the necessary funds needed by the government to finance its deficit.

These countries may find that the main solution for their current economic crisis is to seek aid from international organisations, such as the IMF, the World Bank, etc.

In these circumstances, a country might be asked to present its accounts for investigation before any facilities could be granted. Obviously, flow of funds accounts may play an important role in the negotiations between the country concerned and the international organisation.

In this respect, flow of funds accounts, actual and forecast, could provide these international organisations with a clear view of the present structure and working of the financial system under the present policies of the country concerned. Having investigated these accounts the international organisations may impose conditions on the government before granting the aid.

In Britain, for example, the government has supplied a team from the IMF with short term forecasts showing the public sector borrowing requirement based on its current economic policy in 1976, (100, p.1). Presumably, these type of accounts were used in the negotiations between Britain and the IMF before the requested loan was granted to the British government.

As mentioned earlier, developing economies have, in general, to rely heavily on foreign finance to promote the growth of their economy.

Obviously, the existence of flow of funds accounts would provide substantial assistance to the external financing bodies. The major areas in which these accounts would be of benefit to these international organisations could be:

- (a) the provision of information on the government's finance because of its significant role in raising the necessary funds for development programmes
- (b) the financial activity of the external sector because foreign trade often plays a larger role in these countries than is usually the case in developed economies
- (c) information on the financial activity of the financial institutions because of their decisive role in these economies.

This information could be necessary for the international organisations in the formulation of their decision in respect of the requested aid. They may advise the government of the country concerned to re-formulate its financial policy before any funds can be granted.

The relative simplicity of the financial system of a developing economy may make the construction of a flow of funds system easier than would be the case for a complex and developed economy. Consequently, their accounts, which may contain much of the information required by the international organisations, could be used in the negotiation of aid.

5.5 Summary and Conclusion:

The concept and advantages of a flow of funds statement in a firm have been briefly outlined at the beginning of this chapter. At the national level the importance of flow of funds accounts and the factors that have led to their greater use has also been discussed in detail.

The accounting framework of flow of funds accounts of an economy has many advantages and uses and generally satisfies the many questions that may be asked by either the government or economic analysts. Examples of these advantages and uses are:

- (a) as a framework and a systematic basis for the collection of financial information
- (b) as an instrument for financial planning
- (c) identifying the relationship between financial and non-financial sectors of the economy
- (d) identifying the consequences of implementing certain financial/monetary and pricing policies on the financial behaviour of each sector in the economy.

- (e) analysis of the general development of a capital market, by providing information on:
 - (i) the major types of financial instruments which are taking place in the economy
 - (ii) the increase/decrease in the total, and types, of these financial instruments
 - (iii) the role played by the financial sector in the financial market
- (f) tracing saving and investment processes. The accounts could furnish the following information:
 - (i) the distribution of the sector's saving between physical and financial assets
 - (ii) the degree of financial independence/interdependence of the sector in financing its investment
 - (iii) the main sectors dominance the financing processes in the economy
 - (iv) the financial instruments through which savings are channelled to financial investments.
- (g) forecasting flow of funds transactions in the economy

- (h) international comparability of the financial systems
- (j) the projection of flow of funds tables similar to input-output tables
- (k) as an instrument in negotiating international aid.

Though these accounts were initially constructed for developed economies this chapter has discussed the above uses and their relevance to developing economies.

The value of this chapter may be summarised as follows:

- (1) The current literature on flow of funds accounts lacks a rigorous analysis of the uses made of these accounts for economic analysis and as a source of information for the formulation of government policies particularly in their application to developing economies. It is hoped that the investigation carried out in this chapter fills this gap.
- (2) The illustrations made in this chapter on the accounting structure of a flow of funds of a sector and of a national economy may give insight into the structure and composition of flow of funds accounts, and thereby contribute to a better understanding of these accounts.

CHAPTER SIX

The Flow of Funds Accounting of Egypt : Comparison with the United Kingdom System

6.1 Introduction:

In the previous chapter the accounting framework and uses of flow of funds accounts for national economic policy and economic analysis were introduced.

In order to test the hypothesis postulated earlier, ie the present structure and presentation of flow of funds accounts impair their informational content for the uses designated by economists, it is necessary to investigate the current application of these accounts. For this reason, the structure, composition, and some basic problems in compiling flow of funds accounts in a developing economy are discussed. Special emphasis will be given to the Egyptian experience.

It is proposed to briefly survey the accounting framework of flow of funds systems in various OECD countries before fully investigating these accounts in Egypt (using the U.K. as a comparison). The reason for this investigation is to highlight:

- (a) the essential differences between these various accounts
- (b) their relevance to developing economies
- (c) the benefits to the users of these accounts

6.2 The Accounting Framework of Flow of Funds of OECD Countries:

The accounting framework of flow of funds accounts of those countries that are members of the OECD will be discussed.

The first step, in examining the accounting framework of flow of funds for these countries is to investigate how they sector their economies. This can be seen from Table (6.1) below:

Table 16.4
Sectoring of the Economy in the Present Accounting Framework of National Flow of Funds In:

Country		Germany (1)	Belgium (2)	Canada (3)	U.S.A. (4)	France (5)	Italy (6)	Netherlands (7)	U.K. (8)	Sweden (9)	Japan (10)	Finland (11)	Yugoslavia (12)	Other Socialist Countries
Main Sectors	(1) Financial Institutions	C.B. (a) Banks Insurance Co. Building and loan association	C.B. (a) Other financial institutions	C.B. (a) Other financial institutions	Monetary Authority Commercial Banks Other financial institutions Federal Reserve credit agencies	C.B. (a) Insurance Others (c) Others (c)	C.B. (a) Special credit institutions Insurance Co.	C.B. (a) Others (b) Insurance Co. (c)	Banking Sector (a) Others (c)	C.B. (a) Others (b) Insurance Co. (c)	C.B. (a) Banks (b) Others (c)	C.B. (a) Others (b) Others (c)	Monetary Banks (a) Others (b) Others (c)	Other Socialist Countries
	(2) General Government	C.B. (a) Gov. authorities (d) Social Security Funds	C.B. (a) Public Sector (d) Social Security Funds	C.B. (a) Gov. (b) Provisional & Local Gov. (c) Social Security Funds	Fed. Gov. (a) State and Local Gov. (b)	C.B. (a) State and Local Gov. (b) Social Security Funds	C.B. (a) Treasury (b) Post Office (c) Local Authority (d) Social Security Funds Autonomous Gov. Agencies	C.B. (a) State and Local Gov. (b) Social Security Funds	C.B. (a) Local Authority (b) Local Authority (c)	C.B. (a) Local Gov. (b) Social Security Funds	C.B. (a) Gov. financial institutions System (b) Admin. Activity (d) Local Authorities Non-financial public corporations (e)	C.B. (a) Gov. (b) Local Gov. (c)	C.B. (a) Fed. Gov. (b) State and Local Gov. (c) Federal Gov. (d) State and Local Gov. (e)	Other Socialist Countries
No of Gov. Sub-Sector	(1) Other Domestic Sectors	Enterprises: Except housing Housing (a) Households (b)	Public Enterprises (a) Private Enterprises (b) Individuals (c)	Non-financial enterprises (a) Private and government (b) Persons (c) Unincorporated businesses and residential (d)	Business Enterprises (a) Households (b)	Public Enterprises (a) Private Enterprises (b) Households (c)	Other domestic sectors (a)	Other domestic sectors (a)	Public Enterprises (a) Private Enterprises (b) Personal Sector (c)	Housing (a) Non-financial enterprises (b) Households (c)	Private Companies (a) Personal Sector (b) Local Authorities (c) Non-financial public corporations (e)	C.B. (a) Private non-financial enterprises (b) Households (c) Unincorporated enterprises and residential (d)	C.B. (a) Socialist enterprises (b) Other organisations (c) Households (d) Unincorporated enterprises and residential (e)	Other Socialist Countries
	(2) Rest of the World	R.O.W.	R.O.W.	R.O.W.	R.O.W.	R.O.W.	R.O.W.	R.O.W.	R.O.W.	R.O.W.	R.O.W.	R.O.W.	R.O.W.	R.O.W.
No of B.O.M. Sectors	Identified Micro-enterprises	1	1	1	1	1	1	1	1	1	1	1	1	1
	Total No of Sectoring the Economy for F.O.F.A.	10	9	9	10	11	12	10	10	11	9	9	12	7

Source: OECD, Financial Statistics, 9, June 1, 1975

*Source: George Guray, "Flow of Funds Accounts in Eastern Europe", Review of Income and Wealth, Series 17, 1971, p. 243

**According to flow of funds accounts of 1969

From the above table one may conclude that:

- (1) Out of 25 member countries 12 are able to produce national flow of funds accounts.
- (2) Four major sectors are identified in each country. Classification (1) (OECD Countries) of Appendix 8 illustrates the general components of these sectors.
- (3) The total number of the components of each major sector varies from one country to another. That is from 7 sectors (other socialist countries) to 12 sectors (Italy and Yugoslavia).
- (4) Some divergencies exist in the components of the financial institutions of the countries concerned. For example, the number of sub-sectors of the financial institutions varies between 1 (other socialist countries) and 4 (Sweden, Italy, France, U.S.A. and Germany). The Central Bank transactions have been assigned a separate column (sub-sector) in almost all countries, except Britain and other socialist countries. Insurance companies transactions have been allocated a separate column in some countries.
- (5) The components of the general government sector also vary between countries. The number ranges from 1 (other socialist countries) to 5 (Italy). Social security funds have been allocated a separate column in a high proportion of countries.
- (6) Some differences exist between the countries in the way in which they divide the domestic sector into components. Some countries (Italy and Netherlands) do not classify their domestic sector into its various components, rather they allocate all the financial transactions of the

other domestic sectors under one column. While the other countries classify the domestic sector into its major components. The classification ranges from 2 (Belgium, Canada, U.S.A., and Japan) to 4 (Yugoslavia and other socialist countries). The rest of the countries have divided the domestic sector into three sub-sectors (Germany, France, U.K., Sweden, and Finland).

(7) All countries identified in the table have allocated a separate sector for the financial transactions with the rest of the world.

(8) Some countries (U.S.A. and Italy) have allocated a separate column in the national flow of funds table for statistical discrepancies.

The above analysis shows the diverse approach by the various countries to the problems of sectoring their economies for flow of funds purposes. But it should be emphasised here that these differences may be unavoidable in view of the existing dissimilarities in the structure of their economies and their financial systems.

It has been argued (101, p.8) that the flow of funds approach assigns a greater role to the financial intermediaries than does any other system of national accounting. As a result, one would expect to find that the economies whose financial structures differ require a different sectoring approach. It follows that classification of the various types of financial transactions cannot be standardised in the accounts for all countries.

Nevertheless, one must remember that one of the main objectives of flow of funds accounts is the explanation of the financial behaviour of the economic sectors. If this is true, it follows that the country should classify in its national flow of funds accounts as many sectors as

possible. The differences in the financial system between one country and another do not play a vital role in sectoring the economy for flow of funds purposes. It seems possible to gain some support for this observation in the current structure of the national flow of funds accounts of the countries identified in Table (6.1). This shows, for example, that the U.K. whose financial system has been termed as one of the most complex in the world, has 8 economic sectors in its national flow of funds accounts, amongst which only 2 sectors are assigned for the financial institutions. While in Yugoslavia 12 sectors are identified in her national flow of funds accounts amongst which 3 sub-sectors are classified for the financial institutions. It may be hard to generally agree with that suggested by Heth, (101, p.8):

"The flow of funds systems presently employed are therefore dissimilar not only because of disagreement about what is desirable, but also because of the disparate quality of the statistical data available for constructing the accounts".

Firstly, simply because the desire to study and analyse the financial behaviour of the economic sectors ranks high among the main objectives to which these accounts are constructed. Secondly, though the disparate quality of statistical data needed for these accounts may represent a problem in some countries, they may not be so in those countries which are probably well equipped with sophisticated statistical data processing facilities as may be the case in those countries identified in the previous table.

The above analysis of the flow of funds sectors employed in different countries indicates the absence of a unified approach to sectoring the economy. The SNA of the United Nations, therefore, attempted to standardise the types of economic sectors for the financial transactions. The U.N. system for sectoring the economy is found in classification (2) of Appendix 8. It can be seen that one of the main advantages of this system is the

enlargement of the number of economic sectors and the distinction between private and public transactions in some economic sectors.

The accounting framework of the national flow of funds accounts of the member countries of OECD is illustrated in Table (6.2) below:

Table (6.2)

The Accounting Framework of Flow of Funds of the OECD

	Financial Institutions						General Government		Other Domestic Sectors	Rest of the World	Total																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	Monetary Institutions			Others	Central Government	State and Local Government																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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Source: OECD, "Financial Statistics", 9, Tome 11, Notes, 1975, pp.44-45

Explanatory Notes for Table (6.2):

(1) Investments are shown in the column "U", and the means of financing in column "S".

(2) Row (6) identifies the financial saving or deficit of the sector concerned.

(3) The financial transactions are classified from row (9) to row (20).

(4) Row (7) shows the total financial investments made by each sector (column U).

(5) Row (8) shows the increase (net) of the sector's debt (column S) and the form of increasing that debt is shown in row (9) to row (20).

One of the main deficiencies of the OECD model as far as sectoring the economy is concerned is the high degree of aggregation of divergent economic units into the column "Other Domestic Sectors". This aggregation may not be useful for the explanation of the economic behaviour. The model also does not identify the internal flows within the economic sectors themselves. The loss of this information could be important in assessing the extent to which flow of funds occur inside the sector. Thereby, the importance of the intra and inter flows of the sector could be identified and studied. Sectoring the economy in the SNA for the flow of funds transactions has, to a great extent, overcome the problem of broad definition of a sector.

From the above discussion one may conclude that the more sectors and financial instruments specified the greater the information available on

financial transactions and thus the better the explanation of the behaviour of the sectors, and consequently the greater the value of these accounts to the government, financial analysts and developing economies.

In order to assess further which framework of flow of funds accounts is more valuable to government policy, financial analysts and their relevance to developing economies the Egyptian experience in flow of funds accounts as compared with the British system will be investigated and analysed in the subsequent sections.

6.3 Flow of Funds Accounts and the Developing Economies:

It has been mentioned earlier that flow of funds accounts have some important uses for the developing economies. The question which may arise, however, is what models of flow of funds accounts (in terms of sectoring the economy, the kinds of financial instruments and presentation methods of financial transactions), are likely to be more helpful to them in facing the problems associated with economic and financial development?

Obviously, there can be no single clear-cut flow of funds table that could be useful to all developing economies, because what is useful to one developing economy might not be so for another. It is reasonable to assume that each country will put a different emphasis on the importance of the sectors and financial instruments of its economy. Nevertheless, the framework of flow of funds accounts of an emerging nation should be structured to provide the transactions of specific kinds of economic sectors and of financial instruments that are relatively more important than in the developed countries. Examples of these economic sectors are:

- (a) the components of the financial institutions sector

(b) public enterprises

(c) government sector.

The financial information that may be considered important in a developing nation could include:

(a) money/quasi-money - supply data

(b) intra transactions of the economic sectors

(c) lending transactions of the financial institutions

(d) level of domestic saving

(e) the scope and substance of the external funds in the investments of domestic sectors

(f) data on government financial transactions.

The availability of data on money supply is of course essential in both developed and developing economies, but its importance has been much emphasised in developing economies. It has been mentioned by Sammons, (173, p.163) that:

"Money supply data are especially important because under-developed countries seem to have a more-than-average susceptibility to inflation, and the degree of inflation (as measured by price increases) is usually closely coordinated with the expansion of the money supply. For these countries, the traditional analysis of the expansion of the circulating medium according to domestic and external factors, and within the former, according to whether the credit expansion provides finance to the government or to the private sector, is essential"

From the above quotation and without necessarily subscribing to any theory of the dominant importance of the money supply in determining inflation, it follows that flow of funds accounts should provide information not only on the transactions of different types of money supply, but also on the financial interdependence of the economy. That is the extent to which the demand for funds are met by the domestic savings. The importance of savings in developing nations is evident from the Mexican paper (in the CEMLA* study), as cited in (173, p.164):

"... the necessity for analysing the role of savings seems to be greater in the case of countries in the process of development, where the demand for funds and resources exceeds the capacity of the economy to provide them and at the same time savings tend towards speculative or non-productive investment ...".

The flow of funds accounts of developing economies should primarily be designed to suit the circumstances of these countries. As an example of the application of flow of funds accounts in a developing economy, the Egyptian experience in this context will be discussed.

6.4 The Early Accounting Framework of Flow of Funds in Egypt:

Egypt started her National Plan in the mid 1950's when modest efforts prepared the way for the development of a truly National Plan. In 1955 the government had established a Committee for National Planning whose function was to formulate an over-all economic and social plan to be implemented within a specific time. The national targets were determined in this plan, and all the resources of Egypt had to be directed towards reaching these goals. This Committee played a great role in co-ordinating the plans of different sectors in the economy (149, p.52). In 1958 the Committee for National Planning was responsible for the preparation

* Centrs de Estudios Monetarios Latin Americans (CEMLA)

and study of the national economic and social plans for development and for following up the projects of the plan after they had been approved by the Council of Ministers.

Thus the government agencies responsible for managing the economy are required to obtain information on all aspects of the economy in order to attempt to understand how it functioned. In this context, input-output tables, national income accounts, and the national budgets were used as sources of data. At that time (1958) flow of funds accounts had no place in the Egyptian economic statistics.

The first attempt to compile data for flow of funds accounts in Egypt was made under the auspices of the Committee of National Planning by a unit consisting of banks, insurance companies and the Treasury, which has played an important role in furnishing a considerable body of financial statistics. These statistics have been considered the basis on which a flow of funds system could be constructed.

In 1959, an economist, A. Hosney, designed and constructed the first flow of funds accounts covering the financial transactions of the Egyptian economy for the previous year. The accounting framework of these accounts can be found in Appendix 9.

For the first Egyptian flow of funds system (1958) the economy was split into 14 sectors, of which five were classified as financial intermediaries. The Central Bank and the Treasury were allocated two separate sectors.

The financial transactions were grouped into five tables which divided the main body of flow of funds tables into its major sub-divisions. Composition

of these five groups are summarised below:

First group: shows the flow of funds between economic units and financial intermediaries when the latter are debtors. In other words it shows changes in the financial intermediaries' liabilities. The financial instruments in this table range from deposits (time-current) and loans (short/long term) to Treasury bills and securities which have been deposited by the various economic units in the financial intermediaries, Central Bank and Treasury.

Second group: shows the flow of funds within the economic units themselves. The financial instruments that may take place between these units usually range from commercial bills and short/long term loans to stocks and shares.

Third group: shows the flow of funds within the financial intermediaries themselves. The financial instruments in this table may include, for example, Treasury bills held by financial intermediaries, Central Bank's loans to the Treasury, loans (short/long term) from financial institutions to the Treasury, or vice versa, loans from Central Bank to financial intermediaries, and short term loans between financial intermediaries.

Fourth group: shows flow of funds between economic units and financial intermediaries when the latter are creditors. In other words it shows changes in the assets of financial intermediaries representing claims upon economic units. Examples of the financial instruments that may be included in this group are, Treasury loans, personal overdraft accounts, short/long term loans from financial intermediaries to households, government, companies sector, or the external sector and investments in stocks and shares.

Fifth group: shows the connection between flow of funds transactions and national income accounts. Examples of the kinds of transactions in this table are savings, gross fixed capital formation, increase in value of stocks and work in progress and financial surplus or deficit.

The first four groups could be illustrated by the following simplified diagram:

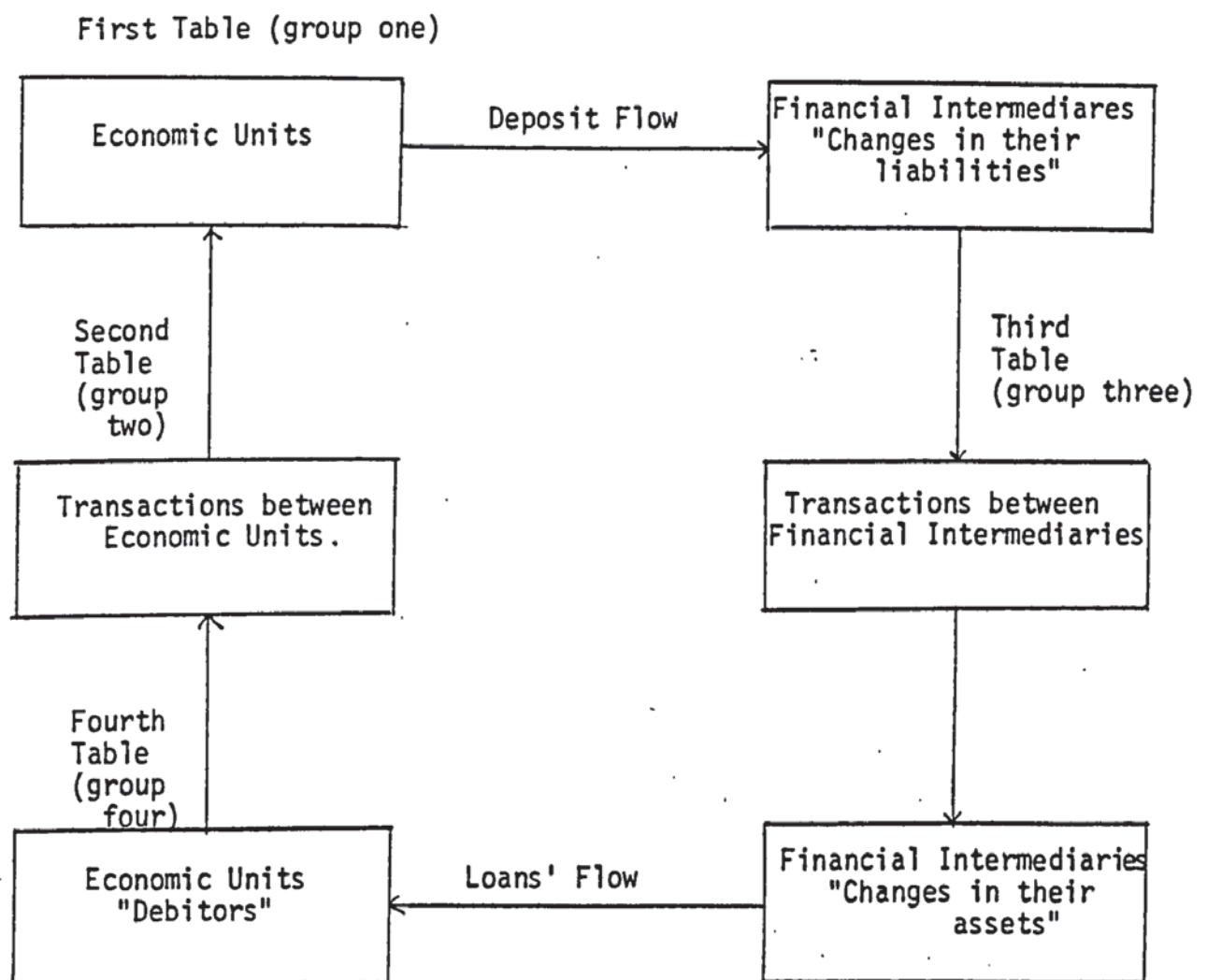


Figure (6.1)

The Flow of Funds Transactions Within and Between
the Economic Units and the Financial Intermediaries
in the Egyptian Flow of Funds System

The flow of funds accounts which emerged in Egypt in 1958 continued until 1960 when fundamental changes in the structure of the Egyptian economic system began to take place. These changes started in mid-1960 and continued up to 1963. As a result, a large government sector was constructed, which included more than 80% of the industrial sector, all banking and insurance and the foreign trade sectors. Since then there have been some attempts to re-structure the Egyptian flow of funds accounts to cope with the new economic system. The next section aims to give an insight into the present structure of these accounts in Egypt.

6.5 The Present Accounting Framework of Flow of Funds System in Egypt:

The interest of the Egyptian economists to develop and re-design the old flow of funds accounts into a new system can be traced to the beginning of the 1960's. But the first real push in this direction was started by the economists Dr Samir Sedhum and Mr Aly L. Aziz of the Institute of National Planning in Cairo. As a result of these efforts, a new structure of flow of funds accounts has emerged, the important aspects are briefly outlined below (175, 14):

(1) Sectoring the Economy:

It has been agreed by the Egyptian economists that the classification of the economic units should be based on the distinction between three criteria (14, p.10):

- (a) the main function of the economic unit (financial/non-financial)
- (b) the major kind of economic activity the unit performs (industry, agriculture, commerce, services)

- (c) the legal form of the economic unit.

But for the purpose of flow of funds accounts it has been decided to aggregate all economic units that are similar in both their economic activity and their main function into two major economic sectors as follows:

A. Non-Financial Sectors: These include:

- (a) business sector, to take charge of production activity
- (b) public services sector, to augment the public services necessary for the economy as a whole
- (c) households sector, whose main activity is consumption
- (d) external sector, includes all economic units working outside Egypt.

B. Financial Sector: includes the following financial intermediaries:

- (a) banking sector
- (b) insurance companies
- (c) agriculture, cooperative and credit organisations
- (d) other financial organisations.

The broad divisions of the eight sectors are as follows:

- (a) Business sector: this includes the private and public business sectors.
- (b) Public services sector: included here are the central government, local government and the Treasury.
- (c) Households sector: this sector consists of not only "households" as "consumers" but also cooperative societies and other non-profit making bodies.
- (d) External sector: included here are all external individuals and organisations doing business with the domestic sector.
- (e) Banking sector: the definition of the banking sector is broad. It includes not only the Central Bank but also all commercial banks which engage in the main money transmission system as well as the real estate banks and the Industrial Bank.
- (f) Insurance companies: included are all insurance and re-insurance companies working in Egypt.
- (g) Agriculture cooperative and Credit Organisation: included here are seventeen banks whose activities are nationally distributed in places where the activity is mainly agriculture.
- (h) Other financial organisations: consist of three organisations dealing with superannuation funds, social security and national health.

(2) Categories of Financial Transactions:

As a stock exchange, in the sense that is used in Britain, does not exist in Egypt, and because of the weakness of the private companies sector, the designer of the accounts categorised the financial transactions (financial instruments) into a minimum number of groups based on a liquidity criteria. Examples of these financial instruments are cash, current and deposit accounts, bonds, bills and short/long term loans.

(3) The Main Structure of the Flow of Funds Tables:

The structure of flow of funds accounts in Egypt is based on the following tables*:

- (a) The Sectoral Table
- (b) The Principal Table
- (c) The Shortened (brief) Financial Table
- (d) The Detailed Table
- (e) The Shortened (brief) Economic Table

* Arabic title of these tables are as follows:

- (a) Al-Gadwal Al-Kittale
- (b) Al-Gadwal Al-Raiesey
- (c) Al-Gadwal Al-Maley Al-Mohktassar
- (d) Al-Gadwal Al-Tufssely
- (e) Al-Gadwal Al-Iqtisady Al-Mohktassar

Each of these tables will be discussed briefly:

(A) The Sectoral Table:

This table is constructed for each major sector in the economy and in some cases for specific sub-sectors such as public business sector, organised/unorganised private business sector, etc. The important criteria that determines the construction of the table is the importance of the financial activity of the sector concerned.

The table displays the financial transactions that take place in the sector and the other sectors which have financial transactions with that sector. Some of the advantages of this table include:

- (1) The net lending/borrowing of the sector to each of the major economic sectors can be determined.
- (2) Coefficients can be extracted for the financial flows; which might be useful for forecasting.
- (3) The table furnishes some basic data useful for the construction of the Principal Table.

The structure of the sectoral table would be tabulated as follows:

Table (6.3)
Flow of Funds Accounts in Egypt -

Model of a Sectoral Table

Transactions Sectors	Changes in Financial Assets		Changes in Liabilities		Net Indebtedness or Credit
	Financial Instruments :	Total	Financial Instruments	Total	
Sector A					
Sector B					
Sector C					
"					
"					
Total changes in financial transactions					
Balance of financial transactions					
Saving					
Capital formation					
Capital transfers					
Financial deficit -/ Surplus +					

The balance of the financial transactions which is included in the lower part of the table represents the differences between the total changes in financial assets (net) and the total changes in the liabilities. If the balance appears in the assets side, it means that the sector has lent more than its total borrowing, while the reverse is true if the balance is shown in the liabilities side.

(B) The Principal Table:

This table covers all the national sectors and their flows of financial transactions. The table is divided into two main vertical parts; the first is for changes in the financial assets of the different broad sectors, the second is for changes in the financial liabilities of these sectors.

The structure of the Principal Table is illustrated in Table (6.4) over:

Table (6.4)
The Structure of the Principal Table
of Flow of Funds Accounts in Egypt

<div style="text-align: center;">Sectors</div> <div style="text-align: left;">Financial Transactions</div>	Change in Assets					<div style="text-align: center;">Total of Financial Transaction</div> <div style="text-align: left;">Assets : Liab</div>	Changes in Liabilities				
	A	B	C	D	E		A	B	C	D	E
Financial transactions						⋮					
" "						⋮					
" "						⋮					
Total changes in Financial Transactions						⋮					
Balance of Financial Transactions						⋮					
Saving						⋮					
Less						⋮					
Gross fixed capital formation						⋮					
Increase in value of stocks and work in progress						⋮					
Financial Surplus +/- deficit -						⋮					

The structure of the principal table depends mainly upon the data derived from the sectoral tables, combined with complementary data which will be discussed later.

(c) The Shortened (Brief) Financial Table:

This table is a simple frame for flow of funds transactions. It is restricted to provide data in a gross and undetailed manner of the financial transactions which take place between economic sectors and the banking sector. It includes changes in the balances of the transactions on the basis of sources and uses of funds. The importance of this table is that it can provide policymakers with speedy answers on certain economic phenomena in general. The structure of this table including hypothetical figures are shown below:

Table (6.5)

The Shortened (Brief) Financial Table

Sectors Transactions	Economic Sectors							Financial Intermediaries
	Households Sector	Public Business Sector	Organised Private Business Sector	Unorganised Business Sector	Cooperative Societies Sector	Public Services Sector	External Sector	Banking Sector
	S U	S U	S U	S U	S U	S U	S U	S U
Deposits, current	- -	- 50	- 20	- 10	10 -	- -	- -	70 -
Loans & advances	- -	30 -	- 10	- 70	10 -	50 -	- 10	- -
Securities	- -	10 -	10 -	- -	- 10	- -	50 -	- 60
Discounted bills	- -	100 -	100 -	50 -	- -	- -	- -	- 250
Total	- -	140 50	110 30	50 80	20 10	50 -	50 10	70 310
Net Changes	- -	- 90	- 80	30 -	- 10	- 50	- 40	240 -

(D) Detailed Financial Table:

This table provides more data than the previous tables in terms of the financial transactions, the financial flows between the economic sectors and the breakdown of the major sectors into their main components.

A model of a detailed financial table is illustrated in Table (6.6). It should be observed that this table does include details of the financial flows which are grouped and classified into five tables, to which previous mention has been made.

Table (6.6)
The Structure of the Detailed Financial Table in Egypt

Transactions	Economic Units										Financial Intermediaries										Total				
	Households Sector	Public Business Sector	Private Business Sector	Unorganised Business Sector	Cooperative Societies Sector	Public Services Sector	External Sector	Central Bank	Real Estate Bank	Commercial Banks	Agricultural Cooperative and Credit Organisations	Insurance Companies	Post Office Saving Accounts	S	U	S	U	S	U	S		U	S	U	
Table (1)																									
Table (2)	↓						↑												↓						↑
Table (4)	↓																		↓						↑
Table (5)																									
Total																									

Table (3)

(E) The Shortened (Brief) Economic Table:

This table combines financial and economic transactions of each of the major economic sectors. While it shows in detail the economic transactions of each major sector in three main accounts, ie production, appropriation and capital, it includes the financial flows in the form of borrowing, lending and repayment of loans. It, therefore, provides a comprehensive summarised description of the activity of the national economic sectors. The structure of this table is shown in Appendix 10.

(4) Statistical Sources of Flow of Funds Accounts:

There is no one form completed by all economic units for the purposes of flow of funds accounts and, in fact, information is not collected from as many economic units as the compiler might, perhaps, wish. The actual data is obtained by a number of government agencies as well as the Central Bank of Egypt.

The main sources of data from which flow of funds accounts are compiled can be summarised below:

(a) Financial Follow-Up Forms:

The Control of Banks Department of the Central Bank of Egypt requires banks to submit monthly and quarterly reports of their financial activities. These returns are made on special forms designed in accordance with the classifications needed for the purposes of flow of funds accounts. Specimen forms are shown in Appendix 11. It can be seen that these forms include balance sheets for the beginning and the end of the financial year. They also categorise the assets and liabilities by sector, by its components and by kind of major economic activity.

(b) Balance of Payments Statistics:

These statistics provide figures for the external sector.

(c) Public Sector Statistics:

These statistics are collected and obtained from three government departments, Ministry of Planning, Ministry of Finance and CAPMS.

(d) Statistics Obtained from Organised Private Sector:

The figures obtained from reporting organisations in the organised private sector (mainly to CAPMS) provide some useful information for flow of funds purposes

(e) Other Complementary Data:

Examples of complementary data are:

- The total of Treasury Bills and Government Stocks issued is available from official sources, ie Ministry of Treasury.
- Details of the issued capital of companies divided between the organised and unorganised business sector are available from the Trade Register Department in the Ministry of Economics.

It should be emphasised that the monthly and quarterly returns of the banks have been considered as the major, and the most important, source of information for the purposes of flow of funds accounts in Egypt.

6.6 Practical Problems in Compiling Flow of Funds Accounts in Egypt:

The problems of constructing flow of funds accounts clearly vary from one country to another. The scope of these problems depends upon certain factors. Examples of these factors are: the accuracy and reliability of statistical sources, the structure and circumstances of the economy and the availability of usable financial data.

Since the discussion is restricted to the Egyptian experience of flow of funds the conclusion reached may not be considered generally applicable to all other countries. Nevertheless, it should be emphasised that there is a gap in the current literature concerning the problems and difficulties of constructing flow of funds accounts in developing economies. Thus an empirical study into the problem areas experienced by Egypt may be of value to other developing economies.

It is proposed to discuss and summarise the problem areas that confronted, or may have confronted, the Egyptian compilers of flow of funds tables. These areas are termed "key problem areas" because they would be critical to the successful compilation of flow of funds accounts.

In order to determine the "key problem areas" which have influenced or are still influencing the structure of the Egyptian flow of funds accounts, a series of informal interviews have been carried out by the author with officers of the Central Bank of Egypt, Ministry of Planning and the CAPMS.

In these interviews, the following major question was asked: "What are the major problems which have influenced and are influencing the compilation of flow of funds accounts of Egypt?" The answers derived

revealed some of the practical problems which faced, and still do, the compilers of the flow of funds of Egypt. These problems can be summarised as follows:

(1) The Absence of Balance Sheets in Certain Sectors of the Economy:

As the structure of flow of funds accounts depends to a great extent upon the availability of balance sheet data, the absence of such data is considered a serious handicap. But it is possible to obtain part of this data by "indirect" means (as discussed for national balance sheets). It has been found that the unorganised private sector and the household sector where balance sheets are not available causes the greatest difficulty for the compiler.

Therefore, Egypt has had to resort to other sources to obtain this missing data. They investigated two approaches. Firstly, through the use of the Inland Revenue data. This was considered unsuccessful for two reasons:

- (a) the Inland Revenue data itself was incomplete in that it did not have all the balance sheets that are required
- (b) there is a considerable doubt concerning the accuracy and reliability of the data presented to the Inland Revenue.

Secondly, an attempt was made to construct a balance sheet for the "average" Egyptian family. This project is still being carried out and no results have as yet been published.

Having recognised the importance of balance sheets for flow of funds accounts, the CAPMS has commenced the publication of relevant information on the financial flows. This, it is hoped, will form the basis of a "body of data" that will eventually be used for flow of funds purposes. Examples of this information are:

- (a) savings of individuals of the household sector
- (b) deposits
- (c) borrowings
- (d) bills.

These flows are presented not only for the components of the economic sectors but also published for two successive years and according to kind of major economic activity.

(2) Lack of Detail in the Category of Financial Investment in the Balance Sheets of the Financial Institutions:

If the balance sheet data of the economic sectors is to be useful for the purpose of flow of funds accounts, it must be presented in such a way as to facilitate the work of the compiler of these accounts.

In Egypt, though some balance sheets of certain economic sectors are made available to the compiler (through the work of the CAPMS), they do not show sufficient detail for adequate use in flow of funds accounts. For example, it is the normal practice in Egypt, even in the financial institutions sector, to present the financial portfolios in the balance sheets

under a global item which is usually termed as "financial investments".

The balance sheets of the following components of the financial institutions do not disseminate detailed information on the category of financial investments:

- (a) insurance companies
- (b) the aggregated balance sheets of banks
- (c) the aggregated balance sheets of the commercial banks and the Central Bank
- (d) the aggregated balance sheets of the industrial and real estate banks
- (e) the aggregated balance sheets of the Egyptian Public Organisation for Agricultural Cooperative and Credit, including its banks in the provinces
- (f) the balance sheets of the other financial institutions, which include:
 - (i) The Social Organization of Bank Nassar
 - (ii) The Public Organization of Social Securities
 - (iii) The Public Organization of Superannuation
 - (iv) Post Office Saving Bank

The balance sheets of these financial institutions which have recently been made available* to the compiler for the purpose of, (47, p.1) "... the identification of the role played by the financial public sector as an organiser of the flow of funds between both the production sector and the different economic activities", are presented in a traditional form and do not fully satisfy the needs of flow of funds accounts. Appendix 12 presents typical balance sheets as published by the financial institutions, (namely a, b and d as identified above) together with the balance sheets of the National Bank of Egypt** in Tables (12.1), (12.2), (12.3) and (12.4) respectively.

The lack of detail in the category of financial investments in the balance sheets is not restricted only to the above statements but it can also be found in the balance sheets of other economic sub-sectors such as the public enterprises and the unorganised private business sectors.

(3) Variability of the Treatment of Financial Transactions:

Although a unified system of accounts was introduced in Egypt, it was mainly concerned with the industrial activity of the public sector companies. Moreover, most of the recommendations of the unified system were made primarily for real assets, eg depreciation and inventory valuation. It follows that transactions in financial assets and liabilities have not been considered by the unified system of accounts. In addition the system excluded not only banks and insurance companies but also the government sector.

* The preparation and presentation of these balance sheets as a part of the national economic statistics in Egypt is the sole responsibility of the CAPMS.

** Further comments will be made on these balance sheets in the next chapter, (see Section 7.3, sub-section (1))

If the unified system of accounts excluded the above mentioned sectors, this implies that these sectors are in no way under an obligation to follow certain unified accounting rules in the treatment of their real and financial assets. These different procedures would, of course, have their effect on the informational content of their balance sheets, and indirectly on their usefulness for flow of funds accounts.

It has been reported by Aziz, (14, pp.2,14) that the lack of uniformity in the treatment of financial assets among the Egyptian economic units represents one of the main difficulties in the construction of these accounts. He stated that the different methods of valuing portfolios (financial and commercial papers) is an example of the lack of such uniformity. He further comments that some companies evaluate their portfolios on the basis of nominal value, while others use market value.

In an attempt to approach this problem in Egypt, the Institute of National Planning in Cairo has recently undertaken to formulate a unified system of accounts for application on the financial intermediaries in Egypt. Though this attempt has not yet been completed, it represents a positive step toward securing a comprehensive body of data that could eventually be used for the purpose of the flow of funds system in Egypt. But this attempt represents only one aspect. The other aspect is that those financial intermediaries together with other economic sectors must be aware of the importance of flow of funds accounts not only for the national economic and financial policy but also for their interests. They must be convinced that such a system is indirectly beneficial to their own interests; one area of such benefit is the evaluation of their past financial activity (within the context of the whole financial system) which will assist in setting better strategies for the future. It will also allow organisations to carry out "interim comparisons".

The lack of interest of the Egyptian financial intermediaries in flow of funds accounts is not only supported by the lack of detail in their balance sheets, as mentioned earlier, but also by their belief that these accounts do not directly serve their interests. It has been reported by Aziz, (14, p.10) that the reason for the lack of participation of the Egyptian financial intermediaries, other than banks, in the field of flow of funds accounts is that they are not convinced of the uses that may be achieved from these accounts. Moreover, it would appear that the cost factor, such as the training of staff and the purchasing of equipment required to produce the information is offered as the main excuse by the financial intermediaries for their unwillingness to participate in the system.

It is worth noting that one of the main functions of the Institute of National Planning in Cairo is to arrange seminars and lectures for senior employees working in the government departments, the public business companies, and the financial institutions. These seminars and lectures usually cover matters related to economic management, finance, economics and accounting. Most of these lectures are given by the Institute's own staff most of whom are well qualified.

A survey carried out by the author in early 1976 on the Institute's lectures and seminars over the last ten years did not reveal one single seminar or lecture on matters related to flow of funds systems. This would appear to be one of the main shortcomings of the Institute of National Planning in Cairo

It would have been hoped that before the Institute introduced the unified system of accounts that they would have arranged a series of seminars for the various components of financial intermediaries including

banks on the concepts and importance of the system of flow of funds accounts. Having explained these important aspects one would have expected that the response to the system may have been better than it is at present.

(4) The Problem of Distributing the Notes Issued Among the Economic Sectors:

One of the difficult problems which faces the Egyptian compiler of flow of funds accounts is the problem of distributing notes and coin among the various economic sectors.

In the balance sheet of the Central Bank there is an item termed "notes issued". Flow of funds accounts regard the increase in the "notes issued" by the Central Bank as a financial source for the Bank, and regard the notes held by the various sectors as a financial use. In other words, the notes issued by the Central Bank represent an increase in its liabilities and, at the same time, represents an increase in the other sectors' assets. The problem here is how to identify the exact share of each sector in this increase of the issued notes. Such a problem, one may assume, has not met yet with an ideal solution, rather it has been treated arbitrarily. The same is true in respect of the coin issued by the Treasury. It should be noted that this problem is not unique to Egypt, rather it can be found even in developed economies. In Britain, for example, it is possible to identify changes in the holdings of notes and coin of certain sectors (banking and the public sector) but the balance is split arbitrarily and on an equal basis between the personal sector and industrial and commercial companies (20, p.92). A similar treatment has been followed in Egypt. In this context, there is no substantive difference between Egypt and the U.K.

The importance of notes and coin in terms of flow of funds lies in:

- (a) notes and coin comprise a main component of the money supply in the economy
- (b) the importance of money supply in determining inflation
- (c) the special importance of money supply in developing economies, as mentioned earlier*.

The magnitude of notes compared with private demand deposits in the Egyptian economy in 1975 (January-April) is illustrated below:

Table (6.7)

Components of Money Supply in the Egyptian Economy
in 1975 (January-April)

£Em

End of	Net Notes in Circulation	Subsidiary Notes & Coins in Circulation	Net Currency in Circulation	Private Demand Deposits	Total
	1	2	3(1+2)	4	5(3+4)
1975 January	940.3	14.3	954.6	524.4	1479.0
1975 February	946.0	14.3	960.3	530.4	1490.7
1975 March	946.3	14.3	960.6	547.0	1507.6
1975 April	961.9	14.4	976.3	583.7	1560.0

Source: National Bank of Egypt, Economic Bulletin, Vol. XXVII - No. 4, 1975, Cairo. Table 1/4, p.446.

The above table shows the magnitude of notes and coins compared with private demand deposits and the total money supply in Egypt.

* see section 6.3

This problem can be regarded as being largely concerned with the selection of the appropriate method to distribute these notes and coins among the various economic sectors, in such a way as not only to reflect the financial behaviour of these sectors but also to show whether the increase in the issue of these notes and coin is held by the government sector or by the private sector. However, there is a wide scope for further study in this and related areas. This problem is left for future research.

From the above discussion, it may be concluded that the main practical problems that confronted the Egyptian compiler of flow of funds accounts can be summarised below:

- (1) The absence of balance sheets for certain sectors of the economy.
- (2) Lack of detail in the category of financial investment in the balance sheets of the financial and the economic sub-sectors.
- (3) Variability of the treatment of financial transactions.
- (4) The lack of participation by the financial intermediaries, other than banks, in the flow of funds system of Egypt.
- (5) Difficulties in finding an appropriate method to distribute notes and coin, issued by the Central Bank of Egypt and the Treasury, among the various economic sectors, in such a way as to reflect the financial behaviour of these sectors.

6.7 A Comparison and Analysis of the Differences Between the Old/New Egyptian Flow of Funds System and its British Counterpart:

A comparative study of the structure of flow of funds accounts between different countries at different stages of economic development is the object of this section.

The comparison which will be carried out here will cover the structure of flow of funds accounts of Egypt (old and new) as a developing country and the U.K. as a developed economy. This comparison could be useful in the assessment of the flow of funds accounts' structure; the analysis of differences and similarities in constructing the accounts in both countries will highlight the extent and the direction in which each account disseminates better information (for financial analysts as well as for financial policy purposes), having regard to the circumstances of both countries.

The comparison will be limited to the following factors:

- (1) sectoring the economy
- (2) forms of the presentation of national flow of funds accounts
- (3) order of the financial instruments in the accounts
- (4) forms used by the Central Bank for flow of funds accounts.

The reason for this limited discussion is the belief that these factors play the major role in the final shape of flow of funds accounts. In addition they may affect the scope and substance of the information which the accounts will convey to the users.

Sectoring the economy will be considered for both Egypt (old/new system) and the present British flow of funds system, while forms of presentation and order of the financial instruments will be considered for the new Egyptian and its British counterpart system.

(1) Sectoring the Economy:

One of the main objectives of flow of funds systems is identifying the financial behaviour of the economic sectors. To achieve this objective, the choice of sector in these accounts should be carefully made. How Egypt and Britain divide the economy into sectors for the purpose of flow of funds accounts can be summarised in the following table:

Table (6.8)

**A Comparison of the Differences in the Economic Sectors
Between the Old/New Egyptian Flow of Funds System and its British Counterpart**

EGYPT			U.K.	
Old - Principal Table	New		National Flow of Funds (Principal Table)	Sectoral Table
	Principal Table	Detailed Table		
(1) Economic Sectors:	Economic Sectors:	Economic Sectors:	Economic Sectors:	Economic Sectors:
1.1 Households	1.1 Households	1.1 Households	1.1 Personal Sector	1.1 Personal Sector
1.2 Public Administration	1.2 Public Services	1.2 Public Services	1.2 Public Sector	1.2 Public Sector:
1.3 Government Sector	1.3 Public Services	1.3 Public Business Sector		* Central Govt
1.4 Organisation Sector				* Local Govt
1.5 Bank Msr Sector	1.3 Business Sector	1.4 Private Business Sector		* Public Corps
1.6 Private Sector		1.5 Unorganised Business Sector	1.3 Industrial and Commercial Companies	1.3 Industrial and Commercial Companies
		1.6 Cooperative Societies Sector		
1.7 External Sector	1.4 External Sector	1.7 External Sector	1.4 Overseas Sector	1.4 Overseas Sector
(2) Financial Sector:	Financial Sector:	Financial Sector:	Financial Sector:	Financial Sector:
2.1 Treasury	2.1 Banking Sector	2.1 Central Bank	2.1 Banking Sector	2.1 Banking Sector
2.2 The Central Bank	2.2 Insurance Companies	2.2 Commercial Banks	2.2 Other Financial Institutions	2.2 Other Financial Institutions
2.3 Commercial Banks		2.3 Insurance Organisation		2.3 O.F.I. (detailed by institutional group)
2.3.1 Organisation Banks	2.3 Public Organisation for Agricultural Cooperative and Credit	2.4 Industrial Bank		
2.3.2 Other Banks	2.4 Financial Organisations	2.5 Agricultural Credit Banks		
2.4 Specialised Organisations		2.6 Post Office Saving Organisation		
2.4.1 Organisation Sector		2.7 Real Estate Bank		
2.4.2 Other Organisations				
2.5 Economic Organisation				

From the above table, the comparison leads to the following conclusions:

- (1) There are major differences in the number of economic sectors in the old and the new Egyptian flow of funds accounts and between the latter and the British accounts. For example, the old Egyptian system included twelve sectors and four sub-sectors, while the new one includes eight sectors. The British flow of funds accounts include six sectors only.
- (2) Some economic sectors in the old Egyptian system have been cancelled, aggregated and/or transferred into new economic sectors in the new Egyptian system. Examples are the transfer of Treasury from the financial intermediaries sector to the public services sector in the new system. Also the integration of the government sector, organisation sector*, Bank Misr**sector (CF), and private sector into one sector termed the business sector in the new system. This integration or cancellation of some economic sectors is due to the economic revolution which closely followed the army revolution in 1952. One of the economic sectors which has no place in the new system is Bank Misr sector. Bank Misr was founded in 1920 to help overcome one of the major problems facing Egypt at that time, that is the absence of a base for financing national industrial projects. The participation of the Bank took many varied forms in industry and trade, it established twenty seven companies which have been termed "Misr group". The Bank's capital was £E80,000 in 1920 and increased to £E6,600,000 by 1960. In 1958 the "Misr group" had total resources of £E248 million and a net income of £E5 million (17, p.22). Bank Misr and the "Misr group" were

* see Chapter 8 for more detail on the components of that sector

** the English translation of the word "Misr" is Egypt

nationalised in 1960. These companies were included in both the business sector in the principal table and the public business sector in the detailed table of the Egyptian new system*.

(3) The financial activity of the government - central and local - has been clearly distinguished in the old and the new Egyptian flow of funds (old: public administration, new: public services), while the same activity of government is included among the public sector activity in the British flow of funds system in the national table and segregated in the sectoral table. But one of the main shortcomings of the British system as far as the financial activity of the central and local government is concerned is the lack of information in the public sector flow of funds table on the financial surplus/deficit of each component of the British public sector, including of course central and local government (21, p.182).

(4) The business sector in the detailed table in the new Egyptian system has been disaggregated to include the following sub-sectors: public business sector, private business sector, unorganised business sector and cooperative societies sector. While in the British accounts, the business sector is distributed between public sector (public corporations) and industrial and commercial companies.

(5) The external sector is allocated a separate sector in both the old/new Egyptian and the British system.

(6) There are many differences in the number of financial intermediaries between the old and new Egyptian systems and between the latter and the British system. For example, the old Egyptian system included five main sectors for financial intermediaries and four sub-sectors, while the new

* It should be noted that this treatment does not imply double counting, because each table presents the financial transactions at different levels of aggregation.

one includes four in the principal table and seven in the detailed table. The British financial sector includes only two sectors i.e. banking sector and other financial institutions, in both the national (principal) and the sector table. However in recent years the Bank of England began to present flow of funds of the financial institutions other than banks detailed by institutional group and on an annual basis only.

(7) Insurance companies in the new Egyptian system, in both the principal and the detailed table, are allocated a separate sector, while in the British accounts these companies are included among "other financial institutions" in the national flow of funds table, and are allocated a separate sector in the recent attempts by the Bank of England to present detailed information on the transactions of each components of the financial institutions other than banks.

From the above discussion, the basic differences between the old/new Egyptian flow of funds system and the British system, as far as sectoring the economy is concerned, are summarised below:

- (a) The Egyptian flow of funds accounts (old and new) include more economic sectors than the British system.
- (b) The Egyptian flow of funds accounts allocate a separate sector for the financial transactions of the Central Bank and another sector for the commercial banks' transactions. While the British system does not show any financial transactions for either the Bank of England or the commercial banks separately. The Bank of England transactions are included in the banking sector in the British flow of funds system.
- (c) The Egyptian flow of funds systems (old/new) include many more disaggregated financial institutions than the British system.

(d) The homogeneity concept in the sector's components has been observed in Egypt, but surprisingly, is neglected to a great extent, in the British national table and, to a lesser extent, in the sectoral table for the public sector and the recent attempt to segregate the major components of financial institutions other than banks.

The findings of this comparison revealed the following facts:

- (1) The United Kingdom, in which the financial transactions play a dominant role in the economic activity* provides little information of the sector's financial transactions and/or its major components within the framework of her flow of funds accounts. This is supported by the lack of information on the financial activity of the Bank of England and commercial banks, non-profit making institutions, unincorporated private businesses and professions, and a lack of identification in flow of funds accounts of the financial surplus/deficit of the individual components of the public sector. While in Egypt where financial activity** is definitely not as intensive as in the U.K., the fact that the flow of funds system identifies more sub-sectors means that more information on financial activities is provided than is the case with the British system. Despite this deficiency, however, financial transactions of the different parts of the British economic sectors are available on a monthly basis in "Financial Statistics" published by the CSO.
- (2) The utility of the flow of funds system in Egypt may be more valuable to government and financial analysts than the British one for two main reasons:

* It has been mentioned earlier (see Chapter 3) that the F.I.R. is usually used to assess the intensity of the financial activity in a country. In this context, an attempt was made by Goldsmith, (see reference 87, p.131), to measure the F.I.R. for sixteen countries in different stages of economic development. Goldsmith found that Great Britain has the highest F.I.R (1.72) of all countries being compared.

** The F.I.R. of Egypt is not so far available due to the lack of both the numerator and the denominator of this ratio. But if one considered the results achieved by Goldsmith in his attempt to measure the F.I.R. one may assume that the ratios of the F.I.R. of the developing economies considered in his table may be taken as an indication of the general level of this ratio in many developing economies in which the ratio did not exceed one half in any one case.

- (a) the availability of data on more disaggregated economic sectors
- (b) the homogeneity of the sector's components.

It may be stated that the Egyptian system of sectoring the economy for flow of funds purposes is not only suitable for a developing economy, but also provides valuable information for both financial analysts and the government.

(2) Forms of Presentation of National Flow of Funds Accounts:

The major differences between the national flow of funds accounts of Egypt and Britain can be summarised as follows:

(a) In Egypt the national flow of funds accounts are presented in two levels of aggregation:

- (i) the Principal Table which shows a high degree of aggregation
- (ii) the Detailed Table which as its name implies is highly disaggregated.

In Britain, the national flow of funds accounts is presented at one level of aggregation. The form of presentation of these accounts has been shown in the previous chapter*.

(b) The British flow of funds accounts do not clearly specify in the body of the accounts the intra sector flow as does the Egyptian system. As can be seen from Figure (6.1) and Table (6.6) the major significance of the

* see the forecast table of the British flow of funds accounts in a footnote in Chapter 5

Egyptian system is that it can not only identify the interflows between the two major economic sectors (the economic sectors and the financial sector), as does the U.K. system, but it can also identify the intra flows within these two important sectors of the economy. The intra/inter flows provide the government and the financial analysts with valuable data on:

- (i) the extent to which each sector depends on the others
- (ii) the role of the financial institutions in the financial processes of the economy
- (iii) the frequency that the various economic sectors resort to the financial intermediary or to the other economic sectors to finance their activities.

(c) In the British flow of funds accounts the practice is to off set all sources of funds against the corresponding uses, so that instead of having two columns for each sector there is only one. In the Egyptian detailed flow of funds accounts, sources and uses of funds are clearly distinguished for each sector. The significance of the difference between the two is that the British presentation has lost part of the information content, while the Egyptian presentation is valuable for those who are interested in the in/out flows of the sector for a variety of purposes. It would be of interest to financial analysts to observe the major sources of funds and the various uses to which they have been put. This would allow them to test their behavioural hypotheses.

(3) Order of the Financial Instruments in the Accounts:

The main differences between the British and the Egyptian flow of funds accounts is that the categories of financial instruments in the former

are arbitrary, this has been clearly stated by the Bank of England, (6, p.16) as follows:

"The order in which the categories are presented must to some extent be arbitrary too ..."

while in the Egyptian system the categories of financial instruments are presented on a liquidity basis.

It should be noted that liquidity does vary both from sector to sector and over time. It depends on the structure and movements of both interest rates and of financial markets. Nevertheless the presentation of the Egyptian flow of funds on a liquidity basis would be of economic and analytical significance for the identification of the major trends of the sectors in terms of the financial transactions which must be liquidated first under certain conditions in the capital market, interest rates, and of monetary and financial policy. This information might be useful in shaping future financial policy/decision and/or predicting the movements of financial instruments.

(4) Forms used by the Central Bank for Flow of Funds Accounts:

The Bank of England and the Central Bank of Egypt exercise considerable control over the banks in their countries. Each bank is required to provide information to the Central Bank for a variety of purposes which include flow of funds accounts.

The principal form used is based on a balance sheet layout (not identical to that used by the banks for their end of year accounts) and all banks are required to submit periodic returns. This return includes

more detailed information on the financial activity of the bank together with a supplementary return which classifies some of the balance sheet items in more sector detail.

In both countries, Britain and Egypt, the balance sheet and the supplementary returns are assigned a high degree of importance as a major source of information for flow of funds accounts. In Egypt, for example, the importance of the banks' returns to the Central Bank of Egypt has been mentioned earlier*. In Britain, Cowley, (58, p.34-37) mentioned that the information collected from banks and OFI's will remain central to the construction of financial accounts, including flow of funds accounts. Cowley explains why the returns from these bodies are particularly important. Three major reasons are given, most of which undoubtedly apply to Egypt as well. These reasons are:

- (1) The central position occupied by these financial institutions in channelling funds between economic sectors.
- (2) No direct contacts are made with the personal sector to obtain data on their financial activity.
- (3) The direct data collected from the industrial and commercial sector is not satisfactory for flow of funds purposes.

It would be useful, therefore, to compare the differences between the banks' returns in these two countries. The purpose is to assess which forms convey the more relevant information for flow of funds purposes.

* see section 6.5

Appendix 13 presents the two forms which a British bank is required to complete and submit to the Bank of England*.

The comparison between the British forms and the Egyptian forms** leads to the following major conclusions:

(1) The Egyptian forms collect information on the financial activity of the various economic sectors at two levels:

(a) according to the institutional sectors in the economy

(b) according to kind of major economic activity

while the British forms are mainly concerned with the financial activity of the institutional sectors.

(2) The Egyptian forms collect financial information from as many components of the economic sector as possible. See for example, Table (3) (in Appendix 11), where the Egyptian forms disaggregate the personal sector into its main components while the financial intermediaries sector is divided into eleven sub-sectors. The British forms do not go as far as the Egyptian forms. For example, in form Q1 (sector details) the banks supply information on persons, households, and individual trusts as one sector and miscellaneous financial institutions as another sector. No information is presented to cover the major components of these sectors.

* The author is most grateful to Mr H.J.Spicer of the Bank of England for supplying these forms.

** see Appendix 11

It may be concluded that the Egyptian statistical returns by banks will not only provide the authorities with a wide range of information on which to base their policy decisions, but will also gradually provide a base on which a flow of funds system, according to kind of major economic activity, may be possible.

6.8 Summary and Conclusion:

This chapter attempts to investigate the accounting framework of OECD countries, and Egypt compared with its British counterpart. The main purpose for the investigation was to identify the relevance of these accounting frameworks to a developing economy and the benefits to the users of these accounts.

It has been shown that the main deficiencies of the OECD accounting framework are:

- (a) the high degree of aggregation of divergent economic units, eg "other domestic sectors" column
- (b) lack of identification of intra flows within economic sectors.

This model may not be considered the most relevant either for developing economies or for the users of these accounts.

The accounting framework of flow of funds accounts of Egypt (old and new) together with the "key problem areas" which faced the compilers of these accounts in Egypt have been outlined.

The comparison between the Egyptian flow of funds system and its British counterpart revealed that the Egyptian system is characterised with five important factors. These are:

- (1) The disaggregation of the sectors, particularly of the financial and business sectors.
- (2) Observing the homogeneity concept in constructing sectors/sub-sectors.
- (3) The provision of detailed data for users in terms of sources and uses of funds.
- (4) Disseminating complete data on the financial activity of government (central and local) in terms of financial surplus/deficit and the transactions in the financial instruments.
- (5) Clarifying the intra flows within the economic sectors.

Most of these factors, if not all, are not applicable to the British system currently in operation.

These characteristics are not only of relevance for a developing economy but also useful for the users of these accounts.

It may be suggested therefore that if a flow of funds system is to be of value for:

- (a) achieving the objectives of flow of funds accounts
- (b) a developing economy

(c) the government and financial analysts

the following factors should be considered:

- (1) The identification of sources and uses of funds for each economic sector.
- (2) Showing the intra flows within the economic sectors.
- (3) Clarifying the role played by the individual components of the public sector, ie central government, local government and public corporations, in the financial transactions.
- (4) Identifying the financial transactions not only of the major financial institutions but also for its various components and incorporating the latter within the national framework of flow of funds accounts. The reason is to clarify the role played by each component in channelling funds from savings into investment sectors.
- (5) The presentation of the financial activity of the economy as a whole on the basis of not only institutional sectors but also according to kind of major economic activity. The latter flow of funds may be of interest in economic analysis as well as for government policy.

Finally, it may be stated that the discussion of the Egyptian experience in flow of funds accounts, which is lacking in the current literature, may hold advantages for other developing economies in terms of:

- (a) avoiding either all or part of the "key problem areas" that faced the Egyptian compiler

- (b) adopting one or more aspect of the Egyptian flow of funds system to suit their requirements and circumstances.

CHAPTER SEVEN

The Current Limitations of Flow of
Funds Accounting - with Special Reference
To Egypt and the U.K.

7.1 Introduction:

In the preceeding two chapters the uses of flow of funds accounts in economic analysis and for government policy were discussed. The present accounting models of the OECD countries and the comparison of the Egyptian and British accounts were also investigated.

The object of this chapter is to investigate the hypothesis postulated earlier in this work, ie the accounting information currently disseminated in flow of funds accounts, of both developed and developing economies with reference to Egypt and Britain, is constrained by certain limitations that could impair the uses designated to them by economists.

The investigation of this hypothesis demands not only the identification of the factors that restrict the usefulness of these accounts but also a critical appraisal of their current structure, as largely practised in both Egypt and Britain, as a major source of information for government policy and economic analysis. Some conceptual and technical problems involved in the construction of these accounts which may detract from their information value will also be investigated.

In fact there may be little value in a comprehensive structure of flow of funds accounts as descriptive and analytical instruments where

there are many deficiencies embodied in their structure. Detailed considerations concerning these limitations have not yet been investigated in depth in the current literature to the best of the author's knowledge. It will, accordingly, be useful to examine the deficiencies that could impair the value of flow of funds accounts.

It is hoped that the conclusion reached in this chapter may be considered in future documents, either nationally or internationally, in the field of flow of funds accounts in the context of developed and developing economies, particularly in Britain and Egypt.

7.2 Some Statistical and Technical Problems in Compiling Flow of Funds Accounts:

The conceptual and technical problems involved in the construction of flow of funds accounts are many and varied, and this fact, although not it alone, has impeded the popularity of these accounts in a great number of countries. The unpopularity is evident from the relatively small number of nations which prepare these statistics on a regular basis.

The statistical and technical problems confronting the compiler of these accounts are generally the same as those facing the compiler of national and sector balance sheets. Some of these problems have been discussed in some length in Chapter 3*. Other problems have been discussed in this chapter because of their direct pertinence to flow of funds accounts. These problems are:

- (1) The scope of assets and liabilities
- (2) The classification of assets
- (3) Net/Gross or sources and uses transactions

* see section 3.4

These problems have been the subject of argument among economists for many years*, because they relate directly to the structure of flow of funds and form the mainstay of any discussion or comparison of these accounts. Implications of these problems in flow of funds accounts still need to be debated and generally understood. Overcoming one or all of these problems could be considered one of the most positive steps in constructing sound flow of funds accounts, whereby most of the uses made of these accounts would be achieved. Each one of these problems will be investigated and analysed briefly as follows:

(1) The Scope of Assets and Liabilities:

It must be remembered that one of the objectives of flow of funds accounts is to demonstrate to policymakers and financial analysts the behaviour not only of transactors but also the various financial instruments. In this sense, the question facing the compiler is that of identifying the range of assets and liabilities to be included in flow of funds accounts. Although the compiler must attempt to make the accounts fully comprehensive in terms of coverage of all financial transactions occurring in the economy in order to maximise the utility of the accounts, this is not always possible due to certain types of data not being available. This fact forces the compiler to omit some transactions, e.g., trade credit in the national flow of funds of Britain, and the inability of the Israeli flow of funds tables to break down the financial transactions (101, p.64).

It has been argued that in the absence of data on financial transactions, it would be possible to derive them from changes in the sector's balance sheets, (101, p.63). This method, by definition, would conceal all financial

* see, for example, Tice (187), Bain (16), Goldsmith (88), and Mendelson (129).

flows which took place between balance sheet dates. This point will be discussed in detail later in this chapter*.

The idea, which received widespread support, to restrict the coverage of financial flows (assets and liabilities) mainly to those affecting capital and credit markets, (16, p.1062), may not be either relevant to the concept of flow of funds accounts or be generalised for all countries, particularly developing countries, for two main reasons:

(a) The exclusion of the financial transactions of individuals and organisations that take place outside the capital market. Examples are credit facilities between companies themselves and loans and advances that may take place between individuals themselves. The exclusion of these transactions would certainly have its effects on the concept of flow of funds, because in this case the accounts could not be taken as a true measure of the flow of funds between the various economic sectors. This will impair one of the objectives for which these accounts are designed.

(b) Because many developing economies may not have an effective capital

* see section 7.3, sub-section 5

market*, this restriction would imply that there will be no flow of funds accounts in these countries.

(2) Classification of Assets:

Classification of assets in flow of funds accounts may represent a problem to the compiler of these accounts. He can classify assets either on a liquidity basis or on an arbitrary basis. The liquidity basis has certain difficulties, such as the variation of liquidity both from sector to sector and over time. It depends on the level and movement of interest rates and on the conditions of the financial markets. Though the compiler must consider the relative importance of an asset as a financial instrument in the current transactions of the capital market, it can not be considered as a static criterion, because this importance may change over time. The classifications of assets and liabilities in flow of funds accounts should also be consistent with those of sector and national balance sheets.

* Many writers (e.g. 73, 177 and 75) have expressed their views that the existence of a capital market is subject to the effective combination of the following factors:

- (a) a sound system of accounting
- (b) availability of corporate reporting and disclosure of accurate and adequate information to reflect the circumstances and operations of the companies whose securities are traded
- (c) the existence of a wide variety of alternative financial instruments with different levels of risk
- (d) the presence of impartial and professional accounting bodies and agencies which oversee the accuracy and reliability of the information disseminated to the investing public
- (e) the existence of authorised, organised and effective distribution and trading agencies (eg broker, dealers and Stock Exchange)

These factors, which could be considered as essential elements of an active capital market, are not as yet, available in a great number of developing nations (75 (particularly chapter 14), 198, 70 and 124). For example, Mahon (124, p.35) comments that in developing nations:

"The credibility of financial statements has not been generally established ... The public simply not being conditioned either to expect or to demand reliable statements. Needless to say, market mechanism under which widely dispersed capital accumulation can be placed at the disposal of emerging industry are limited".

(3) Net/Gross or Sources and Uses Transactions:

Financial transactions of a sector can be recorded in flow of funds accounts by different methods of presentation. They can be presented as gross transactions showing the actual gross transactions that take place, as net transactions in one column, or as a sources and uses of funds.

The gross approach measures total flow of funds, showing all inflows and outflows between economic sectors without any offsetting either within or between sectors. This approach has been described in the current literature as "to whom from whom".

The net approach means that the purchases of a particular financial asset by an economic unit are netted against the sales of that asset by the same economic unit; that is, only the balance of the transaction will be accommodated in the flow of funds account. The same is true at the sector level. The net transaction can be presented in flow of funds accounts either in one column or in two columns as sources and uses of funds. These methods of presentation are illustrated in Table (7.1) below:

Table (7.1)

Alternative Methods of Presentation of Financial
Transactions in Flow of Funds Accounts

Alternative Presentations Type of Financial Transaction	Presentation of Gross Transactions (1) £m - +	Presentation of Net Transactions				
		Presentation (2)	Presentation (3)		Presentation (4)	
			Sources	Uses	Sources	Uses
Deposits	-100 +200	+100	-	+100	-	+100
Loans	-200 +50	-150	-150	-	-150	-
Securities	-200 -	-200	-200	-	-	-200
Life Funds	- +250	+250	-	+250	-	+250
Total	-500 +500	nil	-350	+350	-150	+150

Explanatory Notes:

Presentation (1) : Transactions presented in two columns showing the actual (total) sources of funds (-) and the total uses (+) of funds.

Presentation (2) : Financial transactions presented in one column on a net basis. This presentation is used in the United Kingdom.

Presentation (3) : Financial transactions presented in two columns as sources (-) and uses (+) of funds and on a net basis.

Presentation (4) : Financial transactions presented in two columns, sources (-) and uses (+). But all changes in liabilities are identified in the sources column, while changes in assets are allocated to the uses column. This method is similar to the OECD presentation and to some extent is the method employed by Egypt.

Source : Mason, "The Flow of Funds in Britain", Paul Elek, London, 1976, pp.18-19

Choosing between these alternative methods of presentation represents difficulties for the compiler. For example, the use of the net approach may obliterate many relevant transactions and consequently can not show all financial transactions. This would, in turn, hinder one of the main objectives of flow of funds accounts, ie the explanation of the financial behaviour of both transactions and transactors. Such explanation is important for capital market analysis. The gross presentation, on the other hand, is restricted by the availability of separate figures on purchases

and sales flows of the financial instruments to be included in flow of funds accounts. As the balance sheets of companies do not publish such information, it has to be collected in a special form in which new borrowing and repayment of old borrowing together with purchase and sales of, for example, bonds and corporate equity securities are separately distinguished.

The question of whether flow of funds data would be more useful to the users if they were gross or net is discussed below:

Most published transactions in flow of funds tables are strictly "net" flows. To illustrate, if during a year a company borrows £200 and repays £60 of its previously outstanding debt, according to the "net" concept one will find only the net £140 shown under borrowing - a source of funds. With the "gross" concept, however, one would find £200 under borrowing, a source of funds, and £60 under debt repayment, a use of funds. This latter method is, naturally, a much more complete description of the company's transactions than the former where only a net £140 is shown under borrowing. The limitations are firstly that the patterns of flows are important for models of financial behaviour and in these cases the "gross" basis is more useful than the "net" basis (168, p.14). Secondly, gross flow data could provide important information to decision makers. Also it would contribute even more to studies of certain financial aspects such as interest rates. In this context, Mendelson (129, pp.414-415) suggested that:

"... gross flows often supply information which may be of crucial importance. With new flows, action corresponding to some decision-making processes are offset by action corresponding to other decision-making processes. The basic economic processes that we seek to understand are masked. Furthermore, decision-making processes may also be masked by flows that are not at all the product of decision-making".

Furthermore (p.420):

"The complex of interest rates is determined by the flows within the various maturity sectors, flows that are hidden if netted".

Similarly, Mason (125, p.18) in her recent study, has mentioned the effect of "net" flows when she says:

"For any period as a whole a person can be a net borrower or a net lender, but not both. However, for shorter periods within the total, he may well change from one to the other, he may also successively buy and sell a particular financial instrument. In this case, the net figures mask the true extent of his dealings with the financial system".

It should be noted that this "net" flow is true in most developed* and developing economies**. The main reason behind the construction of flow of funds accounts of a "net" basis rather than a "gross" basis is probably the difficulty of finding data required for the gross basis (166, p.25). However, in certain transactions such as bank deposits the use of the net position of current balances with the banking system should not constitute a serious impediment to analysis.

From the above discussion it may be concluded that the "net" flow provides only partial information on the financial activity of the economic sectors. In Egypt, no attempt has been made to construct flow of funds accounts on a "gross" basis***. In Britain, an attempt has been made to construct the flow of funds accounts of 1962 on the basis of "gross" rather than "net", and the results suggest, (168, p.14) that: "... the value of total gross transactions is approximately twenty times greater than the value of total net transactions". This means that the flow of funds accounts presented on a net rather than a gross basis omit much of the financial activity of the various economic sectors, which may be of interest to either policymakers and/or financial analysts.

* In this context, the Bank of England, (20, p.89) states that: "In general, transactions are shown net, that is, loans and advances are shown net of repayments, issues of stock and shares less redemptions, sales of unit trust units less repurchases, deposits net of withdrawals, purchase of securities net of sales, and so on".

** see Table (7.1), note (4) for Egypt

*** this has been confirmed to the author by one of the academic staff of the Institute of National Planning in Cairo.

7.3 Critical Analysis of Flow of Funds Accounting - With Special Reference to Egypt and the U.K.

This section aims at identifying some factors currently in operation that could either restrict the construction of flow of funds accounts or detract from their benefits. To investigate the hypothesis mentioned in the introduction of this chapter, analysis and criticism of the present accounting structure of flow of funds accounts, in both developed and developing economies, as a source of information for government policy and economic analysis is needed. The United Kingdom and the Egyptian flow of funds systems will be mainly used to investigate the validity of the hypothesis.

The objectives of flow of funds accounts of either developed or developing economies could be constrained by one or all of the factors identified below:

(1) Lack of Balance Sheet Data:

Many economists expressed their views that without the knowledge of holdings of assets and liabilities of each economic sector it is not possible to explain either the financial transactions or the financial behaviour of the economic sector. It may be useful to underline the relationship between balance sheet and flow of funds analysis, in order to assess the extent to which the lack of balance sheet data may affect the uses made of flow of funds accounts. The relationship between balance sheet and flow of funds analysis may be summarised below:

(a) Balance sheets are considered an essential part of saving and investment analysis. As reported by Dorrance, (65, pp.205, 206) the need

for balance sheets in this context is based on the fact that:

"Borrowings and lendings are, however, more than financial flows. They are changes in the assets and liabilities of individual economic units ... if lending and borrowing are conscious decisions to alter balance sheet aggregates, it is reasonable to assume that they are partly determined by the existing structures of the balance sheets of the individual economic units making the decisions ..., if this be true, it follows that balance sheets criteria must be incorporated into our economic theory".

Furthermore:

"... the investment and saving entries in the income and product accounts may be related to the changes in the national balance sheets via the records of the borrowing and lending accounts. It follows that ... any decisions regarding the classification of entries in the lending and borrowing accounts should be consistent with the decisions that are, or will be, required in the compilation of balance sheet accounts".

The same writer has suggested elsewhere (62, p.169) that a comparison of asset and liability aggregates is required if a national explanation of financial transactions in the economy is desired.

(b) Because balance sheet variables both influence and are influenced by the financial decisions of the economic units, it can be assumed that the financial transactions taking place in the capital markets may be largely attributed to the size and types of the structural components of both assets and liabilities. If this is true, it follows that lending and borrowing decisions that are made by individual economic units are determined by the amount of wealth held by these units. Thus analysis of the development of the capital market requires the availability of stock variables of individual economic units.

(c) Long-run forecasts of financial flows either for the economy as a whole or for the individual sector have emphasised real financial relationships

(52, p.3). Obviously, these relationships can not be established in the absence of national and sector balance sheets.

(d) One of the main problems that impair the usefulness of econometric models is the absence of balance sheet data. Brainard and Tobin, (31, p.99) mention that:

"Most monetary economists agree that the financial system is a complex of interrelated markets for assets and debts. The prices and interest rates determined in these markets and the quantities to which they refer both influence and are influenced by the "real economy", the complex of markets for currently produced goods and services ...".

Furthermore:

"Failure to respect some elementary interrelationships - for example, those enforced by balance sheet identities - can result in inadvertent but serious errors of econometric inference and of policy. This is true equally of equilibrium relationships and of dynamic models of the behaviour of the system in disequilibrium".

(e) The study of the portfolio behaviour of a sector can not be fully understood from flow of funds accounts only. It must be supplemented by balance sheet data. In this sense, Bain, (16, p.1087) mentions:

"Before existing or new theories of portfolio behaviour can be tested adequately, consistent sector balance sheet and transactions data for a run of years must be available ...".

From the above discussion it may be concluded that if flow of funds accounts are to provide adequate explanation and analysis of the behaviour of financial instruments, economic sectors, as well as the development of the capital market, balance sheet data must be considered part of this analysis; otherwise their use for administrative or analytic purposes is impaired and possibly misleading. In other words, the availability of

sector or sub-sector balance sheets is a pre-requisite for effective and efficient analysis of the data disseminated in flow of funds accounts on the one hand, and for the construction of these accounts on the other.

It may be argued that the absence of balance sheet data of the economic sectors* does not represent a problem as long as this data of the financial intermediaries is available. In this context, it would be possible to use this balance sheet data to construct balance sheets of other economic units (at the sector level) using what might be termed the reverse entry method.

The essence of reverse entry, briefly, is to consider the assets of the financial intermediaries as the liabilities of the economic units; and vice versa the liabilities of financial intermediaries are the assets of economic units, excluding of course transactions that have taken place between the financial intermediaries themselves.

To illustrate let it be assumed that the balance sheet of the banking sector shows on the liability side £1000 as current deposits of the households sector. It is possible to assume that the same figure will appear in the assets of the households sector as a use of the financial sources of that sector. Similarly, if the same balance sheet of the banking sector shows £2000 as loans to the private business sector, it may be assumed that this figure represents use of the financial sources of the banking sector, and at the same time, is a financial source for the private business sector, and so on in respect of other financial transactions.

* particularly those countries where the statistics on their main sectors are not available

Reverse entry is a simple rational method by which it will be possible to identify various financial transactions carried out by the economic units.

Although the use of the reverse entry method has partially solved the problem of the lack of availability of statistical data, the problem of the absence or the unavailability of balance sheets of these economic units remains. Because the use of reverse entry would ultimately furnish the compiler with only those transactions that have taken place between the economic units and the financial sector, the other financial transactions carried out by the economic units with non-financial sectors will remain unknown. At this point the compiler faces certain problems in finding the missing data from other various sources; the reliability of these may be questionable.

The flow of funds accounts of not only Egypt and Britain but also of some of the OECD countries are usually presented without being accompanied by sector and national balance sheets. This method of presentation is mainly due to the lack of balance sheet data. Such lack is evident from the relatively small number of countries which prepare or publish balance sheets. For example, a survey has been carried out by the author of the number of OECD member countries producing balance sheets. It has been found that only nine* of the 25 countries produce sector balance sheets. It has also been found that these nine countries do not publish with their flow of funds accounts a balance sheet for each sector in the economy. They produce a balance sheet for the "non-financial corporations sector" but unfortunately this balance sheet has no equivalent in the flow of funds accounts.

* These nine countries are Germany, Denmark, U.S.A., France, Italy, U.K., Sweden, Japan and Finland. see reference (25)

In the United Kingdom, the Bank of England has undertaken to compile a complete set of national balance sheets and to integrate them with national income and flow of funds accounts (22, p.498). In December 1972 the Bank of England published a balance sheet for Deposit Banks only as the first step towards a complete set of national balance sheets. A year later the Bank constructed a balance sheet for the whole banking sector (18, p.461). In the June 1975 Bulletin of the Bank, further effort was made to produce a balance sheet for investment trust companies (19, pp.170-181). In the same year, Economic Trends published a study by Moyle and Cowley, (135, pp.95-100) titled "Private non-profit making bodies serving persons : balance sheets for 1969 and 1970".

Mention should be made, however, of the efforts made by Revell to construct national balance sheets for the U.K. covering the period 1957-1966. But as the Bank of England (22, p.498) states, estimates of these balance sheets are not consistent with flow of funds figures.

Recently, the Central Statistical Office undertook a ten-year programme of work aimed at producing national and sector balance sheets integrated within the national accounts. The CSO has so far produced preliminary estimates for the personal sector balance sheets for the period 1975 and 1976, (49, p.99).

Similarly, the Royal Commission on the Distribution of Income and Wealth published estimated values for the personal sector balance sheets for the period 1971-1973 (169, p.73).

In Egypt, efforts are in progress to construct balance sheets for the various economic sectors. Examples of the aggregated balance sheets produced so far have been mentioned in the previous chapter.

One may question if the balance sheets of Britain and Egypt are both usable for and in harmony with the present structure of flow of funds accounts and the economic analysts' needs. The Bank of England has not, as yet, produced a comprehensive set of balance sheets to cover all the sectors and sub-sectors of the economy, eg public sector as a whole or its major components (central government, local government and public corporations), personal sector, industrial and commercial sector and the external sector. These balance sheets are necessary for flow of funds analysis.

While the balance sheets so far developed by the Bank of England, ie deposit banks, banking sector and investment trust companies, though they are consistent with the flow of funds system, holdings of property or fixed assets are excluded. The real assets, even if they are small, may be important for econometric or financial models. Such information has been mentioned earlier. The absence of information on real assets, not only for those balance sheets already constructed by the Bank of England, but also for other economic sectors, may be considered one of the main failings that restrict the construction of reliable econometric models in Britain. Gaster, (80, p.873) mentions that:

"... it has not proved possible - in Britain at any rate - to produce reliable econometric models of the financial system, or, for that matter, reliable single equations permitting prediction of flows in one particular financial market. In the absence of such quantitative relationships (real and financial variables), most forecasters rely heavily on judgement or rules of thumb".

But classification of financial assets and liabilities in the Bank of England's balance sheets so far developed is the area that may be considered useful for the purpose of economic analysis.

The classification of financial assets and liabilities identified in the personal sector balance sheet by both the CSO and the Royal Commission is neither compatible with each other nor is consistent with the transactions in financial assets of the personal sector as identified in the National Income and Expenditure (The Blue Book) (50, p.93, Table 14.3). A consequence of this is that these personal sector balance sheets may not adequately serve the purpose of flow of funds analysis.

As far as the Egyptian balance sheets are concerned they are restricted, for the purposes of flow of funds accounts, by two major deficiencies; firstly they are not sufficiently detailed to serve the construction of the flow of funds system and secondly classifications of their financial assets and liabilities are not compatible with those in flow of funds accounts. A consequence of this is that if the government or financial analysts need to study the behaviour of certain financial instruments, the present classification of these balance sheets would not enable them to carry out the analysis required.

One may argue that the lack of detailed classifications of financial assets and liabilities in the balance sheets of the financial institutions does not represent a problem to the compiler so long as the banks submit a balance sheet return and a supplementary return which gives some of the balance sheet items in more sector detail. But one must remember that detailed information in the balance sheets of these financial institutions is required for:

- (a) providing a series of checks on the information supplied by the banks in their returns
- (b) finding missing data

- (c) enabling private researchers to carry out their own analysis and investigation
- (d) gathering information on the activities of the financial institutions, other than banks, particularly if they are not required to submit returns as detailed as those required from the banks.

From the above discussion it may be concluded that balance sheets of other economic sectors are still lacking, and even those which are available, particularly in Egypt, do not satisfy flow of funds analysis and construction. Moreover, the analysts must be aware of the valuation basis and the frequency with which the financial instruments in the balance sheets are revalued to ensure they are consistent with flow of funds figures.

Hence analysis of flow of funds accounts can be hindered not only by the lack of detail on financial assets/liabilities of some economic/financial sectors, but also by the lack of knowledge of the basis on which the financial instruments are valued or revalued in the sector/sub-sector balance sheet.

(2) Different Motives of the Sector's Components:

One of the most important defects in the current practice of flow of funds accounts, is the high degree of aggregation of different economic units in terms of investment practice, legal status, types of transactions and different behavioural motives towards financial stimuli.

Different motives of a sector's components in flow of funds accounts can be found in almost every country using flow of funds data as a

source of information for economic analysis and financial planning, whether it is a developed or a developing economy. Differences may exist in the extent of the different motives of the sector's components, but they are in degree and not in kind.

Examples of non-homogeneous motives in the sector's components in flow of funds accounts of OECD countries are illustrated in Table (6.1) in the previous chapter*. It can be seen, for example, that in the Netherlands financial transactions of persons and companies are not identified separately, rather they are presented under a global sector termed "other domestic sectors". The same is true for Italy. In Belgium private enterprises are consolidated with individuals to comprise one sector. In Canada the non-financial government enterprises and non-financial private companies are aggregated into one sector ie non-financial enterprises.

In the United Kingdom, examples of non-homogeneous motives in the sector's components in the present system of flow of funds accounts are:

(a) Other Financial Institutions Sector:

The flow of funds account of this sector is presented in the national flow of funds table including the following components, (20, p.87):

"insurance companies, superannuation funds, property unit trusts, building societies, investment trust companies, unit trusts, finance houses, savings banks investment accounts, special finance agencies (and certain other deposit-taking institutions such as the Crown Agents)".

The components of this sector have, by definition, diverse functions and consequently they may react differently to various economic situations.

* see Chapter 6, section 6.2

Having reacted differently, then, the degree of homogeneity in the motives and behaviour of those units comprising the OFI's does not exist. The different motives and behaviour of the sector's components will, then, detract from the value of the sector's flow of funds account, because a realistic explanation of the financial behaviour of that sector may not be obtained.

The diversity of the components of OFI's sector has been recognised by Cowley, (58, p.34-36) as "... the OFI sector constitutes a fairly disparate collection of institutions, ranging from insurance companies to finance houses". While the Bank of England, (20, p.87) states that:

"The institutions, although all financial intermediaries, have diverse functions and characteristics in other respects and to some extent are brought together under this general heading merely for simplicity of presentation".

It can be said here that this has simplified the presentation of the flow of funds table, but this is obtained at the cost of loss of information. However, it should be mentioned that in the last few years, the Bank of England has presented the flow of funds of this sector detailed by seven institutional groups out of the ten groups which constitute the OFI's sector. But this detailed presentation has not yet been incorporated within the framework of the British national table. This means that the interrelationship between these institutional groups of the OFI's and the other sectors of the economy can not be identified from the present structure of the British flow of funds accounts.

(b) Industrial and Commercial Companies:

The industrial and commercial companies sector in the British flow of funds system include the following major components:

- (1) the largest 300 companies operating in the U.K.
- (2) the small/medium industrial and commercial firms
- (3) private non profit making bodies serving industry. Examples (20, p.86) are:
 - (a) trade associations
 - (b) British National Export Council
 - (c) British Travel Association
 - (d) Industrial Training Boards.

The coverage of the industrial and commercial sector in the present flow of funds system is, by definition, not homogeneous in terms of the motives and behaviour of the major components of the sector. The largest 300 companies, for example, may dominate the financial behaviour of the whole sector and consequently, hide the motives and behaviour of the small/medium business firms in which the policymakers may be interested. Whether the private non-profit making bodies serving industry are motivated similarly to the financial stimuli as are the largest 300 companies may be debated.

(c) The Public Sector:

In studying the financial relationships in the economy, the British public corporations (or nationalised industries) may no longer be considered homogeneous with other parts of the public sector (central and local government). In many respects the nationalised industries respond

similarly to economic stimuli as does the private business sector. They will attempt, for example, to increase their activity in areas where profits are foreseen. In fact, some public corporations or the nationalised industries are assigned profit as a goal for their operations. Examples of these nationalised industries are BAA, BSC and British Transport Docks Boards. Others are asked to increase productivity and to effect savings in units costs. Still others are required to achieve a reasonable return on capital and to make modest surpluses, (154, p.79). For economic management purposes, and in order to explain the financial behaviour, it would be just as important to have a detailed knowledge of the nationalised industries' transactions in financial assets as of their transactions in real assets.

The current practice in the British flow of funds system does not take adequate notice of the different motives and behaviour between the nationalised industries and central/local government. The three components are included under one sector in the national table, but separate in the sectoral table as far as changes in financial transactions, but they are not separated in the financial surplus/deficit of the whole public sector.

It should be stated here that grouping these three components of different motives and behaviour may satisfy certain theoretical, economic and legal requirements, but for the purpose of flow of funds analysis it could obscure rather than identify activity in the capital and credit markets*.

(d) The Personal Sector:

The major components of the personal sector in the British flow of

* In the Income and Expenditure Accounts (The Blue Book), the CSO do not segregate the transactions in financial assets of the main components of the public sector. See reference (50, p.97, Table 14.7).

funds system include:

- (1) individuals
- (2) unincorporated private business
- (3) non-profit making institutions (universities, churches, clubs and societies, trade unions, and the like)
- (4) agricultural companies.

This sector, obviously, covers different groups with different motives and behaviour. Such differences may have their effect on the overall behaviour to which the flow of fund account is designed to explain.

In Egypt, aggregation of economic units with different motives and behaviour to comprise a sector for flow of funds purposes is currently in operation. The aggregation processes of different economic units in Egypt are similar in kind to those of the British system, but they are different in degree. Examples are illustrated below:

(1) The Business Sector in the Principal Table:

The business sector in the principal table of the Egyptian flow of funds system comprises the public enterprises, the private enterprises (organised and unorganised), cooperative societies and the Suez Canal Authority. This sector provides an example of the diverse nature of the different motives and behaviour of the sector's components.

(2) The Public Business Sector in the Detailed Table:

This sector covers two different types of public enterprise. These are:

- (a) public enterprises fully owned by the government
- (b) public enterprises partially owned by the government (51% and over of the equity)

Obviously motives and behaviour of companies in group (a) may not be the same as those in group (b). Though the government dominates the activity of companies in group (b), differences in motives and behaviour toward economic stimuli could exist.

It should be mentioned, however, that the grouping of financial intermediaries that have a similar function, and probably similar motives and behaviour, (eg commercial banks, industrial banks, Central Bank, insurance companies, etc ...) into a separate sector in the principal table and in the detailed table of the Egyptian flow of funds system is preferable to that of the British system, because the financial behaviour/ transactions of the financial sector's components of the Egyptian system can be better explained than those of the British system.

It should be clear from the above discussion that in constructing flow of funds accounts, none of the sector's components is expected to be absolutely similar in terms of motives and behaviour. Each economic unit within a sector has its own characteristics. Different motives and behaviour in the sector's components could not be completely avoided. The compiler of the accounts must achieve a balance between the desire to keep the number of sectors relatively small but understandable in terms of their informational content, and, at the same time to reduce the extent of differences of motives and behaviour of the components comprising a sector.

In an attempt to inquire into the direction in which progress could be made in flow of funds accounts, Wallich, (195, p.324) has addressed an inquiry to 25 specialists. The appropriate sectoring of relevant data ranked high among suggestions that were received from his correspondents. Presumably, this would include sufficient similarity in motives and behaviour of the economic units comprising a sector.

If the uses made of flow of funds accounts are to be achieved, the compiler should be biased towards ensuring that the sector's components are sufficiently similar in motives and behaviour. To illustrate, it has been argued by Dorrance, (63, p.118) that the reactions of the non-financial sector to changes in government financial policy comprise the main interest of financial analysts. If this is true it will raise the question of how the financial analysts will identify the individual reactions of the various major economic units of the non-financial sector. Particularly when one realises that the financial decisions of the largest companies are aggregated with that of both small companies and with private non-profit making bodies, whose individual reactions are likely to differ widely with respect to government financial policies. Likewise, how will the financial analysts measure the reaction of the government itself when its financial surplus/deficit is aggregated with that of nationalised industries. The difficulty may be compounded when it is realised that investment/borrowing/lending decisions of government are made usually with political and national economic policies in mind, while decisions of the public corporations, unless totally influenced by government, are made usually as reactions to economic or financial stimuli.

Indeed, many of the present sectors identified in the British flow of funds system, and to a lesser extent in the Egyptian system, do not

serve some of the purposes of flow of funds accounts. They reflect, as Dorrance (64, p.1521) described:

"... the inability of the statisticians to allocate many of the flows (eg changes in currency and bank deposits, government debt and other security holdings) to the separate sectors".

Nevertheless, the inability of statisticians can not alone be blamed, rather the authority's decision in the coverage of the sector must also be questioned. For example, the Bank of England decision to classify the Post Office, British Gas Corporation, British Steel Corporation, British Broadcasting Corporation and the New Town Corporations as a part of the public corporations sub-sector in flow of funds accounts may be questioned in terms of differences in their activities, motives and behaviour.

Finally, it may be concluded that classifying economic units of different motives and behaviour to comprise a sector account in the flow of funds system could detract from the value of the informational content of the sector account. The detailed flow of funds table in Egypt, however, has, to a great extent, reduced the problem of different motives of the sector's components. While this problem still exists in the flow of funds accounts of some of the OECD countries including Britain.

(3) Lack of Information Covering Financial Transactions According to Kind of Economic Activity:

The basic structure of flow of funds accounts of both Egypt and Britain is based on sectoring their economy into institutional sectors/sub-sectors. Each sector/sub-sector contains economic units sufficiently similar in terms of both their functions and balance sheets structure.

But if the financial analyst or even the government wants to study the financial transactions and behaviour of the national economy according to kind of economic activity or by industry, most of the data needed for this purpose falls short and can not be obtained from a full flow of funds presentation either in Egypt or in Britain.

The SNA of 1968 recommended the presentation of a main part of the various components of national income accounts according to kind of economic activity as shown in Table 5.2 in the SNA. This recommendation has also been considered by the recent U.N. report on national balance sheets.

The availability of flow of funds accounts based either on the classification scheme shown in Table 5.2 of the SNA or even on the criteria of major economic activity in a nation (Industry, Agriculture, Trade and Services) could be useful for economic analysis purposes. Firstly, to make certain the flow of funds system is in harmony with national income accounts and national balance sheets. Thus providing the analyst with sufficient information regarding the transactions of the economic activity (or industry) concerned in the three sub-systems of national accounts. Secondly by mapping out the financial transactions between the economic activities, it will draw the government's as well as the analysts' attention to the way in which, for example, Manufacturing or Agriculture and Hunting (or the national industrial sector as a whole) has reacted financially toward certain fiscal and monetary measures and trading conditions (inflation/deflation). This kind of information could be useful to the government in drawing up its policy regarding this sector. For example, the government might try to avoid certain policies which may impede the development of the agriculture sector in the economy, or might introduce a new policy which could help the development of that sector.

This might suggest that a flow of funds table according to kind of economic activity should be accompanied with flow of funds accounts based on the institutional sectors/sub-sectors.

But it should be remembered that the structure of flow of funds accounts according to kind of economic activity has practical difficulties and problems. These can be regarded as largely concerned with the analysis of the major activity of the economic unit in order to allocate it to the appropriate activity. Also, analysis of the sub-activities of the economic unit is essential, because in certain cases these sub-activities may in the future outweigh the principal activity of the economic unit.

In Egypt, some efforts are being made to collect data on financial transactions according to kind of major economic activity (Industry, Agriculture, Trade and Services) mainly through the banks' returns to the Central Bank. In Britain, the banks submit a variety of returns to the Bank of England, for various purposes, but those used for the flow of funds accounts are the quarterly "balance sheet" returns together with the more detailed supplementary returns*. Copies of these forms can be found in Appendix 13. As can be seen from these "balance sheet returns" the Bank of England does not collect, for the purposes of the flow of funds system, financial transactions according to kind of economic activity. Furthermore, in the Income and Expenditure Accounts (The Blue Book), the CSO do not publish any information covering transactions in financial assets by industry as is the case in the accounts of the stock of fixed capital and capital formation in stocks and work in progress. In the latter case information is disseminated both by sector and by industry.

* Bank of England

(4) Lack of Detailed Information of Major Types of Financial Instruments in the Sector Account of the British System:

The flow of funds system of Britain does not provide comprehensive information on the different types of financial instruments which were subject to financial transactions, particularly in the sector account. The current practice is to disseminate in the sector accounts the financial instruments on a global basis. It is possible to provide some examples from the current practice of flow of funds accounts in Britain (21, pp. 182-185):

(a) Overseas sector accounts : Examples of items disseminated on a global basis are:

- Miscellaneous private investment
- Other identified (but not identified in the table)

(b) Personal Sector : Examples of items presented in aggregate form:

- Bank deposits, notes and coin
- Building societies shares and deposits
- Other

(c) Industrial and commercial companies : Examples are:

- Trade investments, mergers, etc in the United Kingdom
- Long-term investment abroad (no detail is given to the types of these investments)

- Capital issues (including Euro-currency issues) : No information is given to the users on the composition of this item, whether it includes one or more of the following : ordinary shares, fixed interest, preferred shares
- Other items : Information is given in a footnote that these other items include "Net trade credit with public corporations, and hire purchase lending". No details has been given to the changes in each item
- Other overseas transactions (including the balance of payments balancing item) : No detail has been given to these other overseas transactions

(d) Banking sector : Examples are:

- Changes in domestic assets of:
 - public sector
 - industrial and commercial sector
 - OFI's
 - personal sector
- Changes in domestic deposits of:
 - public sector
 - industrial and commercial sector
 - OFI's
 - personal sector

The extent to which each component of the above identified sectors has contributed to the changes in domestic assets or deposits is not available from the sector account. Perhaps it is the lack of information in the sector account that made Roe, (168, p.4) criticise the Bank of

England's approach to flow of funds accounts when he wrote that:

"... the Bank of England's approach thus far seems to ignore one of the first principles governing the American flow of funds system, namely that 'To be of maximum usefulness, the record must be extensive in scope and encompass all major types of transactions in which financial factors influence and are influenced by other economic developments. The record also needs to be detailed to permit identification of the economic groups participating in each major type of economic activity and to permit varied combinations of these groups and activities for testing analytic hypotheses'...".

Furthermore:

"In addition, the British flow of funds accounts might be criticised for giving the impression of comprehensiveness while in a sense being only partial ... (This) can be attributed to the perfectionism of the Bank in regard to statistics ... This perfectionism ... is perfectly defensible but does have the effect of obscuring the extent of our lack of knowledge...".

In Egypt, the situation is quite similar where in the sector account of the new system, though it distinguishes between changes in financial assets and those of financial liabilities, the financial instruments are intended to be grouped on the basis of the common and major financial transactions.

(5) The Accounting Limitations of Flow of Funds Accounts : The "Movement of Funds" versus "Changes in Balances" Techniques:

One of the most important limitations of flow of funds accounts as a source of information is that the structure of these accounts is dependent, to a great extent, upon the changes in the values of balance sheet items of the various economic sectors ie the difference between the values of balance sheet items at the beginning and at the end of the period.

This method of constructing the flow of funds accounts obliterates by definition, all the financial transactions of a sector which have taken place between the beginning and end of the period to which it refers. This means that flow of funds accounts measure only changes in the balances of financial transactions and cannot measure the "gross movement of funds" within the whole period under investigation.

To illustrate this contradictory method of constructing the flow of funds accounts and its dangers for financial planning, the following examples will be given:

Example (1) : assume that the private sector has borrowed from the banking sector as follows:

- in January 1975 : £100,000
- in February 1975 : £200,000
- in July 1975 : £150,000
- in November 1975 : £50,000

and just before the end of the financial year the private sector re-paid all these loans to the banking sector. It is obvious that the above transactions will appear neither in the balance sheet of the private sector nor in the balance sheet of the banking sector. Consequently, these transactions have no place in the flow of funds tables.

Example (2) : assume that the business public sector has borrowed from the banking sector the following:

- in February 1974 : £50,000
- in March 1974 : £100,000
- in May 1974 repaid : £60,000

This means that the business public sector has received loans amounting to $\pounds 50,000 + \pounds 100,000 = \pounds 150,000$ of which $\pounds 60,000$ has been repaid. The net borrowing, then, from the banking sector is $\pounds 90,000$ ($\pounds 150,000 - \pounds 60,000$). In the balance sheet of the business public sector one would expect to find $\pounds 90,000$ as loans which is the balance of the loans account and not $\pounds 150,000$ which is the total borrowing obtained from the banking sector. As the essence of flow of funds accounts is to measure the quantity of funds that flow "within" a given time, the last figure ($\pounds 150,000$) must be the prior concern of the accounts.

It is possible to provide evidence to prove that flow of funds accounts disseminate minimum information on the financial transactions that have taken place in the economy.

The utilisation of resources by the commercial banks may take one of the following forms which are given here by way of illustration rather than as an exhaustive treatment:

- (1) Investment in securities eg government bonds, treasury bills and companies stocks and shares
- (2) Loans and bills discounted
- (3) The deposit of such funds with other banks whether at home or abroad.

Table (7.2) illustrates the amount of loans and discounted bills granted by the commercial banks in Egypt.

Table (7.2)
Classification of Loans and Discounts
Granted by the Commercial Banks in Egypt

£Emillion

End of December	Loans Secured By								Unsecured Loans	Total Loans	Bills Discounted	Total Loans and Discounts
	Cotton	Other Agric. Crops	Merchandise	Securities	Bills	Personal Guarantee	Cessions	Otherwise secured				
1965	78.4	12.6	15.4	9.7	2.1	84.5	4.0	14.1	270.2	491.0	4.2	495.2
1966	64.2	14.3	22.0	8.3	1.2	85.9	3.1	18.0	349.8	566.8	6.2	573.0
1967	50.0	21.5	30.3	6.9	1.7	95.6	3.7	13.4	424.1	647.2	5.0	652.2
1968	52.8	28.0	27.7	6.3	3.0	107.7	2.7	23.2	425.4	678.8	6.2	685.0
1969	77.0	31.5	32.5	4.7	3.9	100.8	2.2	16.7	466.8	736.1	9.2	745.3
1970	66.8	28.3	32.7	2.9	5.9	97.4	2.9	14.1	606.3	857.3	5.2	862.5
1971	62.3	31.3	34.6	2.6	6.9	88.6	3.2	11.1	685.6	926.2	5.9	932.1
1972	81.9	4.2	30.5	1.8	8.2	63.2	9.3	21.4	756.6	977.1	4.7	981.8
1973	55.9	3.2	39.5	1.4	8.6	91.5	6.4	21.4	757.0	984.9	9.9	994.8
1973 Aug	2.2	5.8	40.7	1.5	8.9	87.3	9.8	21.1	809.8	987.1	0.9	988.0
1973 Sep	2.6	5.0	39.7	1.4	9.5	87.7	8.4	20.7	823.7	998.7	0.9	999.6
1973 Oct	78.7	5.2	39.4	1.4	9.2	92.2	8.1	20.3	738.7	993.2	1.6	994.8
1973 Nov	97.2	3.4	40.4	1.4	8.8	93.1	7.6	21.1	650.9	923.9	11.6	935.5
1973 Dec	55.9	3.2	39.5	1.4	8.6	91.5	6.4	21.4	757.0	984.9	9.9	994.8
1974 Aug	1.5	5.8	53.8	1.2	13.8	115.9	7.8	33.1	775.5	1008.4	0.9	1009.3
1974 Sep	1.2	5.3	54.9	1.2	14.8	119.0	8.2	33.1	745.1	982.8	1.0	983.8
1974 Oct	62.5	5.0	56.7	1.2	14.5	116.8	8.3	32.5	789.7	1087.2	1.4	1088.6
1974 Nov	112.2	4.6	60.1	1.2	15.0	120.5	8.0	39.7	919.0	1280.3	1.6	1281.9
1974 Dec	78.5	3.3	61.9	1.2	14.8	119.2	8.0	42.6	1070.0	1399.5	3.2	1402.7

Source: National Bank of Egypt, Economic Bulletin Vol. XXVIII - No. 1, 1975,
 Arabic Reference

The example of the loans secured by cotton (see the above table) provides a good illustration. At one time the commercial banks provided the cotton merchants and cotton export companies with the bulk of their financial requirements. But with the establishment in 1964 of the Agricultural and Cooperative Credit Organization for the Cooperative Marketing of Cotton, the commercial banks' role became confined to financing the cotton trading companies against the security of cotton deposited with ginneries. It can be seen from the table that the volume of such loans is not stable within the year. It increases during the cotton season (mid-September to the end of March) then declines gradually reaching its lowest level in August. For the purpose of flow of funds accounts, the only figures that will be treated in the accounts are £E55.9m (balance of December 1973) and £E78.5m (balance of December 1974). Obviously, these two figures (or the difference between them) do not represent the "flow of loans" within the period. As can be seen the actual "flow" has varied within each year, i.e. from £E2.2m in August to £E97.2m in November, and from £E1.2m in September to £E112.2m in November 1973 and 1974 respectively.

The averages of the actual "flow" of loans in 1973 is £E47.32m, and in 1974 is £E51.18m. These averages which are different from the balances of December 1973 and 1974, should be the concern of flow of funds accounts, and have to be considered in drawing up the financial policy of commercial banks as well as the government's financial or monetary policy.

The following three tables provide further examples of the deficiency of flow of funds accounts in considering only the "balance sheets balances" as a basis for constructing the accounts.

Table (7.3)
Classification of Deposits in
The Egyptian Commercial Banks

End of	Current			Time			Savings (2)	Others (3)	Grand Total
	Private	Govt (1)	Total	Private	Govt (1)	Total			
1965	229.1	37.9	367.0	155.4	77.1	232.5	65.2	17.3	582.0
1966	262.0	32.4	294.4	155.4	45.3	200.7	65.7	14.5	575.3
1967	275.8	37.5	313.3	174.9	46.8	221.7	63.7	10.4	609.1
1968	302.1	38.4	340.5	197.0	45.9	242.9	66.7	10.9	661.0
1969	302.8	28.0	330.8	224.1	52.7	276.8	72.1	13.3	693.0
1970	313.4	40.3	353.7	246.4	54.9	301.3	83.7	16.8	755.5
1971	320.0	38.5	358.8	203.4	82.9	286.3	96.5	51.6	793.2
1972	398.2	41.2	439.4	211.5	81.1	292.6	113.4	51.6	897.0
1973	453.3	30.2	493.5	235.9	52.3	288.2	133.1	58.3	973.1
1973 Aug	449.9	38.1	488.0	232.3	78.1	310.4	125.9	52.0	976.3
1973 Sep	446.2	47.6	493.9	229.0	77.3	306.3	126.9	50.9	977.9
1973 Oct	434.0	44.0	478.0	239.2	56.1	295.3	128.8	52.8	953.9
1973 Nov	442.4	26.7	469.1	238.9	54.1	293.0	129.9	55.0	947.0
1973 Dec	463.3	30.2	493.5	235.9	52.3	288.2	133.1	58.3	973.1
1974 Aug	602.1	76.1	678.2	280.6	45.2	325.8	152.7	46.5	1203.2
1974 Sep	632.5	54.5	687.0	279.1	45.5	324.6	154.8	26.2	1192.6
1974 Oct	603.1	47.7	650.8	277.3	45.9	223.2	157.7	53.4	1185.1
1974 Nov	589.4	58.8	648.2	279.5	54.0	333.5	160.6	57.3	1199.7
1974 Dec	610.1	68.1	678.2	279.4	64.6	344.0	165.3	54.7	1242.2

(1) Includes semi-government accounts

(2) Mostly private

(3) Includes earmarked and foreign currency deposits

Source: National Bank of Egypt, Economic Bulletin, Vol. XXVII, No. 1, 1975, Arabic Reference

Table (7.4)
Aggregate Balance Sheet of the Commercial Banks in Egypt

End of	Assets						Liabilities					Total Assets and/or Liabilities	Contra Accounts	Reserve Ratio %	Liquidity Ratio
	Cash	Balances with C.B.E.	Investments	Loans and Discounts	Banks and Correspondents	Other Assets	Capital and Reserves	Banks and Correspondents	Deposits	Borrowing from C.B.E.	Other Liabilities				
1965	20.3	85.4	165.2	495.2	140.3	65.7	64.0	91.7	582.0	161.4	73.0	972.1	380.7	18.5	48.6
1966	22.4	74.7	145.9	573.0	107.5	53.5	69.1	88.2	575.3	182.0	62.4	977.0	404.4	21.5	41.6
1967	20.2	119.5	143.5	652.2	124.7	59.3	76.5	87.6	609.1	277.5	68.7	1119.4	408.7	25.8	46.9
1968	26.2	122.9	133.3	685.0	154.2	63.9	89.0	85.4	661.0	376.0	74.1	1185.5	388.2	23.9	48.7
1969	25.9	137.0	121.0	745.3	196.0	62.5	85.0	101.9	693.0	310.0	97.8	1287.7	595.3	26.6	51.5
1970	27.0	208.5	92.8	862.5	164.8	75.1	97.7	81.9	755.5	405.0	90.6	1430.7	651.6	37.3	50.8
1971	30.2	111.6	137.2	932.1	162.2	86.6	109.1	89.4	793.2	373.0	95.2	1459.9	735.6	15.8	41.0
1972	34.0	151.3	126.4	981.8	185.2	125.6	128.1	86.0	897.0	373.0	120.2	1604.3	1009.8	16.1	39.9
1973	39.7	220.0	116.9	994.8	297.3	148.4	112.6	132.9	973.1	383.0	206.4	1817.1	1633.4	20.8	50.1
1973 Aug	29.1	204.0	128.0	988.0	324.6	142.8	112.2	133.8	976.3	442.0	153.0	1817.3	1072.9	20.5	50.7
1973 Sep	32.7	187.1	128.4	999.7	311.0	143.9	113.0	120.9	977.9	440.0	151.0	1802.8	1102.5	20.5	49.0
1973 Oct	40.5	178.5	116.7	994.8	315.7	137.0	113.4	146.6	953.9	417.0	152.3	1783.2	1182.0	19.8	49.0
1973 Nov	39.9	181.9	117.6	935.5	263.8	145.3	112.5	162.6	947.0	309.0	152.9	1684.0	1560.8	20.5	46.0
1973 Dec	39.7	220.0	116.9	994.8	297.3	148.4	121.6	132.9	973.1	383.0	206.5	1817.1	1633.4	20.8	50.1
1974 Aug	34.3	272.3	117.1	1009.3	545.7	137.0	122.6	187.2	1203.2	343.0	259.7	2115.7	1953.8	20.6	58.8
1974 Sep	35.1	298.3	117.2	983.6	579.6	139.9	122.6	213.1	1192.6	357.0	268.2	2153.7	2028.1	20.3	61.7
1974 Oct	46.7	279.9	107.1	1088.6	643.8	153.6	120.7	289.2	1185.1	425.0	288.7	2319.7	1926.9	20.4	61.9
1974 Nov	45.3	311.9	77.6	1281.9	634.6	145.0	120.5	326.9	1199.7	526.0	323.2	2496.3	1999.9	20.8	60.5
1974 Dec	53.8	327.7	78.8	1412.7	686.7	137.5	171.4	418.5	1242.2	562.0	293.1	2687.2	2265.7	20.5	58.5

Source: National Bank of Egypt, Economic Bulletin, Vol. XXVIII, No. 1, Cairo, 1975. Arabic Reference

Table (7.5)
Banking Department Position in Egypt

£Em

Date	Assets							Liabilities						Total Assets and/ or Liabilities	Contra Accounts
	Treasury Bills	Securities	Advances to Commercial Banks	Other Adv & Debit Accounts	Clearing and other Accounts	Gold and Foreign Correspondents	Other Assets	Capital Reserves	Government Accounts	Commercial Banks	Clearing and other Accounts	Deposits and other Accounts	Other Liabilities		
1965 30th Dec	29.9	7.2	48.9	167.6	40.1	5.9	35.5	4.5	2.7	76.1	139.7	103.5	8.6	235.1	441.4
1970 31st Dec	8.3	11.3	11.0	409.7	34.8	17.0	31.2	6.0	1.6	193.8	183.1	132.5	6.3	523.3	695.6
1971 30th Dec	37.3	8.8	20.0	367.5	38.7	10.7	42.0	6.0	6.9	113.0	230.1	161.0	8.0	525.0	825.6
1972 28th Dec	34.9	20.8	23.0	365.6	35.4	14.1	45.0	6.0	4.4	137.6	227.6	152.9	10.8	539.3	969.7
1973 27th Dec	35.5	15.2	3.0	376.2	34.9	88.0	46.8	6.0	11.4	169.4	184.2	211.7	16.9	599.6	1109.1
1973 30th Aug	24.9	22.7	23.0	440.7	36.4	40.7	35.6	6.0	5.6	190.0	198.0	206.9	17.5	624.0	966.2
1973 27th Sep	15.9	22.7	23.0	455.8	38.0	35.3	42.2	6.0	3.6	201.3	198.1	209.3	14.6	632.9	948.9
1973 25th Oct	14.2	12.3	23.0	384.4	37.0	65.9	48.8	6.0	7.0	151.5	199.3	208.8	13.0	585.6	962.7
1973 29th Nov	32.4	15.2	3.0	327.5	35.5	123.5	52.8	6.0	6.4	165.2	196.2	211.2	14.9	599.9	1155.4
1973 27th Dec	35.5	15.2	3.0	376.2	24.9	88.0	46.8	6.0	11.4	169.4	184.2	211.7	16.9	599.6	1109.1
1974 29th Aug	62.3	21.4	3.0	365.0	88.4	76.7	51.0	6.0	2.8	242.9	162.6	236.1	17.4	667.8	1095.4
1974 26th Sep	38.3	21.4	3.0	297.4	69.2	145.7	60.0	6.0	4.2	203.3	164.6	237.6	19.3	635.0	1065.0
1974 31st Oct	7.0	25.3	-	450.7	70.3	92.9	51.4	6.0	3.1	226.0	171.0	248.3	43.2	679.6	1108.1
1974 28th Nov	24.9	25.3	-	483.8	64.1	67.3	58.4	6.0	3.2	214.7	197.7	278.3	23.9	723.8	1209.4
1974 26th Dec	22.8	25.3	-	560.7	63.7	47.3	83.7	6.0	4.4	249.7	195.8	320.6	27.0	863.5	1251.3

Source: National Bank of Egypt, Economic Bulletin, Vol. XXVII, No. 1, Cairo, 1975. Arabic Reference

From these tables the following conclusions can be reached:

(1) In Table (7.3) changes in the balances of the various kinds of deposits that will enter the flow of funds table are different from changes in the averages of the actual movement of these deposits, as can be seen from the following table:

Table (7.6)
Loss of Information Content in
Flow of Funds Accounts Based on "Balances"
Rather than "Averages"

	Balances		Changes (3)	Averages†		Changes (6)	Differences Between Two Methods (3-6)
	Dec 1973 (1)	Dec 1974 (2)		1973 (4)	1974 (5)		
<u>Current</u>							
Private	453.3	610.1	156.8	447.16	607.44	160.3	-3.5
Government	20.3	68.1	47.8	37.32	61.04	23.7	+24.1
<u>Time</u>							
Private	235.9	279.4	43.5	235.6	279.18	43.6	-0.1
Government	52.3	64.6	12.4	63.58	51.04	-12.5	+24.9
Savings	133.1	165.3	32.2	128.92	158.22	29.3	+2.9
Others	58.3	54.7	-3.6	53.8	47.64	-6.2	+2.6

† averages have been calculated only from the data available in Table (7.3)

From the above table it can be seen that the preparation and presentation of flow of funds accounts on the basis of "changes in balances" rather than "changes in averages", gives the appearance of unreal financial information*

* This is based on the belief that the average of the monthly balances of the transactions could be a fair representative figure for the movement and behaviour of both the transaction and the transactor.

related to deposits which amounted to £E54.5m at 1973/74. While the financial transactions relating to private deposits (current and time) are underestimated by £E3.6m, (the difference between changes in the flow of funds based on "balances" and that based on the "averages movement of funds").

(2) The same analysis could be carried out for both Table (7.4) and Table (7.5). For example, considering only the balances of advances to commercial banks in December 1973 and December 1974 in Table (7.4) as a way of measuring the flow of funds can not provide the policymaker with sufficient information for his decision making. Such a deficiency is evident by looking at the monthly data of 1973 and 1974.

The question which may arise here is : "Is this deficiency applicable to all flow of funds analysis in both the U.K. and Egypt?" The answer is quite obviously yes so long as the presentation of flow of funds is mainly dependent on "changes in balances"; but the existence of quarterly flow of funds accounts (in, for example, the U.K., but not in Egypt) might help to reduce the importance of this deficiency. Even so the U.K. example would be assisted by further illustration.

It is intended here to select some financial items as they appear in the quarterly flow of funds of the British sectors, as published by the Bank of England Quarterly Bulletin of December 1975 (23, pp.347, 350-351). These are illustrated in the following tables:

Table (7.7)

Income and Expenditure of the U.K. Economic Sectors in Flow of Funds Accounts

£ millions Seasonally adjusted								
	Income from employment and trading[a][b]	Transfer incomes etc.[b]	less Consumption[c]	less Current transfer payments	equals Saving	less Gross domestic capital formation[a][d]	less Capital transfers (net payments -)	equals Financial surplus/deficit[e]
Public sector								
1972 3rd qtr	+ 484	+5,565	- 2,968	-2,375	+ 706	-1,175	+22	- 447
4th "	+ 506	+5,843	- 3,098	-2,566	+ 685	-1,227	+14	- 528
1973 1st qtr	+ 533	+6,038	- 3,186	-2,582	+ 803	-1,424	-23	- 644
2nd "	+ 535	+6,103	- 3,265	-2,739	+ 634	-1,355	-11	- 732
3rd "	+ 543	+6,461	- 3,387	-2,829	+ 788	-1,472	+ 7	- 677
4th "	+ 584	+6,745	- 3,502	-3,085	+ 742	-1,517	+16	- 759
1974 1st qtr	+ 569	+6,756	- 3,747	-3,406	+ 172	-1,728	+11	-1,545
2nd "	+ 655	+7,532	- 3,909	-3,344	+ 934	-1,655	-34	- 755
3rd "	+ 662	+8,203	- 4,304	-3,948	+ 613	-1,843	-34	-1,264
4th "	+ 659	+8,755	- 4,681	-4,149	+ 584	-2,091	- 8	-1,515
1975 1st qtr	+ 716	+8,957	- 5,253	-4,297	+ 123	-2,385	+ 5	-2,257
2nd "	+ 641	+9,876	- 5,376	-4,596	+ 545	-2,259	-15	-1,729
Overseas sector[f]								
1972 3rd qtr					+ 90			+ 90
4th "					+ 10			+ 10
1973 1st qtr					+ 150		+38	+ 188
2nd "					+ 78		+19	+ 97
3rd "					+ 198		+ 1	+ 199
4th "					+ 409		+ 1	+ 410
1974 1st qtr					+ 849		-	+ 849
2nd "					+ 918		+29	+ 947
3rd "					+ 829		+40	+ 869
4th "					+1,072		+ 6	+1,078
1975 1st qtr					+ 316		-	+ 316
2nd "					+ 235		-	+ 235
Personal sector								
1972 3rd qtr	+ 9,485	+4,110	-10,085	-2,480	+1,030	- 694	-88	+ 248
4th "	+ 9,881	+4,417	-10,408	-2,597	+1,293	- 753	-84	+ 456
1973 1st qtr	+10,276	+4,606	-10,985	-2,820	+1,077	- 844	-93	+ 140
2nd "	+10,633	+4,892	-11,026	-2,933	+1,566	- 752	-68	+ 746
3rd "	+10,945	+4,943	-11,413	-2,974	+1,501	- 801	-84	+ 616
4th "	+11,307	+5,118	-11,717	-3,125	+1,583	- 776	-74	+ 733
1974 1st qtr	+11,602	+5,439	-12,058	-3,322	+1,661	- 754	-88	+ 819
2nd "	+12,331	+5,496	-12,566	-3,626	+1,635	- 754	-64	+ 817
3rd "	+13,489	+5,915	-13,233	-4,116	+2,055	- 710	-65	+1,280
4th "	+14,579	+5,990	-13,813	-4,576	+2,180	- 788	-61	+1,331
1975 1st qtr	+15,784	+6,057	-14,545	-4,896	+2,400	- 843	-92	+1,465
2nd "	+16,270	+6,684	-15,475	-5,081	+2,398	- 876	-50	+1,472
Company sector[g]								
1972 3rd qtr	+ 1,791	+1,540		-1,840	+1,491	-1,389	+66	+ 168
4th "	+ 1,944	+1,637		-1,890	+1,691	-1,548	+70	+ 213
1973 1st qtr	+ 2,109	+1,892		-2,184	+1,817	-1,968	+78	- 73
2nd "	+ 2,110	+2,094		-2,339	+1,865	-2,014	+60	- 89
3rd "	+ 2,205	+2,241		-2,376	+2,070	-2,406	+76	- 260
4th "	+ 2,290	+2,758		-2,698	+2,350	-2,670	+57	- 263
1974 1st qtr	+ 2,481	+2,952		-3,016	+2,417	-3,150	+77	- 656
2nd "	+ 2,440	+3,047		-3,273	+2,214	-3,526	+69	-1,243
3rd "	+ 2,443	+2,961		-3,229	+2,175	-3,354	+59	-1,120
4th "	+ 2,342	+3,035		-3,128	+2,249	-2,940	+63	- 628
1975 1st qtr	+ 2,662	+2,979		-3,018	+2,623	-2,574	+87	+ 136
2nd "	+ 2,288	+3,000		-3,245	+2,043	-2,515	+65	- 407

Source: Table (A) in Bank of England, Quarterly Bulletin, Vol.15, December 1975, p.347

Table (7.8)
Quarterly Flow of Funds Accounts of the U.K. Personal Sector

£ millions Seasonally adjusted	1972				1973				1974				1975			
	3rd qtr	4th qtr	1st qtr	2nd qtr	3rd qtr	4th qtr	1st qtr	2nd qtr	3rd qtr	4th qtr	1st qtr	2nd qtr	3rd qtr	4th qtr	1st qtr	2nd qtr
Saving	+1,030	+1,293	+1,077	+1,566	+1,501	+1,583	+1,661	+1,635	+2,055	+2,180	+2,400	+2,398				
Capital transfers (net)	- 88	- 84	- 93	- 68	- 84	- 74	- 88	- 64	- 65	- 61	- 92	- 50				
Capital expenditure	- 694	- 753	- 844	- 752	- 801	- 776	- 754	- 754	- 710	- 788	- 843	- 876				
Financial surplus +/deficit -	+ 248	+ 456	+ 140	+ 746	+ 616	+ 733	+ 819	+ 817	+ 1,280	+ 1,331	+ 1,465	+ 1,472				
Borrowing (-)	- 777	- 721	- 807	- 710	- 747	- 539	- 483	- 433	- 635	- 718	- 771	- 953				
For house purchase	- 222	- 675	- 490	- 252	- 316	+ 31	- 76	- 40	+ 123	- 31	+ 156	+ 142				
Bank borrowing[a]	- 58	- 50	- 88	- 38	- 25	- 32	+ 38	+ 12	+ 13	+ 3	- 15	- 47				
Hire purchase debt	- 55	- 32	- 83	- 100	- 27	- 61	+ 33	- 169	- 59	- 42	+ 122	- 65				
Other[b]	- 1,112	- 1,478	- 1,468	- 1,100	- 1,115	- 601	- 488	- 630	- 558	- 818	- 508	- 923				
Acquisition of financial assets (+)	+ 630	+ 673	+ 842	+ 720	+ 660	+ 735	+ 846	+ 695	+ 716	+ 858	+ 970	+ 1,050				
Life assurance and pension funds	+ 57	+ 47	+ 120	+ 222	+ 190	+ 239	+ 193	+ 287	+ 212	- 159	+ 507	+ 46				
Government stocks	- 400	- 369	- 511	- 339	- 666	- 672	- 576	- 383	- 213	- 92	- 754	- 383				
Company and overseas securities	+ 60	+ 64	+ 57	+ 47	+ 31	+ 15	- 1	- 2	+ 7	+ 8	+ 39	+ 34				
Unit trust units	+ 476	+ 542	+ 605	+ 904	+ 992	+ 1,115	+ 995	+ 781	+ 717	+ 834	+ 280	- 547				
Bank deposits, notes and coin	+ 465	+ 524	+ 480	+ 787	+ 536	+ 385	+ 238	+ 455	+ 633	+ 684	+ 1,060	+ 1,079				
Building society shares and deposits	+ 88	+ 88	+ 75	+ 63	+ 45	- 39	- 38	- 26	+ 12	+ 61	+ 91	+ 75				
National savings	- 45	+ 48	+ 62	+ 5	+ 137	+ 145	+ 404	+ 331	+ 44	- 51	+ 80	- 240				
Local authority debt	+ 79	+ 66	+ 67	- 18	+ 21	+ 13	- 52	- 15	- 21	+ 72	- 1	+ 175				
Other	+ 1,410	+ 1,683	+ 1,797	+ 2,391	+ 1,946	+ 1,936	+ 1,999	+ 2,123	+ 2,047	+ 2,215	+ 2,213	+ 1,389				
Identified financial transactions	+ 298	+ 205	+ 329	+ 1,291	+ 831	+ 1,335	+ 1,511	+ 1,493	+ 1,489	+ 1,397	+ 1,705	+ 366				
Unidentified	- 50	+ 251	- 189	- 545	- 215	- 602	- 602	- 676	- 209	- 66	- 240	+ 1,106				

[a] Other than for house purchase.

[b] Including accruals adjustments and trade credit received from public corporations.

Source: Table (D) in Bank of England, Quarterly Bulletin, Vol.15, December 1975, p.350

Table (7.9)
Quarterly Flow of Funds Accounts of the U.K. Industrial and Commercial Companies

£ millions	1972				1973				1974				1975		
	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd		
	qtr	qtr	qtr	qtr	qtr	qtr	qtr	qtr	qtr	qtr	qtr	qtr	qtr		
Seasonally adjusted															
Assets: increase +/decrease -															
Liabilities: increase -/decrease +															
Capital expenditure	+1,187	+1,376	+1,768	+1,777	+2,118	+2,375	+2,868	+3,252	+3,055	+2,638	+2,304	+2,196			
less Saving	-1,320	-1,543	-1,665	-1,702	-1,834	-2,072	-2,234	-2,027	-1,950	-2,009	-2,255	-1,699			
less Capital transfers (net)	-81	-85	-97	-79	-95	-76	-93	-85	-76	-80	-104	-82			
equals Financial surplus -/deficit +	-214	-252	+6	-4	+189	+227	+541	+1,140	+1,029	+549	-55	+415			
Trade investments, mergers, etc. in the United Kingdom	+186	+243	+215	+183	+298	+237	+231	+121	+97	+85	+92	+97			
Long-term investment abroad	+199	+248	+416	+493	+446	+808	+472	+2,7	+406	+733	+567	+699			
Total requiring financing (+)	+171	+239	+637	+672	+933	+1,272	+1,244	+1,498	+1,532	+1,367	+604	+1,211			
Capital issues (including euro-currency issues)	-214	-179	-111	-101	-29	-30	+7	-3	-13	+10	-5	-336	-352		
Overseas investment in UK companies	-148	-123	-200	-347	-217	-394	-755	-328	-442	-187	-263	-46			
Import credit and advance payments on exports	-94	-103	-59	-71	-69	-188	-59	-73	-63	-175	+2	-25			
Export credit and advance payments on imports	+44	+31	+123	+14	+38	+107	+78	+118	+20	+60	+9	-58			
Bank borrowing	-592	-816	-675	-617	-1,611	-1,767	-983	-1,295	-1,536	-597	-355	-414	+107		
Other borrowing[a]	+51	-50	-288	-187	-419	-345	-134	+58	+4	-218	-351	+262			
Bank deposits, notes and coin	+554	+744	+587	+277	+969	+833	+49	+262	+3	+124	+571	+454	+964		
Other liquid assets[b]	+14	+31	+9	+81	+20	-9	+2	+29	+106	-91	-82	-38			
Other items[c]	-24	+2	+97	+39	+48	-20	+5	-23	+57	+226	-118	+89			
Other overseas transactions (including the balance of payments balancing item)[d]	+57	+98	-20	-9f	+1	+134	-44	-303	-244	+86	+61	+563			
Unidentified domestic transactions[d]	+181	+126	-100	+331	+336	+407	+688	+60	+576	-357	-73	-1,662			
Total financing (-)	-171	-239	-637	-672	-933	-1,272	-1,244	-1,498	-1,532	-1,367	-604	-1,211			

[a] Including transactions in commercial bills by the Issue Department; and also accruals adjustments for interest on bank deposits and advances, local authority rates, purchase tax, VAT, car tax, and refunds of SET.

[b] Treasury bills, local authority debt, tax reserve certificates, tax deposit accounts, and deposits with other financial institutions.

[c] Net trade credit with public corporations, and hire-purchase lending.

[d] Most of the balancing item in the balance of payments accounts, especially when large, probably reflects unidentified transactions between companies and overseas. It is deducted from the total amount unidentified in the company accounts to leave a rough estimate of unidentified domestic transactions.

Source: Table (E) in Bank of England, Quarterly Bulletin, Vol.15, December 1975, p.350

Table (7.10)
Quarterly Flow of Funds Accounts of the U.K. Banking Sector

£ millions

Seasonally adjusted

Lending: increase +/decrease -

Deposits: increase -, decrease +

	1972		1973				1974				1975		
	3rd qtr	4th qtr	1st qtr	2nd qtr	3rd qtr	4th qtr	1st qtr	2nd qtr	3rd qtr	4th qtr	1st qtr	2nd qtr	3rd qtr
Lending													
Public sector	+ 98	+ 57	+ 491	+ 294	+ 516	+ 528	+ 213	- 548	+ 66	+ 970	+326	+1,085	+1,771
Industrial and commercial companies	+ 600	+ 827	+ 689	+ 619	+1,649	+1,863	+1,049	+1,268	+1,550	+ 571	+390	+ 411	- 114
Other financial institutions	+ 186	+ 226	+ 242	+ 117	+ 190	+ 288	+ 139	+ 169	+ 63	- 252	- 66	- 105	+ 285
Personal sector	+ 322	+ 775	+ 560	+ 347	+ 406	+ 24	+ 106	+ 75	- 98	+ 31	-166	- 102	- 253
Total domestic lending	+1,206	+1,885	+1,982	+1,377	+2,761	+2,703	+1,507	+ 964	+1,581	+1,320	+684	+1,289	+1,689
Deposits													
Public sector	+ 35	- 135	- 10	- 30	+ 62	- 122	- 8	+ 112	- 2	- 33	- 30	- 186	+ 176
Industrial and commercial companies	- 507	- 682	- 511	- 218	- 973	- 728	+ 87	- 199	+ 124	+ 251	-471	- 414	- 871
Other financial institutions	+ 4	- 275	- 275	- 222	- 325	- 194	+ 38	+ 98	- 464	- 543	+554	- 351	- 224
Personal sector	- 430	- 481	- 529	- 846	- 995	-1,011	- 957	- 719	- 589	- 708	-180	+ 587	- 372
Total domestic deposits	- 898	-1,573	-1,325	-1,316	-2,231	-2,055	- 840	- 708	- 931	-1,033	-127	- 364	-1,291
Net lending to overseas sector[a]	+ 25	- 107	- 340	- 324	- 161	- 643	- 166	- 262	+ 8	- 580	-328	- 889	- 10
Non-deposit liabilities (net)	- 333	- 205	- 317	+ 263	- 369	- 5	- 501	+ 6	- 658	+ 293	-229	- 36	- 388

[a] Claims on overseas sector net of overseas deposits. Including foreign currency borrowing to finance loans to UK public sector.

Source: Table (F) in Bank of England, Quarterly Bulletin, Vol.15, December 1975; p.351

Table (7.11)
Quarterly Flow of Funds Accounts of the U.K. Financial Institutions Other than Banks

£ millions

Seasonally adjusted

	1972		1973				1974				1975		
	3rd qtr	4th qtr	1st qtr	2nd qtr	3rd qtr	4th qtr	1st qtr	2nd qtr	3rd qtr	4th qtr	1st qtr	2nd qtr	3rd qtr
Increase in financial liabilities (-)													
Life assurance and pension funds	- 630	- 673	- 842	- 720	- 660	- 735	- 846	- 695	- 716	- 858	- 920	-1,050	
Building society shares and deposits	- 465	- 524	- 475	- 804	- 511	- 370	- 217	- 455	- 633	- 684	-1,060	-1,089	-1,043
Other deposits	- 102	- 63	- 167	+ 4	- 103	- 16	- 7	- 28	- 12	- 182	- 54	- 58	
Capital issues	- 78	- 32	- 46	- 4	- 4	- 7	- 6	- 8	- 18	- 61	- 55	- 179	- 43
Sales of unit trust units	- 60	- 64	- 57	- 47	- 31	- 15	+ 1	+ 2	- 7	- 8	- 30	- 34	- 18
Other borrowing[a]	- 185	- 226	- 241	- 116	- 189	- 288	- 138	- 268	- 381	+ 306	+ 252	+ 221	
	-1,520	-1,582	-1,828	-1,687	-1,498	-1,431	-1,213	-1,452	-1,767	-1,487	-1,867	-2,189	
Increase in financial assets (+)													
Short-term assets[b]	- 37	+ 319	+ 293	+ 432	+ 307	+ 243	+ 117	+ 208	+ 784	+1,026	- 845	+ 431	
Government stocks	+ 12	+ 98	+ 83	+ 281	+ 128	+ 211	+ 34	+ 392	+ 129	- 246	+1,145	+ 302	
Company and overseas securities:													
Ordinary shares	+ 474	+ 371	+ 139	+ 93	+ 92	+ 130	+ 3	+ 68	- 138	- 218	+ 324	+ 774	
Fixed-interest	+ 50	+ 83	+ 32	+ 10	+ 21	+ 33	- 3	+ 20	+ 5	- 27	+ 40	+ 26	
Loans for house purchase	+ 629	+ 557	+ 661	+ 532	+ 542	+ 385	+ 347	+ 275	+ 447	+ 541	+ 554	+ 673	
Long-term lending to local authorities	+ 54	+ 8	+ 17	+ 29	+ 54	- 3	+ 2	+ 50	+ 119	+ 173	+ 308	+ 388	
Hire-purchase claims	+ 26	+ 44	+ 75	+ 32	+ 36	+ 23	- 34	- 7	- 14	- 5	- 1	- 6	
Other lending	+ 40	+ 71	+ 65	+ 122	+ 166	+ 154	+ 55	+ 101	+ 188	+ 317	- 2	+ 48	
	+1,248	+1,551	+1,365	+1,531	+1,344	+1,176	+ 521	+1,107	+1,520	+1,561	+1,523	+2,636	
Net identified financial transactions	- 272	- 31	- 463	- 156	- 152	- 255	- 692	- 345	- 247	+ 74	- 344	+ 447	

[a] Includes bank borrowing and official lending to building societies.

[b] Bank deposits, tax reserve certificates, tax deposit accounts, Treasury bills, and local authority temporary debt.

Source: Table (G) in Bank of England, Quarterly Bulletin, Vol.15, December 1975, p.351

From the above tables the following analysis can be carried out:

(1) Table (7.7) shows that the saving of the public sector runs from £172m to £934m within 1974, while its deficit within the same year runs from £725m to £1545m. If the British flow of funds system was presented on an annual basis only, the balance of saving of the last quarter of 1974 (£584m) and the balance of the financial deficit at the same period (£1515m) would have been only the concern of flow of funds accounts. The annual flow of funds accounts will, then, ignore all the movements in these two items that have taken place within the year in question. Similar analysis can be carried out in respect of various financial items of different sectors in the same table. Examples are the volatility of overseas' saving in 1973 and in the third and fourth quarter of 1972, and personal sector's saving of 1974. Also, the variability of the financial surplus/deficit of the public sector in 1974 and the company sector in 1973 and 1974.

(2) Some financial transactions change from quarter to quarter in 1973/1974. The following financial transactions in particular should be observed:

- in Table (7.8) of the personal sector:

- . Bank borrowing
- . Companies and overseas securities
- . National savings
- . Local authority debit

- in Table (7.9) of the industrial and commercial companies:

- . Euro-currency issues
- . Bank borrowing
- . Other items
- . Other overseas transactions

- in Table (7.10) of the banking sector:
 - . Lending to public sector
 - . Lending to industrial and commercial companies
 - . Lending to personal sector
 - . Deposits of public sector
 - . Deposits of other financial institutions
 - . Net lending to overseas sector
 - . Non-deposit liabilities (net)

- in Table (7.11) of financial institutions other than banks:
 - . Other deposits
 - . Other borrowing
 - . Short-term assets
 - . Government stocks
 - . Ordinary shares
 - . Fixed interest securities
 - . Long-term lending to local authorities
 - . Hire purchase claims
 - . Other lending

From the above discussion, it may be suggested that the current presentation of flow of funds accounts could be more valuable if accompanied by similar accounts prepared on the basis of the average movement of financial transactions. The latter accounts may provide more realistic financial data, which could be used for making reliable and efficient short-term policy and long-term investment decisions. Otherwise it may not be useful to consider only the difference between the balance sheets at both the beginning and the end of the financial year, while ignoring all the monthly movements of the financial transactions.

(6) Obliteration of Intra-Sector Flows:

This suggests another limitation in the current practice of the flow of funds accounts, particularly the British system, as a source of information. This limitation arises from the fact that the British flow of funds accounts eliminate intra-sector flows, (20, pp.87-88). The accounts usually present the transactions involving borrowing and lending between the sectors of the economy. This means that the accounts will cover only those flows which leave or enter a sector. Because flows between members of the same sector, are omitted in the British system, it follows that the accounts will not include intra-sector transactions. Examples of these transactions are corporate securities held by corporations, mortgages and other liabilities of households held by households and intra bank claims. Such transactions may influence the flow of funds within the national economy. To provide an example of the magnitude of intra-sector flows, transactions among the British banks will be illustrated in the table below:

Table (7.12)

Intra/Inter Sector Flows Between the U.K. Banks in 1973

Amount outstanding end 1973	Deposit Banks	Overseas Banks	Merchant Banks	All Banks
	% of Deposits			
(1) Borrowing Deposits	100 (£25.127m)	100 (£54.994m)	100 (£16.682m)	100 (£96.813)
of which				
in sterling	91	16	57	43
in other currencies	9	84	43	57
from:				
U.K. banks	10	26	34	22
other U.K. residents	73	6	28	28
overseas residents	8	58	25	39
negotiable CDs	9	10	13	11
(2) Lending	106	102	108	104
of which				
notes and coin, etc	5	-	-	1
balance with U.K. banks	13	27	25	23
money at call	6	1	4	3
sterling bills	4	1	1	2
special deposits	4	-	2	2
negotiable sterling CDs	3	2	7	3
British government securities	6	1	-	2
loans to U.K. local authorities	1	2	5	2
Advances	62*	66	58	63
to U.K. residents	53*	11	31	25
to overseas residents	8*	55	27	38
other assets	2	2	6	3
Acceptances	-	2	5	2

Source: Table 4.2, p.99 in Sandra Mason, "The Flow of Funds in Britain :
An Introduction to Financial Markets", Paul Elek, London, 1976

* rounding errors

The figures included in the table show the importance of inter-bank transactions compared to the total activities of the U.K. banks. It shows, for example, that 34% of the borrowing deposits of merchant banks come from other U.K. banks, (deposit banks and overseas banks), while the overseas banks' dealings with other U.K. banks amounted to 26% of their borrowing deposits. The deposit banks received 10% of their deposits from other banks. The overall picture of all banks is shown in the last column of the table, where 22% of the borrowing deposits came from U.K. banks. How these deposits, held by U.K. banks, were used is illustrated in the lower part of the table. Taking all banks together, 23% of their holdings of deposits were directed as balances held by other banks. For each individual group of banks (deposit banks, overseas banks, merchant banks), the percentages were as follows: 13%, 27% and 25% respectively.

The above figures are evidence of the importance of the inter-bank transactions in the total activities of either the U.K. banks as a whole or for each individual group. This importance has clearly been stated by Mason, (125, p.121), when she writes:

"It is notable that inter-bank activity is as important, in terms of size of outstanding assets and liabilities, as many of the direct flows between banks and the non-financial groups".

Despite the significance of these intra-sector flows for the U.K. banks, which was expressed in the above quotation by Mason; in her attempt to illustrate schematically the financial system of the United Kingdom in 1973, she did not incorporate these intra-flows of banks and other financial institutions into her presentation. Her justification was to avoid the presentation of the accounts in a more complicated manner. Indeed, this was achieved in her model, but it was at the cost of obscuring the

users' knowledge of all intra flows within the U.K. financial system. This fact was clearly acknowledged by her when she considered that her schematic model does not show all the flows within the financial system of the United Kingdom, (125, p.153).

It should be clear that the obliteration of intra-sector flows is not only restricted to the banking sector and OFI's in the U.K. flow of funds accounts, rather it also applies to the other U.K. non-financial sectors. Although the Bank of England did not specify this clearly, it was reported by Mason, (125, p.153):

"... in the area of persons and companies ... there is little firm information about the extent of the transactions involved. The volume of flows like private lending between persons (and by) persons to unincorporated business, or trade credit between companies can not at present be estimated, though it is believed to be quite substantial. There are also some complex flows within the government group, relating to the financing of local authorities and nationalised industries".

One may assume that intra flows between the members of the same group in the non-financial sector are also omitted.

The British flow of funds system is thus incapable of providing adequate information of the total flows within the national economy. Such information which may be needed by the monetary and financial authorities to identify, for example, the growth of these types of flows and the frequency of circulation of the different types of flows within and between the economic sectors.

It has been argued by Hicks, (103, pp.163-164) that if flow of funds accounts are to provide valuable data for:

"... analyzing the consequences of changes in the supply of, or preferences for, money and other types of financial assets ... The accounts of sectors ... should include intra sector financial transactions ... Without their inclusion, the accounts would not be addressed to the question of why the sectors hold the assets they do".

The above quotation implies that the lack of information covering intra sector transactions could hinder one of the main uses of flow of funds accounts, ie the explanation of the financial behaviour of a sector.

In Egypt, this problem seems to be solved through the five tables discussed in the previous chapter and is illustrated in the diagram shown in section 6.4.

(7) Inconsistency in Sectoring the Economy Between Flow of Funds Accounts, National Income Accounts, and Balance Sheet Accounts in some Countries:

The question of consistency of flow of funds accounts, national income accounts and national balance sheet accounts has been debated by economists and seems to be universally accepted.

Sectoring an economy is an important aspect of this consistency. In other words, in each one of these accounts the sector and sub-sector ought to be, to a great extent, similar so that the behaviour of the major components of the sector will be revealed, and the structural changes taking place in the sector, which are reflected in its accounts, can be understood.

Comparing and following up the activity of the same sector in the three sets of accounts is desirable, so that the data disseminated in these accounts can be used to show the impact of government policy, for example,

on the functioning of a sector or its sub-sector in view of production/consumption, saving/dissaving and how they are being financed and the financial instruments used in each case.

A consistent system of sectoring an economy is required for all components of national economic statistics. Not only would consistency of sectors in these statistics facilitate economic analysis, but the data derived from them would contribute to the understanding of the financial behaviour of the sector concerned.

In Egypt, the institutional sectors in her flow of funds system are lacking much of the consistency either with the institutional sectors of her national income accounts or with those identified for national balance sheet purposes. To illustrate, Table (6.8) in Chapter 6 shows in the Principal Table in the new flow of funds system, some economic sectors are incompatible with those in national income accounts and national balance sheets. Examples are, the business sector, the public services sector and the sub-sectors of the financial sector. While the detailed table shows the same incompatibility in respect of the sub-sectors coded 1.3 to 1.6 as illustrated in the table. The same is true as far as the sub-sectors of the financial sector are concerned with the exception of the sub-sector of the Central Bank.

This inconsistency of sectors and sub-sectors in the three sets of accounts (national income accounts, national balance sheets and flow of funds accounts) in Egypt can not be used without adjustment to provide information for economic analysis and for explaining the financial behaviour of a sector or sub-sector.

In the United Kingdom the scheme of sector classification is generally

compatible with that of the SNA and national balance sheets.

Table (6.1) in Chapter 6 provides further examples of the degree of incompatibility of the institutional sectors in flow of funds accounts of the OECD countries with the institutional sectors identified in the SNA.

It would appear to follow that due to the importance of the relationship between balance sheet and flow of funds analysis*; consistency between their sectors and sub-sectors must at least be ensured. Otherwise the explanation of the financial transactions that take place in the latter accounts may not be achieved.

7.4 Summary and Conclusion:

In this chapter some of the conceptual and technical problems in compiling flow of funds accounts and the identification of the major factors that restrict the usefulness of these accounts, with reference to the U.K. and Egyptian systems, were discussed.

Among the most serious problems facing the compiler of flow of funds accounts, three have been outlined together with their possible effect on the informational content of the accounts. These problems are: the scope of assets and liabilities, the classification of assets, and the choice between the alternative methods of net/gross or sources and uses of funds in the presentation of these accounts. Unless the compiler handles these problems with care in order to maximise the utility of these accounts, much of the uses to be made of flow of funds accounts may not be attained.

* see section 7.3 in this chapter

The analysis carried out in this chapter of the U.K. and the Egyptian flow of funds systems revealed that part of the objectives which had emerged from the construction of these accounts are constrained by some factors currently in operation in the systems in both countries. These factors are; lack of balance sheet data, the incorporation of economic units with different motives and behaviour to comprise a sector, lack of information covering financial transactions according to kind of economic activity together with the lack of detailed information of the major types of financial instruments, (particularly in the sector account), obliteration of intra sector flows particularly in the U.K., inconsistency in sectoring the economy between flow of funds accounts, national income accounts and national balance sheets, especially in Egypt. To this may be added the accounting limitations involved in measuring the flow of funds on the basis of "changes in balances" of the balance sheet data for both the beginning and end of the financial year for which the flow of funds is constructed.

The importance of balance sheet data for flow of funds analysis has been discussed. The lack of the former may, therefore, constrain the value of the latter. Grouping economic units of different motives and behaviour towards financial/economic stimuli into one sector in flow of funds accounts, as currently practiced in both Egypt and the U.K., rank high among these impediments.

Also, the "changes in balances" basis ignores all the "movement of funds" of both the financial transactions and transactors within the financial year. It has been seen, by reference to the Egyptian and the U.K. statistics that reliance upon "changes in balances" can not display

the whole story of the financial behaviour of the sector, which comprise one of the main objectives of the flow of funds system. To provide more realistic data on the financial behaviour of the sector, the flow of funds accounts must trace the movement of the financial transactions which finally lead to the "balance". In some cases the actual movements could be relatively unimportant, in others they may prove to be unusual trends which change completely the conclusions one would draw from the final balance viewed in isolation. This means that the financial data generated from the actual average movement of funds could be as important as the information derived from the balance sheets' "balances".

Ignoring intra sector transactions, particularly in the U.K. system, in flow of funds accounts may not help to provide the information needed by monetary and financial authorities on the actual flows in the economy. The importance of these intra sector flows has been shown by reference to the transactions of the U.K. banks.

The value of this chapter for both Egypt and the U.K. flow of funds systems and to the flow of funds approach to national accounting may be stated below:

(1) Identification of the limitations that restrict the value of flow of funds accounts of both Egypt and the U.K., together with the criticism made of their current structure and presentation, may stimulate the statistical authorities in both countries to re-consider their flow of funds systems to avoid some or all of the identified factors which deter from the value of their accounts as a source of information for government policy and economic analysis.

(2) The examination of the limitations involved in the current practice of flow of funds accounts of a developing (Egypt), and a developed economy (U.K.) may contribute to the further development of an optimum accounting structure complying with it.

CHAPTER EIGHT

The Public Enterprises Sector in Egypt - Problems of Control and Information Gathering

8.1 Introduction:

In the preceding chapters the uses and deficiencies of some branches of national economic statistics for government policy and economic analysis were discussed. The experience of Egypt, compared with the U.K., in the field of flow of funds accounts was also investigated.

The main object of this and the following chapter is to investigate in detail the deficiencies of a single important area comprising a basic input for the national accounting statistics. The emphasis will be placed on the accounts of the public business sector in Egypt for two main reasons:

- (a) The public business sector, at present, is playing a very crucial role in the national economy in terms of capital formation, market dominance, exports and imports, employment and industrial production.
- (b) The recent publication of a complete set of accounts for the public business enterprises as a whole.

The object of this investigation is to identify the factors that restrict the usefulness of these accounts as a main source of information for government function and in assessing the performances of these public undertakings.

The information flow conveyed to the sponsoring ministers on the activity of these public enterprises is constrained by two important factors:

- (a) deficiencies in their final accounts and balance sheets
- (b) the problems created for the public enterprises by the needs of the control and data collection bodies.

In this chapter the problems of control and the information required from the public enterprises will be discussed. The main object is to investigate the possible effect of these problems on the information flow to the sponsoring ministries in Egypt.

8.2 The Scope of the Public Business Sector in Developed and Developing Economies, with Special Reference to Egypt:

The question of whether there should be government intervention in economic activities has practically ceased to be a controversial subject. The countries that currently show a commitment to public enterprise now include those who in the past were the greatest supporters of free enterprise. This subtle change is apparent in both developed and developing economies. In Britain, for example, in 1967, the National Coal Board, the Post Office, and British Railways were the three largest employers in the world outside the U.S.A., (159, p.16). In France, before 1974, public employees accounted for 90% of the total labour force employed in energy and 65% of those employed in transport and communications, and the public enterprises participation in the production sector amounted to an average of 33.9%, (66, p.4). In Italy power sources, communications, railways, air services, and medium and long term credit are mainly in public hands, and about 30% of gross national investment is dedicated to the public sector, (188, pp.46-47).

But while public enterprises in developed western countries are mainly concerned with energy, communications and transport, the expected role in some developing countries is quite different. In Egypt, for example, public enterprises contribute about 80% of industrial production as against 2% in Germany and France or 6% in Italy. This marks a clear difference between the role of public enterprises in industrialised western countries and in some of the developing nations where public enterprise can represent a rapidly growing sector and a leading factor in the industrial economy.

It has become an economic axiom that if a developing economy wants to lay down solid foundations of economic growth upon which the structure of a dynamic and a diversified economy can be built and if it wishes to proceed with its economic development at a rapid pace in order to attain Rostows vaunted "take off" point it is usually assumed to have no other alternative but to assign a very important role to public enterprise in its overall development.

In Egypt the scope of the public enterprises* has been steadily increasing during the last two decades. Two important stages of development can be distinguished after the revolution in 1952:

Stage I : (1956-1960): beginning of nationalisation

Stage II : (1960-1976): large scale nationalisation, planned economy and public organisations.

Within each one of these stages government involvement in the economic development was larger than ever. As a result, a large government sector

* The term "public enterprise" is used in Egypt to mean state ownership in the operation of industrial, financial and commercial undertakings. The term public enterprise or public companies will be used interchangeably in this study.

was constructed, which includes all banking and insurance, all trade with the foreign sector and the major industrial activities. On this basis it was then possible to attempt a successful execution of the first National Plan of Egypt which was set up in 1960.

The public enterprises sector in Egypt now includes a variety of economic activity, such as industry, banking, irrigation, railways, road transport, air transport, shipping, external trade and other public utilities which are completely owned by the state. Although the state now owns only 5% of agricultural land, this does not mean that the agriculture sector is privately controlled. For inputs (seeds, machinery, credit facilities etc) are provided and the output is controlled through public enterprises, so public enterprises are performing a range of various functions in the field of industry, agriculture, finance and commerce.

The organisational structure of the second stage of development is shaped by the Public Organisation and its affiliated units. Thus public enterprises were grouped according to type of activity or industry. Each group was put under the control of one public organisation and each Minister was responsible, through the public organisations, for all the companies in his appointed sector.

Accordingly in 1961 all the enterprises in the public business sector were grouped, and those engaged in the same or similar kind of activity were put under the supervision of one specialised public organisation. There were 46 distributed unequally between 12 Ministries. Later in 1970 their number increased to 49 public organisations and they controlled 404 enterprises, and were supervised by 16 Ministries. To give an example of

their coverage, the following table lists the public organisations belonging to the various Ministries, together with their affiliated units and their capital.

Table (8.1).
Present Grouping of Public Organisations and
their Affiliated Units Under Ministries in Egypt

£E	Number of Companies	Capital
<u>(A) Ministry of Industry:</u>		
Public Egyptian Organisation for:		
(1) Food Industries	26	63,600,395
(2) Spinning and Weaving	30	56,189,970
(3) Chemical Industries	31	53,476,819
(4) Electric and Electronic Industries	8	13,033,393
(5) Engineering Industries	14	20,645,460
(6) Building Materials and Refractories	12	12,935,477
(7) Metal Industries	9	38,133,340
Total	130	245,079,342
<u>(B) Ministry of Electricity:</u>		
Public Egyptian Organisation for:		
(8) Electricity	3	200,000
(9) Electrification of rural areas	n.a.	n.a.
Total	3	200,000
<u>(C) Ministry for Irrigation:</u>		
Public Egyptian Organisation for:		
(10) Irrigation and drainage projects	7	n.a.
Total	7	n.a.
<u>(D) Ministry of Tourism:</u>		
Public Egyptian Organisation for:		
(11) Tourism and Hotels	6	6,579,500
	6	6,579,500

(continued)

£E		Number of Companies	Capital
<u>(E) Ministry of Civil Aviation:</u>			
Public Egyptian Organisation for:			
(12) Egypt Airlines		n.a.	n.a.
Total		n.a.	n.a.
<u>(F) Ministry of Health:</u>			
Public Egyptian Organisation for:			
(13) Drugs, chemicals and medical appliances		12	12,624,321
Total		12	12,624,321
<u>(G) Ministry of Culture:</u>			
(14) Cinematography		n.a.	n.a.
(15) Publishing		1	347,204
(16) Broadcasting		1	275,000
(17) Television		1	n.a.
Total		3	622,204
<u>(H) Ministries of Finance and Foreign Trade:</u>			
(18) Central Bank of Egypt and commercial and specialised banks		9	19,700,000
Public Egyptian Organisation for:			
(19) Foreign Trade		10	13,005,240
(20) Insurance		4	2,575,000
(21) Cotton		12	12,260,532
(22) Exhibitions and international markets		n.a.	n.a.
Total		35	47,540,772
<u>(J) Ministry of Military Production:</u>			
Public Egyptian Organisation for:			
(23) Military factories and aircraft industries		11	34,813,031
Total		11	34,813,031
<u>(K) Ministry of War:</u>			
Public Egyptian Organisation for:			
(24) The armed forces		n.a.	n.a.
Total		n.a.	n.a.

EE

	Number of Companies	Capital
<u>(L) Ministry of Transportation and Communication:</u>		
Public Egyptian Organisation for:		
(25) Overland passenger transport	4	3,058,186
(26) Inland freight transport	5	3,701,128
(27) Roads and Bridges	5	3,482,244
(28) Maritime transport	7	12,829,904
(29) River transport	4	4,113,053
(30) Suez Canal Authority	9	5,620,973
Total	34	32,805,488
<u>(M) Ministry of Petroleum and Mineral Wealth:</u>		
Public Egyptian Organisation for:		
(31) Petroleum	10	75,691,214
(32) Mines	19	n.a.
Total	29	75,691,214
<u>(N) Ministry of Supply and Domestic Trade:</u>		
Public Egyptian Organisation for:		
(33) Rice Mills	10	400,000
(34) Flour mills, silos and bakeries	10	2,733,761
(35) Consumption goods	10	6,401,500
(36) Foodstuffs	9	4,887,234
(37) Engineering articles, metals and chemicals	4	1,120,017
(38) Aquatic resources	5	3,772,154
Total	48	19,314,666
<u>(P) Ministry of Housing and Construction:</u>		
Public Egyptian Organisation for:		
(39) Contracting of civil construction	17	8,158,395
(40) Housing and Development	10	6,527,085
(41) Building and Housing	18	6,249,317
Total	45	20,934,795

(continued)

£E

	Number of Companies	Capital
<u>(Q) Ministry of Agriculture and Agrarian Reform:</u>		
Public Egyptian Organisation for:		
(42) Agricultural credit and co-operation	17	5,381,874
General Egyptian co-operative organisation for		
(43) Agriculture	11	n.a.
(44) Poultry	n.a.	n.a.
(45) Meat	n.a.	n.a.
(46) Public Authority for agricultural reform	2	14,424
Total	30	5,396,298
<u>(R) Ministry of Land Reclamation:</u>		
Public Egyptian Organisation for:		
(47) Development of reclaimed lands	5	n.a.
(48) Land reclamation	6	7,755,000
(49) Desert reclamation	n.a.	n.a.
Total	11	7,755,000
Grand Total	404	509,356,631

- Sources: 1. Patrick O'Brien, "The revolution in Egypt's economic system; from private enterprise to socialism, 1952-1965". London, Oxford University Press, 1966.
2. Central Agency for Public Mobilization and Statistics, "Directory of Economic Activity of Public Organizations", 1970.
3. Al-Ahram: Newspaper, 21st June 1974, 20th and 23rd July, 1974, 5th October, 1974, Cairo.

It can be seen from the table that there is considerable diversity in the economic activities of the public organisations. The amount of capital invested in these public organisations and their affiliated units was in 1970 at least £E509,356,631. In December 1975, the Minister of Industry suggested an increase in the capital of some industrial enterprises (16 in number) by £E50m within the next five years (3, p.1). Each public organisation, however, has its own capital, consisting of equity shares in its affiliated companies plus money allocated to it by the government. From these funds it assists its companies to realise their objectives by granting loans or acting as guarantors. In most cases they act as holding companies for their affiliated units, but sometimes they are directly engaged in the production process, as in the case of the Public Organization for Poultry which in fact has no affiliated units. The Public Organization for Petroleum is engaged in the oil industry sometimes directly as a company, and sometimes through affiliated units. The Public Organizations for Desert Reclamation and Agrarian Reform are not engaged in production at all and have no affiliated units. They exist simply as research and planning agencies for the Ministry of Land Reclamation.

To illustrate the role played by these public organisations and their affiliated units, in the economic activity in Egypt, Appendix 14 provides statistics which outline this role. From these statistics the following conclusions can be reached:

(1) The public enterprises in Egypt occupy a predominant place in the national economy and the state budget.

(2) The Egyptian public enterprises play a leading role in the industrial activity, particularly in production, value added and gross fixed capital formation. They are also in a dominant position in such

financial activity as loans, deposits and credits.

(3) The majority of investments (about 85%) in the 1975 Investment Plan were made through the public sector.

Yet, although public enterprises have helped to lay down the material foundations for the economic development of Egypt, they are encountering many serious problems of which the problem caused by the controlling and data collection bodies will be discussed. The effect of this problem on the quality of information flows to the sponsoring Ministers will also be investigated.

8.3 The Problem of Control over the Public Enterprises in Egypt and the Overlapping Functions of Data Collection Bodies:

The previous section has shown the relative size of the investment programmes assigned to the public enterprises in the National Plan of Egypt. Whether or not these programmes can be properly implemented will no doubt be greatly dependent on the efficiency of the public enterprises. In this connection, the serious problems facing them must be solved before they can be expected to achieve their objectives. It is proposed to confine the analysis to one major problem which might influence the quality of information produced by the public enterprises. That is the problem of control over the public enterprises and the overlapping functions of data collection bodies.

The term control infers the relationship of the management of public enterprise to the higher authorities who, among other things, lay down the targets, evaluate the performance, and try to assess results in such a way that identified deviations can act as a guide for future action.

Control over public enterprises in Egypt has been summarised as follows (72, p.8):

- "i - Direct management at the level of the enterprise
- ii - Indirect administration by the specialized (public organizations) through supervision, auditing, planning and evaluation of performance; each (public) organization being responsible for a clearly defined sector of economic activity.
- iii - Supervision, by Ministers, each being responsible for a group of (public) organizations affiliated to it."

In addition to the above management and control bodies over the public enterprises, there are (72, p.8):

"... other numerous supervisory and auditing agencies, whose activities were not always in the best interests of production".

Specification of the functions and the type of information required by each one of these controlling and data collection agencies from the public enterprise is discussed below:

(1) Public Organisation:

The public organisations, to which previous mention has been made, are the supervisory bodies over the public enterprises and represent the link between the government (various ministries) and the enterprises. It is a direct form of control over public enterprise; it has the authority of supervising, controlling, coordinating and evaluating the enterprises under its supervision, but should not interfere in the daily decisions, which these enterprises take (91). The public organisation has a legal department (93), to take over all the legal disputes of the organisation and its enterprises and an auditing department to perform the functions of the external auditors for the enterprises (92). The board of directors of

a public enterprise whose chairman is the Minister is concerned with modification of the enterprises' rules, approval of their budget, increasing or decreasing their capital, approving the transfer of earmarked funds to other purposes, and with the amalgamation and winding up of companies, (1, p.60). All public enterprises are required to provide reports on their activities to their public organisations. Examples of the common information required by public organisations from their affiliated companies are:

- (1) Information on the current operations, which include the current revenue and expenditure, each is divided into its main components.
- (2) Marketing information, which includes sales data (actual and planned), divided between local sales and exports, compared with the previous year. Similar information is also included in respect of the enterprises's purchases.
- (3) Investment information, includes information about investment projects (actual and estimated), together with a detailed breakdown of the components of these investments.
- (4) Financial and cost control information, this information covers many items which are usually included in the profit and loss account and appropriation account. These items are compared with the previous year.

The actual forms on which this information has to be presented are found in Appendix 15, Table (15.1).

(2) Ministerial Control:

The public organisations, as discussed earlier, are headed by Ministers.

Each Minister is responsible for the execution of that part of the National Plan assigned to the public organisations under his supervision. At first the Minister had the authority of supervising and controlling these public organisations to ensure the implementation of the National Plan. But by an Act of 1971 the Ministers' power of direction was abolished and replaced by one of approval (1, p.110). Decisions taken by public organisations must now be referred to the Minister concerned for approval. Examples of these decisions are (145, pp.267-268), the annual budget, the balance sheet and financial accounts, investment, production, marketing, exporting and employment policies, creation of new enterprises or purchase of shares, training policies and the rules and regulations for the organisation of work. The above endorsements refer to the decisions of both the Public Enterprises and the Public Organizations.

In addition to the control exercised by their sponsoring Minister public enterprises are also subject to the control of other Ministries without being under their direct supervision. Examples of these ministries are the Ministry of Planning and the Ministry of Finance. As the Ministry of Planning is responsible for the preparation and monitoring of the National Plan in Egypt, it has the right to ask for any information it needs from the public organisations and their affiliated enterprises. Hence, all business enterprises (public or private) are obliged to complete a special form sent to them by the Ministry of Planning known as "Planning Form No. 40 : Financial Follow-up". The information required in this form can be found in Appendix 15 Table (15.2)

The funds allocated to the public enterprises are determined mainly by the Minister of Finance after discussion of the National Plan in the

Cabinet. He has been given the right to ask for reports and information during the course of the year on how the enterprises are using their funds in order to determine their compliance with the assigned plan.

Additionally, all public enterprises are obliged to complete other forms prepared and sent to them by the Ministry of Finance. A specimen of the form used by the Ministry of Finance for the Public Enterprise is shown in Appendix 15, Table (15.3). One of the functions of the Ministry of Finance in Egypt is to take part in the audit of the final accounts of the public enterprises. The information required by them has been mainly used for the construction of the State Budget and not for control or communicating information for the Ministers concerned. This type of information could have been collected from either the public organisation concerned or from the CAPMS.

In addition to the above controlling and data collection agencies, the public enterprise in Egypt is subject to the control of other, including data collection, bodies. These bodies and the types of control they perform and the information they require are mentioned below:

(3) The Central Agency for Accounting:

One of the main functions of the Central Agency for Accounting, (CAA), is to check the financial accounts of all public organisations and their affiliated companies. All enterprises where public ownership exceeds 25% of the capital together with all government departments are subject to audit by the CAA (94). It is also the function of the CAA to follow-up and evaluate the activity of the public enterprise with the purpose of discovering whether the enterprise's transactions are within the limits of

the state budget estimates and whether the necessary steps for correction of any divergence from the assigned targets have been taken.

Enterprises, therefore, are required to submit their final accounts for inspection by the CAA's staff, at least two months before the annual general assembly (AGM). Additionally, public enterprises are required to complete forms designed by the CAA for the purpose of following-up and evaluating their activity. Appendix 15, Table (15.4) shows part of the form (the actual form consists of more than 40 pages) used by the CAA.

(4) The Administrative Investigation Board:

The Administrative Investigation Board (AIB) was initially established in 1954 to oversee the legality of the administrative actions taken by the government departments (95). With the expansion of the public enterprises, which has taken place since 1956, the AIB functions were extended to include the public enterprises (96). Its main functions is to reveal any illegal administrative actions, and to examine any complaint from either the company's staff or even a citizen who may consider that the management have taken an illegal action. The public enterprises are required to provide all the information demanded by the AIB.

(5) The Taxation Authorities:

The public enterprises in Egypt, even when they are completely state-owned, are subject to commercial and industrial taxation laws.

The tax inspectors have the right to investigate the financial accounts of the public enterprises; a situation which often causes trouble to the enterprise and a waste of time, (regarding the assessment and

questions of what is subject to tax and what is not). The tax inspector has the right to demand any detailed information regarding all financial aspects of the company. Any previous investigations which may have been carried out by other accounting or controlling bodies will not be considered by the tax inspector. He always requires primary rather than secondary information. Typical aspects of interest to the inspectorate are the items disseminated in the profit and loss account and of course the operations account.

(6) The Central Agency for Organization and Management:

The Central Agency for Organization and Management (CAOM) has the following authority over the public enterprises (97):

(a) The control of managerial decisions of public organisations and their affiliated enterprises where those decisions concern production and productivity. The CAOM has to be informed in advance about any decisions regarding production processes or increases in productivity, other than those decisions related to the normal operations of the enterprise. Any decisions which may affect these normal operations should be discussed with CAOM with the public enterprises concerned.

(b) The suggestions for the most suitable organisational structure in the public enterprises, employment cadre, wages structure, and means of increasing productivity. A great number of public enterprises have, to a great extent, normally accepted most of these suggestions.

(c) It also ensures that the public enterprises' regulations governing employment and wages are correctly applied within the laws and decrees in force.

(d) Makes inspection of both public organisations and enterprises, and has the right to demand any information and statistics needed for the performance of its duties.

(e) It also checks the employment budgets of enterprises before their submission to the Ministry of Finance.

It has been mentioned elsewhere, (15, p.115) that in reality it has been found that the CAOM performs many of the functions of the CAA, mainly in checking illegal financial and managerial decisions.

(7) Other Controlling and Data Collection Agencies:

In addition to the above major agencies controlling and collecting information from the public enterprises in Egypt, there are other agencies which perform other similar duties in terms of control and the collection of information. Examples of these agencies are:

(a) Political Control Agency, which is part of the Socialist Union (the sole ruling party in Egypt).

(b) Companies Department, which requires, among other things, the final accounts of the enterprise.

(c) The Ministry of Industry, examples of the type of information required by this Ministry includes goods and services produced by the enterprise, the main inputs to the production processes, and financial and cost accounting information related to the enterprise's activity (eg wages, materials used, maintenance, depreciation, profit/loss, and major components of inventories).

(d) The Central Agency for Public Mobilization and Statistics: This agency demands all the information necessary to compile accounting and economic statistics for the national economy as a whole.

From the above discussion the following conclusions can be reached:

(1) The public enterprises in Egypt are subject to a comprehensive system of control performed by Ministerial and non-Ministerial controlling agencies.

(2) The system of control upon the public enterprises implies some defects in terms of overlapping functions and responsibilities. The following areas illustrate these overlapping responsibilities:

(a) auditing and checking of accounts: This function is the responsibility of each one of the following agencies:

- (i) public organisations
- (ii) the Central Accounting Agency
- (iii) Ministry of Finance
- (iv) Taxation Departments
- (v) the Central Agency for Organization and Management

(b) finance: This function is the responsibility of:

- (i) public organisations
- (ii) Ministry of Finance
- (iii) Banks (on occasion)

(c) legal disputes: The following agencies are involved in any legal disputes of the public enterprise:

- (i) public organisations
- (ii) the Administrative Investigation Board
- (iii) Ministry of Justice
- (iv) the Courts

(3) There is considerable overlap in the information required by the various data collection agencies. Almost all of the data collection bodies have requested financial information from the public enterprise in a form designed by the agency concerned. The one type common to all these data collection bodies is the financial statements of the public enterprise. The tables included in Appendix 15 provide evidence on the type of information required by these agencies.

8.4 Assessing the Quality of Reports and Information Communicated to the Government under the Present Systems of Information Gathering and Controlling the Public Enterprises in Egypt:

The fundamental purpose of the reports and their information flow is to measure the performance and goal achievement of an enterprise; the main aim of these reports is to assist the Minister (or his department) to take appropriate action.

The aim of this section is to assess the quality of the information flows, in terms of accuracy and reliability, between sponsoring Ministers and operating organisations in Egypt. More precisely, the analysis will be based mainly upon the possible effect of the various controlling and data collection agencies (discussed in the previous section), upon the quality of information produced by the public enterprises to the Ministers concerned.

Effective communication systems between government and operating organisations could be considered as a condition for managing the economy more efficiently. If this is true, it follows that the flow of information conveyed to government must be based on sound information, in order to enable the government to assess the performance of public undertakings in relation to the assigned targets. The reports must also identify potential bottlenecks and their causes, and determine the extent to which some factors, if any, threaten the achievement of planned objectives.

In Egypt the public enterprises' reports/information conveyed to various levels of management are becoming an indispensable source of information for managing and controlling not only this large and important sector but also the economy as a whole. The importance of these reports/information to government demands that they must, as far as possible, be objective, trustworthy, accurate, timely, and frequently available to the sponsoring Ministers. Without objective and sound communication of factual information, the possibility of mismanaging the economy and wasting scarce economic resources is increased.

How the control and data collection agencies have - and still do - affect the quality of information requested by these agencies and conveyed to the sponsoring Ministers, is discussed below:

The effects of the multiplicity of control bodies upon the public enterprises, for they are the units on which the economic development of the country ultimately depends, are three fold: Firstly: the executives of the enterprise could be demoralised by the excessive number of forms they have to complete, as evidenced by Appendix 15. This has recently been expressed by the ex-Minister of Planning in Egypt when he mentioned,

(1, p.485) that most of the public enterprises' executives have expressed, on many occasions, their strong annoyance at the numerous requests from controlling and data collection bodies. He argued that almost seventeen departments of the major controlling bodies are interfering in the day-to-day activity of their enterprises. Secondly: being faced with these numerous controlling and data collection agencies, the public enterprise has no choice but to reply, fill in forms, and submit all the information required. It is important for it to reply, because if it does not, it will be in serious trouble and a penalty may be imposed upon the enterprise, or even the executive responsible.

But the accuracy and reliability of the information provided by the enterprises is another matter which does not concern any one of the controlling or data collection agencies. The ex-Minister of Planning in Egypt has expressed his feelings regarding this matter in the following manner (1, pp.486-487):

"... provision of data required by controlling and data collection agencies from the public enterprises ended, in most cases, to be just a routine work aimed at a 'stop-gap', and provide the data collection bodies with 'anything' ... The accuracy of their reply is another matter which might never be subject to any verification ...".

Furthermore:

"If the accuracy of the data supplied by the enterprises has been questioned one day, many excuses can be offered by the enterprise, such as typing mistake, the lack of clarity of the data needed, the disagreement of the definition of the required data, etc....".

Thirdly: because the executive capacity needed to supply all the information required is, and should be regarded as, a scarce resource in Egypt, the creation of so many controlling and data collection bodies will, undoubtedly, have some effect on the performance of the executives' main functions. By

receiving frequent messages, forms, and telephone calls from these bodies, all asking for an early response, one may assume that this would lead to an increase in the amount of time spent on paperwork at the enterprise level (which is non-productive as far as the company is concerned).

The cost of supplying all the information required under the present system of supervisory and data collection bodies in Egypt should be considered against the cost of diverting staff from their main activities. An inevitable consequence of the overload of information demanded from public enterprises, most of which is time-consuming, is the reduction of the time available to the managers to carry out their original tasks. If one considers the great array of tasks required to meet the needs of these data requests, one may wonder how the executives can find the time to make sound decisions and run their own organisations. This might also help to create a situation in which the enterprise managers tend to compromise between performing their main functions and satisfying the massive data required by the control and data collection bodies.

One of the factors which presumably annoyed most of the enterprise managers could be the overlapping function of the data collection bodies and the interference of the different agencies in the investigation of the same matter. Additionally, the forms shown in Appendix 15 support the fact that much of the information demanded from the public enterprise is requested more than once and by more than one agency.

The vast amount of data and/or information required by the various administrative and control bodies has created an administrative overload for public enterprises, mainly in the duplication of work stemming from the uncoordinated nature of data/information requests. According to an article in Al-Ahram al Iqtisady, (5, p.15) the number of items of information

demanded from a public enterprise within one year by sixteen control departments belonging to the major control agencies, was 6034. Many of these were required more than once, or by more than one body. They were broken down as follows:

on Production	5,380
on Finance	186
on the Labour Force	77
"Miscellaneous"	391

And if one adds to this the fact that there is no fixed time for the provision of this information, most of which is required in the peak work periods of the enterprise, one may assume that the public enterprise managers do not pay as much attention to the affairs of their companies as they ideally should.

Under the present pressure of the controlling and data collection bodies on the public enterprises in Egypt, the quality of the information content of their reports could be questioned. Needless to say, the National Planner and the State, on the basis of the information gathered and conveyed to them, decides upon the action to be taken. The effect of these controlling and data collection agencies on the planning efforts in the public enterprises has been mentioned by Rachid, (158, p.185) who carried out interviews with managerial staff in Egypt, as follows:

"It seems, however, that most of the planning efforts of public enterprises are wasted in the preparation of reports and answering of questions about matters that are completely uncomprehensible".

In Egypt great emphasis has been placed on the follow-up reports in the National Plan, as a means of formulation, evaluation and the definition of the impediments to plan achievement. Yet these forms (four specimens from different agencies are shown in Appendix 15) are always voluminous, exhibit duplication and their information content is often available too late to be of much use in the planning process. An example of the complexity and time consuming nature of the reporting forms is the "Follow-up and evaluation of performance reports" of the external trade companies requested by the CAA. The report is 33 pages in length and requires data for 36 different tables. The appendix of this chapter (Appendix 15) also provides evidence of the number of pages and tables that each public enterprise has to fill out for only four agencies, in addition, of course, to the other forms required by the remaining controlling and data collection bodies. It is worth noting that the information gathered from the public enterprise by the four major control and data collection agencies (see the forms shown in Appendix 15) do not substantially differ from each other. A basic part of the information disseminated in these forms does not differ, in principle, from that presented in the final accounts and balance sheet of the public enterprise. It is possible to say, therefore, that the present forms used by these control and data collection bodies show, to a great extent, duplication of information in matters concerning the financial aspects of the enterprise. By reducing the number of agencies participating in the direct collection of information it is possible thereby that a reduction in the number of forms that the enterprise has to fill out would be achieved, and this might help to reduce the amount of time spent on "form filling" at the enterprise level. As a result, the enterprise managers may be able to devote more time to performing their functions more effectively.

According to a report published in Egypt in 1973, the CAA complains that it is under-staffed for the task of auditing the accounts of so many public enterprises and government departments during a short period each year* (4, p.6). The report states that in 1970, the CAA audited over two million financial documents and the accounts of 3178 organisations.

The CAA is supposed to publish annual reports of its findings for submission to the President and the National Assembly, but because its full time staff are limited and the nature of its work, it has been unable to carry out this function effectively. It was, for example, not until the end of 1972 that the CAA submitted a report showing that in 1970, out of 383 publicly owned companies, 74 had losses totalling £E31.7m (4, p.7). This information has obviously come far too late to allow those responsible to take corrective action.

Thus it is possible to say that there may be "Government misinformation flows" in Egypt. This situation was remarked on as recently as 15th of March 1976 by President Sadat when he said that he had asked his advisors to provide him with data on the level of national debt. His object was to negotiate with other Arab countries to determine the possibility of raising loans so that the effects of the relaxation of the Middle East Crisis could be exploited and the Egyptian economy could be re-built. Ten billion dollars was the answer presented to President Sadat. Later, they discovered that the actual figure was ten billion sterling and not ten billion dollars. The lack of accurate statistics and information, said President Sadat, was one of the main causes of the economic crisis in Egypt today (10, p.4).

* The financial year of companies ends on the same date, normally 31st December

From the above analysis, the main factors that detract from the value of the information flows between the sponsoring Ministers and public enterprises in Egypt may be due to one or all of the following reasons:

- (1) The public enterprises in Egypt are suffering from an abundance of control and data collection agencies. This must affect their performance and the quality of information conveyed to the higher authority.

- (2) It is suspected that some Ministers may have been more impressed by the status and not the object of data collection bodies. On many occasions it has been assumed that these controlling and data collection agencies are necessary not only as a safeguard of the public funds but also necessary to ensure efficient communications and as a check on the information presented to them on the activity of the public undertakings. This assumption may not be realised under the present system of controlling of, and gathering information from the public enterprises, because the latter are the sole source of information for controlling and data collection agencies. A possible consequence of so many control agencies with so many requests for information to the companies, is that the information supplied could hardly be accurate. The inaccurate information collected by multiple channels would be duplicated and communicated to those who are interested in the companies' affairs. In this context, it has been mentioned (114, p.56) that: "Multiple channels, if based upon the same source of information, can merely duplicate errors". In a country like Egypt this duplicated error in the information collected and communicated to the government may have harmful effects on the economy, because the Egyptian economy, mainly, is the public enterprises.

- (3) Most of the information conveyed to the Ministers is of a quantitative nature. It means that the human aspect in the information message has to

a great extent been ignored in Egypt. It must be remembered, however, that an economic unit is only as good as the people within it, and is to a great extent a reflection of those people. Lack of co-operation by the employees could prevent the company from achieving its objectives.

(4) Most of the information provided to the Minister or the other managerial bodies is often utilised for control purposes. Hence, psychological constraints could affect the reality and quality of the information message. For example, the public enterprise is not likely to provide information to the Minister or to the controlling bodies which may lead to actions which could affect them adversely. This psychological constraint has been expressed by Katz and Kahn, (114, p.51) as follows:

"People do want to get certain information up the line, but generally they are afraid of presenting it to the most relevant person or in the most objective form. Full and objective reporting might be penalised by the supervisor ...".

Furthermore:

"The more top-heavy the organisational structure and the more control is exercised through pressure and sanctions, the less adequate will be the flow of information up the line".

It may be said that the organisational structure of the public enterprises in Egypt could be considered one of the main impediments that detracts from the value of information conveyed to the top management, including the Ministers.

The problem of communication systems between the public enterprises and the sponsoring ministers has reached its peak in Egypt. One suggestion

towards finding a solution to this problem is the recommendation presented to the government in January 1976 for abolishing the public organisations as controlling and supervising bodies over the public enterprises. To the best of the author's knowledge this recommendation was subject to amendment and the public organisations are not yet totally abolished. It should be observed that even when they are abolished, it will not eliminate the problems of control and information gathering. The public enterprises in Egypt will continue to suffer from the remaining major control and information gathering agencies, and the direct interference of their departments in the day-to-day activity of the enterprise, so long as the present controlling and data collection systems are in operation.

8.5 Summary and Conclusion:

This chapter has shown the size, the role, the character and the organisational structure of the public organisations and their affiliated companies in Egypt. During the last fifteen years these organisations and companies have occupied a dominant role in the economy.

The problems of the higher authorities' control and the data collection agencies needs on the public enterprises together with the overlapping functions of these agencies have been discussed and analysed. The specimen forms presented in the appendix are evidence of the overload of requests for information from the public enterprises. The effects of the multiplicity of control and data collection agencies upon public enterprises are likely to have two outcomes: Firstly, the efficiency of the duties of some public enterprise managers may be affected. Secondly, the informational content of their reports may be scanty in terms of accuracy, reliability and out of date. President Sadat's remark on the inaccuracy and unreliability of statistics and information may be considered

as an indication of an inevitable consequence of the current systems of control and data collection.

The possible remedy that might be suggested for the problems created by the current practice of controlling and gathering information from the public enterprises in Egypt may be summarised as follows:

- (1) The authority should avoid unnecessary duplication in the duties of some of the control bodies. This can be achieved through:
 - (a) the elimination of the Ministry of Finance, public organisations, and the Central Agency for Organization and Management from auditing and checking the accounts of the public enterprises. This function should be the responsibility of the Central Accounting Agency, because it has been established by statute to check the financial accounts of all public enterprises.
 - (b) the function of finance should be the concern of the public organisation, because it directly supervises the activities of its affiliated companies, and has a close contact with, and knowledge of the production processes of each public enterprise. The role of the Ministry of Finance and banks in financing the public enterprise should, then, be abolished.
 - (c) the most suitable body to undertake the legal disputes of the public enterprise is the Administrative Investigation Board, because it was established to control the legality of the action of both the government departments and the public enterprises. Thus, it will be possible to eliminate the public organisations so that there is not, as at present, overlapping of functions in matters concerning legal disputes of the public enterprises.

(2) The function of data collection from the public enterprises should be, in the author's view, the responsibility of the public organisation, because of its direct concern with the public enterprise and the experience and skill of its staff in matters relating to the nature of the information required. Thereby gathering only the facts essential to the matter under investigation. The information needs of the various administrative agencies in the economy can then be channelled through what might be called in the public organisation, "Management Information Advisory Services". In this context, the public organisation may be considered the body most capable of handling and channelling the information required with minimum cost and difficulty.

Conceivably, this suggestion could improve both the data flow from, and data handling in, the public enterprise, because the other data collection agencies will be eliminated. This may help to create a favourable attitude between the enterprise managers. Then the data may be handled cautiously and appropriately processed as accurately as possible, which is often overlooked under the present systems of control and gathering information.

The information collected by the public organisation should be arranged, stored, retrieved and manipulated in such a way as to satisfy the goals and objectives of the other controlling and data collection bodies, in an economical and efficient manner.

However, it was hoped by the government that improvement in the quality of information could be realised by the introduction of a unified system of accounts for the public enterprises. In fact, the unified system of accounts has overcome some of the constraints that detract from the value of the information reported to the users. This has been achieved

by uniformity of terminology as well as presentation of the accounts of these public enterprises. The extent to which this quantitative information disseminated in the financial accounts of the public enterprises has helped to improve the flow of information for government remains to be seen in the next chapter.

CHAPTER NINE

The Limitations of the Public Enterprises'
Accounts in Egypt - with Reference to
the U.K. Nationalised Industries' Accounts

9.1 Introduction:

In the previous chapter the conclusion has been reached that one of the most important factors which has made the introduction of a unified system of accounts necessary in Egypt is the abundance of controlling and data collection bodies over the public enterprises.

The main objective of this chapter is to investigate the hypothesis that the present information disseminated in the public enterprises' accounts in both Egypt and Britain (nationalised industries) does not fully satisfy the basic information needs for government, including the compiler of national accounts.

The investigation of this hypothesis necessitates the discussion of the following main factors:

- (a) The main features of the System of Unified Accounts in Egypt together with the objectives set out for it by the CAA.
- (b) The difference and similarities between the Egyptian Public Enterprises' accounts and the British nationalised industries' accounts.

- (c) The current limitations of these accounts (in both Egypt and the U.K.) which affect their informational content for the government, including the compiler of national accounting statistics.

It is proposed to criticise and analyse the main features of the Unified System of Accounts in Egypt together with the presentation of the public enterprises' accounts, which have recently been released (1974 and 1975) by the CAPMS. This will be a general investigation examining the extent to which these accounts satisfy both the State's information needs and the basic requirements of national accounting statistics.

The investigation will also include the U.K. nationalised industries' accounts in order to provide a model of practice in a developed economy; a country with a long experience of mixed economy and public accountability of nationalised industries.

The limitations of these accounts in both countries will be investigated in terms of omission of data appropriate for economic management and the possible effect on the government in performing its control and management functions as well as the public understanding of the financial results being achieved by them.

9.2 The Main Features of the Unified System of Accounts in Egypt:

Egypt, like other developing countries, suffered from defective, unorganised and unrealistic accounting data. Many of these deficiencies appeared at the enterprise level. These deficiencies not only diminished the usefulness of the data collected from business accounting for the construction of economic accounts but also impaired their effectiveness

as instruments of financial control or as means of development planning.

With reference to the economic circumstances of Egypt the following can be mentioned:

- (a) the problems of control and management associated with the creation of a large public enterprises sector
- (b) the problems caused by the needs of the controlling and data collection agencies.

It was felt by officials that a System of Unified Accounts (SUA), compulsory for all economic units working in the public business sector, could help overcome these problems.

In 1966 a Presidential Decree (No. 2125) concerning the formation of the Consultants Committee to study the system was promulgated.

From 1968 the SUA was introduced by the CAA and used in the preparation and presentation of the final accounts, including balance sheets, of all companies of the public business sector, except banks and insurance companies. A transition period was allowed for a few companies to adapt their accounting systems to the new system.

The manual of the SUA consists of some 800 pages. It contains detailed charts of accounts, financial statements together with forms of financial and control reports. The manual also includes guidelines for depreciation rates, classifications of commodities, crafts and jobs and economic activities in accordance with the "International Standard Industrial Classification of all Economic Activities".

The chart of accounts included in the SUA is shown in the following Table:

TABLE (9.1)
The General Framework of the System of Unified Accounts in Egypt

Balance Sheet Accounts		Operating and Revenue Accounts		Analysis of Uses of Resources				
1 Assets	2 Liabilities	3 Uses of Resources	4 Sources	5 Production Centres Control	6 Production Service Centres Control	7 Marketing Service Centre Control	8 Administrative and Financial Service Centre Control	9 Capital Transaction Centre Control
11 Fixed Assets	21 Capital	31 Wages	41 Revenues from current operations	531 Wages	631 Wages	731 Wages	831 Wages	931 Wages
12 Project under completion	22 Provision and Forwarded surplus	32 Commodity requirements	42 Subsidies	532 Commodity requirements	632 Commodity requirements	732 Commodity requirements	832 Commodity requirements	932 Commodity requirements
13 Inventory	23 Allowances	33 Service requirements	43 Revenues from Securities	533 Service requirements	633 Service requirements	733 Service requirements	833 Service requirements	933 Service requirements
14 Long Term Lending	24 Long Term Loans	34 Purchases for Sale	44 Transfer Revenues	534 Purchases for Sale	634	734	834	934
15 Financial Investments	25 Creditor Banks	35 Current Transfer Expenses	45 Profit for Housing and Land Reclamations	535 Current Transfer Expenses	635 Current Transfer Expenses	735 Current Transfer Expenses	835 Current Transfer Expenses	935 Current Transfer Expenses
16 Debtors	26 Creditors	36 Current Appropriated Transfers	-	-	-	-	836 Current Appropriated Transfers	-
17 Miscell. Debtor Accounts	27 Miscell. Creditor Accounts	-	-	-	-	-	-	-
18 Cash on Hand and in Bank	28 Results of the Year	-	-	-	-	-	-	-

Source: C.A.A. "The System of Unified Accounts". C.A.A., Cairo. (op 24,25)

The chart is followed by a very detailed explanation, classification and coding of the accounts included in the chart. For example, the balance sheet is split into two classes ((1) and (2)). Class 1 details and codes all the assets, that are normally shown in a balance sheet, whilst class 2 covers all the liabilities of companies. Table (9.1) shows the general framework of the breakdown of these assets and liabilities; but in the actual balance sheet much greater detail is presented.

According to the System of Uniform Accounts in Egypt each public enterprise is required to prepare the following financial statements. These are:

- (1) Balance sheet
- (2) Production and Trading account
- (3) Profit and Loss account
- (4) Appropriation account
- (5) Cash Flow statement.

In addition, each public enterprise is required to submit two further accounts which are used mainly for national accounting purposes. These accounts are:

- (6) Current Operations account
- (7) Sources and Uses of Capital statement.

The former account is closely linked to national income accounts. It is designed to reflect the production of the enterprise at market prices. The latter account has been purposely designed to be consistent with the "Capital Account" of the national income accounts. The statement furnishes very detailed information on the sources and uses of capital at the enterprise level. The statement also distinguishes between invested capital and transfer capital.

The SUA has specified the general principles and rules to be followed particularly in the depreciation of fixed assets which must be based on historical cost and the Straight Line Method, together with inventory valuation. Details of these principles and rules have been left to be determined by the public organisations for their affiliated companies.

Having introduced the SUA, the officials hoped that the following objectives would be realised (40, pp.7-9):

- (1) The provision of the basic data necessary for planning, management and control purposes at the various hierarchies of economic management.
- (2) The linking of the economic unit's accounts with the information required for national accounting, in order to facilitate the latter's preparation.
- (3) An improvement of the process of collection, sorting, classification and storage of data.
- (4) To enable the government to measure explicitly the performances of public enterprises and make appropriate comparisons utilising financial or other similar targets.

(5) To provide information on the efficiency of the management of the public enterprises in terms of optimum allocation of resources and in comparison with other public enterprises.

(6) To provide the government with first hand observations thus overcoming part of the deficiencies inherent in the work of committees or agencies dealing with the investigation of the public sector accounts, in terms of their delay in reporting their findings to the government and their inability to examine regularly the financial affairs of the public enterprises. Examples of this deficiency has been previously discussed within the context of the CAA.

It should be clear that the deficiencies of these agencies (in terms of their delay in reporting and examining regularly the public undertakings' affairs) is not only unique to Egypt, rather it can occur in developed economies. For example, the work of the Nationalised Industries Committee in the U.K. has been criticised by Johnson, (113, p.294) as follows:

"... it is not surprising that over the ten or more years since its establishment as an effective committee of inquiry the Nationalised Industries Committee has concentrated rather less on financial scrutiny than on broader surveys of economic and organisational problems affecting the Nationalised Industries. The relatively large (and increasing) number of nationalised concerns has meant that the committee can examine an industry (including certain numbers of economic units) not more often than once in seven or eight years, and it may in future be hard to achieve even this coverage ...".

While the chairman of the Public Accounts Committee in Britain has recently (1978) expressed his view regarding the work of his committee when he said (67, p.4):

"The work we do is only a tiny fraction of what needs to be done - the top of the iceberg".

These are the major objectives set out for the public enterprises' accounts in economic management by the Egyptian Government. Whether these objectives have been realised or not is a matter which will be examined in this chapter.

Between June 1974 and February 1975 the CAPMS, (44, 45) published a complete set of financial and economic accounts of all the public companies working in the production sector. Appendix (16) illustrates the structure and presentation of these accounts.

It shows that the public enterprises' accounts are presented in two levels of aggregation:

- (a) at the aggregate level of all public enterprises (Tables 16.1 - 16.4)
- (b) according to kind of economic activity as recommended by the SNA (Tables 16.5 - 16.25).

The second level of aggregation is presented in more detail in respect of some items of the profit and loss account and balance sheet, (see Appendix 16).

From the above discussion the outstanding features of the SUA in Egypt can be summarised as follows:

- (1) The Unified System of Accounts affects all public enterprises except banks and insurance companies.
- (2) The accounting statements are classified to provide information for

planning and control at all managerial levels in the economy. Data needed for the construction of national income accounts have also been considered in the financial statements of the public enterprise.

(3) The system contains a general framework for cost accounting, mainly depreciation and inventory valuation, leaving specific details to be determined for each enterprise.

(4) Each public enterprise is required to present its financial report which includes:

(a) Report of the Board of Directors

(b) Financial statements and final accounts

(c) Report of the Auditor

(d) Report on the efficiency of the enterprise's management.

(5) Footnotes as such are not permitted in the Uniform System of Accounts. Any supplementary accounting information has to be included in the report of the Board of Directors.

Whether the present structure of the Egyptian public enterprises' accounts, including balance sheets, is capable of fulfilling the objectives set for it in economic management will be examined in comparison with the British Nationalised Industries' Accounts.

9.3 A Comparison Between the Egyptian Public Enterprises' Accounts and the British Nationalised Industries' Accounts

The object of this section is to analyse the general accounting framework and the scope of the financial information provided by the U.K. nationalised industries' accounts for the State as compared with the Egyptian public enterprises' accounts. Examination of the accounting bases employed for the provision of such information together with the financial objectives assigned and the performance criteria will also be made.

The published annual reports and accounts of the British nationalised industries are models of information disclosure submitted to the minister concerned as well as to the public and parliament. So the comparison with Egypt may be useful in assessing the range of financial information available to the State through the published annual reports. This could illustrate the direction in which each annual report disseminates more readily available information for the State information needs as well as in assessing the efficiency of the management of these public undertakings.

For the purpose of analysis the accounts of the following British nationalised industries will be examined:

- (a) Post Office, 1975/76
- (b) British Gas Corporation, 1975/76
- (c) British Airport Authority, 1974/75
- (d) British Railways Board, 1975

(e) British Steel Corporation, 1974/75

(f) National Coal Board, 1973/74

(g) British Airways, 1975/76

(h) Central Electricity Generating Board, 1975/76

These industries have been chosen on the basis that they are among the major nationalised industries in Britain.

Nine criteria were used as a basis for comparison. These criteria have been selected on the basis that they could influence the structure of the accounts and consequently their contents may have relatively little informational value for the objectives for which they have been designed. Table (9.2) illustrates the findings.

TABLE (9.2)

**A Comparison of the Differences/Similarities between Reports and Accounts of the Egyptian Public Enterprises
and their British Counterpart (Nationalised Industries' Accounts)**

CRITERIA OF COMPARISON	EGYPTIAN PUBLIC ENTERPRISES' ACCOUNTS	BRITISH NATIONALISED INDUSTRIES' ACCOUNTS
(1) The Principal Form of Published Accounts and Statements:	1. The Balance Sheet 2. Production and Trading Account 3. Profit and Loss Account 4. Appropriation Account 5. Cash Flow Statement 6. Current Operations Account 7. Sources and Uses of Capital Statement.	1. The Balance Sheet 2. Profit and Loss Account 3. Sources and Uses of Funds Statement.
(2) Uniformity in Presentation and Preparation of Final Accounts: • Financial Accounts • Cost Accounting	• All Final Accounts are presented in a uniform form. • Treatment of some Accounting Items has been unified with some flexibility in respect of other items.	} Neither the Final Accounts nor the accounting treatment of certain items e.g. Depreciation, Assets valuation are presented in a uniform basis for a great number of Nationalised Industries.
(3) Financial Objectives:	Almost all the Egyptian Public Enterprises are working as profit-seeking organisations.	Financial objectives are not clearly defined for a great number of Nationalised Industries.
(4) Accounting Policies: • Fixed Assets Valuation • Stocks Valuation • Depreciation Method	• at Cost Less Depreciation • Cost or market price whichever is lower • Straight Line basis	• at Cost Less Depreciation • Lower of cost and net realisable value or cost • Straight Line basis
(5) Capital Structure:	• Consists: (a) Owned Capital, (b) Government Contribution (to be paid) and (c) Reserves	• Consists: (a) Debt Capital, (b) Public Dividend Capital and (c) Reserves and Special Provisions
(6) Inflation Accounts: • Depreciation Calculation • Adjustment of Sales to reflect inflation	• on historical cost in Profit and Loss Account. Provisions are usually made for replacement in the balance sheet. • has not been considered	Mixed • some calculate depreciation in replacement basis • other based depreciation on historical cost • has been considered by one nationalised industry, i.e. British Steel Corp.
(7) Notes to the Accounts	Not Permitted	Substantial notes and schedules to the Accounts
(8) Data necessary for: • National Income Accounts • Sector Balance Sheet	• Accounts (6) above is mainly designed to meet part of national income accounts' needs. • Details of physical assets are presented in the balance sheets or the enterprise and according to the kind of economic activity. But less information is available on financial assets.	• Almost all data needs to be adjusted for national income purposes • Details of the components of fixed assets are presented in schedules
(9) Performance Criteria:	Financial Ratios	Mixed, examples are: 1. return on net assets 2. return on capital employed 3. earnings per passenger per mile 4. operating profit on turnover

From the above table the following conclusions may be reached:

- (1) The general form of accounts published by the British nationalised industries bears few similarities to those issued by the Egyptian public enterprises. The British accounts lack both the Current Operations Account and a detailed Sources and Uses of Capital Statement.
- (2) The British nationalised industries' accounts exhibit non-uniformity in respect of the accounting treatment of some important items. This point will be discussed in detail later in this chapter.
- (3) The depreciation rate in both countries is based on the straight line method.
- (4) The final accounts in both countries do not fully reflect the effect of inflation in their accounts. Stock valuation and depreciation policies are examples of the adherence in both countries to the "conservative aspect of accounting". The British Gas Corporation and the British Airports Authority are the two industries which have considered inflation in respect of their depreciation policies. While the other British nationalised industries base their depreciation policies on historical cost. In Egypt, the historical cost is used as a basis for depreciation policy, but provisions are allowed to account for replacement purposes.
- (5) The accounts of the individual enterprises in Egypt provides a link between micro and macro accounts. The former, mainly accounts (6) and (7) and the balance sheet, secure part of the basic information needed for the construction of both national income accounts and sector balance sheets. While the British nationalised industries' accounts do not clearly disseminate information for the purposes of national income accounts. The data needs

to be adjusted for the latter accounts.

(6) Almost all the accounting information of the enterprises in Egypt is available from the main body of their accounts. Whereas the British nationalised industries' accounts disseminate the minimum of information in the main body of their financial statements supplemented by substantial notes and schedules.

(7) The capital structure of the Egyptian public enterprises are homogeneous as between these enterprises. The financial structure of these enterprises consists of:

(a) Owned capital

(b) Government contribution (to be paid)

(c) Reserves and provisions

The financial structure of the British nationalised industries is varied, as can be seen from Table (9.3)

Table (9.3)

Financial Structure of the British Nationalised Industries
As a Percentage of Total Funds Employed (December 1974 to March 1975)

	Debt Capital	Public Dividend Capital	Reserves and Special Provisions
British Airways	33%	39%	28%
British Gas	97%	-	3%
British Rail	47%	-	53%
British Steel Corporation	49%	28%	23%
Electricity (England & Wales)	87%	-	13%
National Coal Board	86%	-	14%
Post Office	77%	-	23%
*British Airport Authority	n.a.	n.a.	n.a.

Source: Table 1.6 in "A Study of U.K. Nationalised Industries :
Background Paper 1 : Financial Analysis" NEDO, July 1976, p.7.

* figures not available.

The consequences of this variation in the capital structure of the British nationalised industries is the lack of a sound basis in their accounting information for the purpose of interindustry or intra-industry comparisons in the public or in the private sector. Platt, (154, p.85) comments on this as follows:

"...the general lack of homogeneity between the various concerns (in respect of) their capital structure (and sources) ... Most of the nationalised bodies have more than one of these sources of capital.

The differing types of capital liability carry very different burdens on revenue: some of the elements are interest-free, others are subject to dividends when profits permit, and others again are either at historically low rates of interest or at high current rates. In consequence, it is not possible to expect comparability of results,

either between the various nationalised industries or with concerns in the private sector".

Although the final accounts of these public enterprises and industries are supposed to inform the government as well as the public on how well or how poorly they have been performing their operations in comparison with their assigned objectives, the information disseminated in these accounts is seriously blurred by certain limitations. These limitations are not only applicable to the Egyptian public enterprises' accounts rather they exist in the present British nationalised industries' accounts. In a recent report published by NEDO, (143, p.39) "A Study of U.K. Nationalised Industries : Their Role in the Economy and Control in the Future", the inadequacy of the final accounts of the U.K. nationalised industries is expressed in the following manner:

"Annual reports and accounts perform a limited function in their present form and are not an adequate means of assessing the performance of statutory duties".

But the scope and substance of the inadequacy of these accounts has not been outlined by the NEDO report. It is proposed to identify the limitations that impair the usefulness of the published accounts of these public undertakings not only for Egypt but also with reference to the U.K.

9.4 The Limitations of the Egyptian Public Enterprises' Accounts in Comparison with the British Nationalised Industries' Accounts

It has been shown earlier that the Egyptian public enterprises' accounts, using the SUA as a basis, have been designed to fulfill certain objectives defined by the Egyptian Government. When the CAPMS published a complete set of financial accounts including balance sheets of these public enterprises, most of the objectives set out for these accounts seem to have

been overlooked. Furthermore, the SUA includes certain deficiencies which constrained the achievement of other objectives.

This section will investigate the main limitations of these account that impede the fulfilment of their objectives. Reference will also be made to the present form of the British nationalised industries' accounts where relevant.

The utility of the public enterprises' accounts in Egypt in fulfilling the objectives set for them are limited by one or all of the following factors:

- (1) Data provided by non-homogeneous industry accounts.
- (2) Failure to disclose profit/loss of the normal operations of the public enterprises as a whole and of the industry concerned.
- (3) Failure to highlight data on the contribution of the public enterprises to social, economic and development operations.
- (4) Omission of certain data such as:
 - (a) import and export figures
 - (b) details of financial assets and liabilities
 - (c) physical assets at current cost.

which may be useful in economic management and the compilation of the balance sheet of the non-financial enterprises sector.

- (5) The delay in producing the final accounts and balance sheets.
- (6) The inadequacy of the depreciation method used for assessing management efficiency of public enterprises.
- (7) The lack of uniformity in costing systems.

Each of these limitations will be discussed in some detail as follows:

(1) Data provided by non-homogeneous industry accounts:

The concept of homogeneity of the accounts has been discussed earlier. Basically, the financial statements of the public enterprises' accounts should express not only the financial image of the economic units being reported upon but also reflect an insight into management's performance and a true and comprehensive knowledge of the circumstances of the enterprises.

It seems apparent that the concept of homogeneity of the public enterprises' accounts in Egypt did not receive sufficient attention by the compiler of these accounts. Obviously, the information communicated of a non-homogeneous nature could exert an influence on the quality of managerial performance of both the State and the public enterprise. It is possible to provide examples of this deficiency in the currently published Egyptian public enterprises' accounts. These are:

- (a) The presentation of the accounting information of both the giant and small companies in one set of financial statements. For example, the aggregation... of the accounts of the Egyptian Sugar Company whose capital is £E40m with those accounts of other companies whose capital

ranges from £E38,000 to £E1m. Similarly, the accounts of some textile companies whose capital exceeds £E10m were integrated with other companies whose capital does not exceed £E150,000. These were aggregated into one set of accounts at the industrial and the enterprises levels and then communicated to the sponsoring minister.

(b) The integration of the financial statements of both fully-owned public enterprises and those partially owned by the State in one set of accounts both at the enterprise and the industry levels.

This method of presentation of the accounting information of the public enterprises in Egypt could have serious limitations in practice. Examples are:

(A) The presentation of the accounting information of the giant and small companies in one set of accounts can not help the government to identify:

- (a) the contribution of the small companies to the national economy
- (b) the performances of the giant companies against their assigned targets
- (c) the consequences of a government decision related to a specific industry on the attitude of the small as well as large companies within the same industry.

(B) The accounting information on a specific industry can not be obtained from the current presentation of public enterprises' accounts according to kind of economic activity. For example, Appendix 16 shows that the account

coded 3.1 covers such activities as Manufacture of Food, Beverages and Tobacco. Information covering the activities of:

- (a) Food manufacturing
- (b) Beverage industries
- (c) Tobacco manufacturers

is not individually available from this major account. Policy-makers and financial analysts who may be concerned with one component of this major category can not base their decisions on such information which includes heterogeneous groups of industry activities. The same is true in respect of accounts coded (3.2), (3.3), (3.4) and (3.5) as shown in Appendix 16, Tables (16.5-16.25).

As far as the British nationalised industries' accounts are concerned, the concept of homogeneity has to a great extent been observed in the dissemination of the individual industry accounts. But when these accounts are aggregated with other accounts, i.e. local authority accounts and central government accounts to comprise the public sector account, one can say that the latter account does not convey homogeneous information to the user. This point has been previously discussed in some detail.

From the above discussion it may be concluded that the present dissemination of the Egyptian public sector accounts and balance sheets does not, in itself, provide the relevant information for national economic policy and economic management purposes, as their accounts are presented in non-homogeneous activity accounts. Analysis in terms of "non-homogeneity account", or "representative account" is likely to be a quite misleading source of

accounting information. The variation in behaviour among industries needs to be taken into account in any decision-making concerning a specific industry. And this is true at the theoretical level as well as in empirical analysis.

(2) Failure to disclose profit/loss of the normal operations of the public enterprises and their individual industry:

It has been mentioned earlier that one of the objectives of public enterprises' accounts is to furnish information relevant for the government and other parties to enable them to assess the efficiencies of their operations. The company's profit (or loss) is normally considered as one of the main factors used to assess the quality of the financial management of the company.

All Egyptian public enterprises operate on either a profit seeking or a break-even basis. While some British nationalised industries, such as British Airports Authority, British Airways and British Steel Corporation have stated their financial objectives (either self-imposed or as a directive from the Government) in terms of achieving such goals as:

- (a) an agreed profit
- or (b) a satisfactory return on net assets
- or (c) operating on a profit basis.

Having stated these financial objectives, it is important for the minister concerned to examine the relationships between costs of the normal operations and the resulting benefits (or profits) in these public

undertakings.

In order to measure these relationships, and in the meantime, to assess the efficiency of the enterprises in performing their main activities, one has to consider one of the principal objectives of accounting, i.e. that all gains and losses which are not related to the normal operations of the public enterprises (irregular, unpredictable and of a non-operating nature) should be shown separately from those of the normal operations. This is important in order to enable the government to use the profit resulting from the normal operations as a main basis for evaluating the performance of the enterprise or for the purpose of comparison.

The current Egyptian public enterprises' accounts at the different levels of:

- (a) the individual enterprise
- (b) the aggregated level of enterprises
- (c) classification according to kind of economic activity

together with some of the British nationalised industries do incorporate these losses and gains with those of their normal operations. Thereby they tend to obscure the actual results of their normal operations. According to this practice the government could be misled by inadequate disclosure of the financial results of the normal operations achieved in each year.

To illustrate; Appendix 16 in Table (16.3), the profit and loss account of the Egyptian public enterprises includes certain items which are usually incidental and not regular features of business operations.

Examples of these items are capital losses and profits, rents earned, sales of scrap and profits from sales of raw materials.

A similar situation can be found in the British nationalised industries. Examples are:

(1) British Railways:

In 1975 the operating account shows support amounted to £324m from the government as part of the normal operations of British Rail (34, p.35). This method of presentation has masked the real loss in that year. This special support should have been considered an extraordinary item and should be segregated from the normal profit/loss of British Rail.

(2) British Airways:

The annual report and accounts do not provide detailed information on the major activities of this industry, which includes airline services, aircraft maintenance, communications and other services provided to third parties. The operating surplus/loss of each one of these activities is not available. For example, the profit and loss account of British Airways, (33, p.32) includes one figure representing revenue from the major activities, giving no details or supplementary information on revenue of each of these activities.

(3) Post Office:

In the annual report and accounts of 1975-76, the profit and loss account of the major activities (Telecommunications and Posts) included a surplus on the sale of assets which was considered as one of the main

sources of income (156, pp.42,48).

(4) British Airports Authority:

The profit for the year (1974/75) includes certain items of income or expenses relating to previous years, (32, p.32).

These methods of the presentation of financial results of these public undertakings could obscure information relevant to the sponsoring minister and the public at large in that they fail to reflect the profit of the normal activities (and their components) for the current year.

A phenomenon common to the accounting policy of almost all the British nationalised industries under consideration is that they incorporate in their operating results interest payable to the Secretary of State for Industry, together with interest on bank overdrafts and other loans, deducting from this total interest receivable including income from quoted trade investments. The balance is usually shown as "interest payable less receivable", in the operating results of the industry concerned.

Interest payable on borrowings from the Department of Industry, whether on commencing capital debt or on subsequent loans, should not be considered as expenses to be allocated in the profit and loss account of the industry. This interest should be transferred to the appropriation account. The reason most commonly accepted is that expressed by Platt (154, p.80):

"Interest payable on long-term loans by the nationalised industries, which does not have share capital, is the equivalent of what might be paid by a company in the private sector by way of both dividends on share capital and interest on loan capital, and therefore needs to be shown separately from operating results".

The practical limitations of this accounting policy is that it may not be possible to use the operating results* achieved in each industry as a criterion for comparability either between nationalised industries of differing types of capital liability which carry different rates of interest or with similar industries in the private sector at home or overseas whose practice is the allocation of the cost of capital employed (e.g. public dividend capital) in either profit and loss account or appropriation account and not in operating account.

From the above discussion it may be concluded that the present method of calculating the profit/loss of the normal operations of both the Egyptian public enterprises and the British nationalised industries examined do not provide a sound basis for assessing the efficiency of the management in performing the normal operations of their public undertakings. It would also affect earnings performance criteria** (which use operating profit/loss as a numerator) which may not provide normative assessment of how well the public concerns are achieving a specific set of goals.

(3) Failure to highlight data on the contribution of the enterprises to social and developmental operations:

The social responsibility of companies has received a great deal of public and academic attention in the last few years***.

* Examples of the British nationalised industries which include interest on capital employed (i.e. long-term borrowing) with trading or operating items are: British Steel Corporation and the Post Office; the other industries show long-term borrowings interest after arriving at the operating results.

** The ratios most commonly used are percentage return on net assets and return on average capital employed.

*** See, for example, references (8) and (179).

Although the public enterprises in Egypt are working on a profit-seeking basis, they have to conform with the State policy related to the processes of social and economic development. A similar situation exists in the British nationalised industries. For example, the NEDO report, (143, p.32) mentioned that the intentions of the 1967 White Paper and 1968 Transport Act was that the British government would explicitly consider and take more account of social cost/benefit associated with services provided by nationalised industries.

Conformity with State policies may cause the public enterprise to make less profit. Thus, the profit and loss accounts of public enterprises would reflect in such cases two elements:

- (1) Entrepreneurial profits
- (2) "Profits sacrificed" which are attributable to social and developmental operations.

For proper presentation of the accounting information, these two elements should be clearly specified and separated in the financial statements of public enterprises. This sort of information would help to identify the degree to which the public undertaking has implemented a socially responsible programme say, for example, by reducing its profits to increase labour welfare or to provide for regional development. This information should be communicated not only to the government but also to the public so that they can make their own judgement of the social performance of the enterprise.

One of the main deficiencies in the present practice of measuring the efficient allocation and use of resources entrusted to the public undertakings,

either in Egypt or Britain, is the use of the final result of profit and loss account as one of the main criteria of success.

In order to arrive at the actual entrepreneurial profit of the public undertaking, its profit and loss account should be adjusted by the payments or receipts which are related to social and/or development processes, as well as by any sacrifices in the enterprise's profit to keep its prices in accordance with the government's policy of price restraint. The resulting figure after these adjustments should be used as a basis for assessing the quality of the financial management of the public enterprise and how they utilise the resources allocated entrusted to them. This figure could also be used for comparing performance, either between similar public enterprises or with companies in the private sector.

A public enterprise may realise a satisfactory profit and, at the same time, contribute to social objectives of the economy in such a way as to reduce the balance of its profit. Thus an enterprise that contributes toward social or economic and environmental development could be considered superior to one that did not.

The absence of this relevant information could undermine the effectiveness of earnings criteria as instruments for evaluating the success or failure of the management of the public enterprises. Additionally, it may lead to a situation in which these two enterprises could be assessed on the same level.

So what is needed is what might be called a "cost of social benefits and reconciliation of profits statement", which highlights the operating profits, together with the scope and extent of the funds sacrificed in the social arena. The proposed structure and composition of this

statement will be outlined in the following chapter. Because of the increasing awareness of the importance of highlighting the social responsibilities of companies, public enterprises should give consideration to presenting such information.

The current practice of presenting this information in one British nationalised industry's accounts i.e. Central Electricity Generating Board is in a supplementary statement and in the profit and loss account. For example, the annual report and accounts of the CEGB of 1976 reported in statement no. 7 and in the revenue account some £22.6m as Training, Safety and Welfare (48, pp.30,38). The other British nationalised industries' accounts examined in this chapter seem to have overlooked the presentation of this type of information. In Egypt, the different types of the company's contributions towards social and environmental development was shown in the company's Current Operations Account in the Uniform Account No. 312 (non monetary wages).

This method of presentation may not help to clarify the scope and extent of the company's social costs in comparison with its operating profit so that an interaction between the social contributions of the company and its operating profit can be easily developed and assessed.

(4) Omission of data useful in economic management and sector balance sheet:

The Egyptian public enterprises' accounts have vastly influenced the whole field of information systems for the State. They also have a major bearing on different branches of national accounting (e.g. national income accounts and sector balance sheets).

Although the Egyptian public enterprises' accounts and balance sheets

are purposely designed and classified to disclose information relevant for official needs, including the compilation of national accounting statistics, they omit other data which could be useful for economic management and the sector balance sheet. To provide examples of this missing data, the following can be listed:

- (a) purchase of imported goods
- (b) sales of goods and services to non-residents (exports)
- (c) domestic investment
- (d) overseas investment
- (e) physical assets at current cost
- (f) detailed transactions in financial assets and liabilities,
divided between national and overseas.

This data could have useful results for the purposes of:

- (a) financial analysis
- (b) assessing the efficiency of the management of public enterprises
- (c) furnishing essential data for national accounting statistics.

Examples of the usefulness of this data in fulfilling these objectives are mentioned below:

If imports and exports activities are shown in the public enterprises' accounts, the following advantages may be achieved:

- (1) The State could assess the contribution of public enterprises to the balance of payments.
- (2) The compiler of national accounting statistics could use this information to construct the balance of payments account thus reducing any likely errors which may result from receiving inaccurate data by the statistical inquiries method*.
- (3) They would enable the government to measure, and not to estimate or impute - the flow of payments between this sector and the overseas sector within a given period.

Categories of domestic and overseas investments would enable government to assess the management policy in distributing the public enterprises' funds between home and abroad.

All the Egyptian and the British** public companies' accounts examined present their physical assets on a historical cost basis. This could mislead those who manage and control the public and nationalised industries if they use earnings criteria as a measure of the efficiency of

* see the Sir Alec Cairncross quotation in Chapter 2, Section 2.4, sub-section (1).

** with the exception of two British nationalised industries, namely British Steel Corporation and British Airways. The former presented its accounts in a supplementary statement in accordance with statement no. 7 of the Accounting Standard Steering Committee. While the latter made an estimate of its results in current cost accounting terms. This result, as far as physical assets are concerned, with the comparative figures in historic terms is:

	CCA £m	Historic £m
Assets employed at 31 March 1976	840	620

the enterprise. The lower the value of capital employed, the bigger the ratio, and consequently the more misleading the ratio as an indication of the efficiency of the nationalised industry. The presentation of physical assets on a current cost basis would not only overcome this problem but it would also contribute to furnish information which may be useful for the compiler of the sector balance sheet of non-financial enterprises.

It has been mentioned earlier that the balance sheet of the business enterprise is considered one of the most important sources of information not only for the construction of a sector balance sheet but also for flow of funds accounts. Although the model of balance sheet devised by Egypt for the public enterprises has secured a basic part of this information, other relevant data is still absent for sector balance sheet purposes. Examples are:

- (a) residential and non-residential buildings
- (b) currency and transferable deposits divided between national and foreign
- (c) Bills and Bonds, long and short-term and classified according to national and foreign debtors/creditors
- (d) accounts receivable/payable national and foreign.

This type of data would provide the compiler of the sector balance sheet with an important part of the information needed for such a system.

(5) Delay in producing the final accounts:

The usefulness of the final accounts of the Egyptian public enterprises for government planning, management and control is further constrained by two factors:

(a) Publication Delay:

The importance of a short time delay between the end of the financial year and the reporting of the information does not need to be emphasised. The annual report and accounts of the public enterprises must be put at the disposal of the sponsoring minister very shortly after the period to which they relate, or at the time when action needs to be taken, otherwise they may not be useful as a guide for the government in performing its management and control functions.

The reported accounting information of the CAPMS currently exhibits a great delay*, which detracts from its value for the guidance of planning and control of not only the public enterprises sector but the national economy as a whole.

This deficiency does not apply to the British nationalised industries that were examined although, of course, deficiencies within their own management accounting controls may arise as a result of delays in obtaining information.

* It was, for example, not until mid 1975 that the CAPMS published a complete set of public enterprises' accounts and balance sheet covering the year 1970. When the author visited the CAPMS in January 1976 and requested an up-to-date set of accounts and balance sheets from officials, he was informed that the accounts and balance sheets of 1970 were the latest that were available.

(b) Non-publication of the individual enterprise's accounts and balance sheet in Egypt:

Shortly after the nationalisation and Egyptianisation acts, the public enterprises in Egypt were not allowed to publish their final accounts, as used to be the case before these acts. In fact the decision of non-publication was made when heavy losses were being realised by these enterprises immediately after nationalisation. Presumably, the decision might have been justified by officials on the grounds that if the public knew that some public enterprises (which originally were contributing to the prosperity of the Egyptian economy) were in a critical financial situation, their confidence in the management (the majority of which are appointed by the Government) of those enterprises and consequently in the whole economic system of Egypt might be shaken.

In theory, the economic system of Egypt, which is based on the Socialist Philosophy, implies participation by the people in publicly owned enterprises, including the right to be informed of the current state of these enterprises. The non-publication of the annual report and accounts does not allow such participation.

The publication of public enterprises' accounts on the basis of an up-to-date information could be of some benefit to the present economic situation in Egypt. A situation which has been recently (February 1977) described by President Sadat when he was explaining the status of the economy to the National Union of the Egyptian Students (2, p.7) is that:

"Five days before the 1973 War ... and in a meeting with the National Security Council, I said that our economy now is below zero ... the year 1974 will come and we have no money to buy bread. Both the suppliers and the bankers to whom I am a debtor will declare our bankruptcy".

One of the proposed solutions to overcome part of the present economic crisis in Egypt was the encouragement of foreign investment. To achieve this objective, in June 1974, Law No. 43 was promulgated regarding the investment of Arab and Foreign Capital and Free Zones. It attempted to encourage foreign investment under the "open door" policy and the consolidation of economic development efforts. Despite the privileges which were granted by the law in the form of exemption from laws governing foreign exchange, employment and taxes, the desire of foreign investors to participate in the Egyptian investment programmes was very slow and did not yield the expected results. In an attempt to explain the unsuccessful "open door" policy (in respect of foreign investment in Egypt), President Sadat had this to say (2, p.8):

"We know that all the laws and codes (codes of investment) were wrong ... and there is no government or person who does not make mistakes".

Presumably, the Egyptian code of investment was not the only reason to blame, the other reason that could have caused this reluctance to invest was the non-publication of the accounts of the most powerful economic sector in Egypt. If the public enterprises' accounts were published and easily accessible*, foreign investors, especially Arabs, would be informed of the capacity of the Egyptian market and thus be able to determine the profitable and non-profitable areas. An up-to-date publication would also enable them to have regular information over a wide field of activity, thus enabling them to make comparisons between various investment decisions.

* These accounts are not easily obtainable from the CAPMS under the present circumstances in Egypt even for the Egyptians. These accounts are available only under restricted conditions and the approval of both the CAPMS and the national security office.

However, the decision to publish these accounts should consider the compromise between the information which should remain confidential in the enterprise's interests and that information which, if disclosed, may be useful and beneficial to other interested groups, without imposing a further workload on producing these accounts (60, p.20).

(6) Inadequacy of the depreciation method for assessing the management efficiency of public enterprises:

This section illustrates the possible effect of using the straight line depreciation method (adopted by Egypt and Britain) on the information generated in the public enterprises' accounts. The extent to which this method could affect:

- (a) assessment of the management efficiency of the company
- (b) the public understanding of financial results achieved in these companies

will also be discussed.

The effect of the straight line method will be illustrated through the following hypothetical example:

- (1) The capital cost of an asset allocated to a public enterprise is £5,000 with £1,000 residual value at the end of five years.
- (2) It is assumed that the depreciation fund is invested at 8% p.a.
- (3) The reported rate of return on the total investment in this public

company in the case where:

(a) allowance is made for a residual value of the asset

(b) no allowance is permitted for any residual value

can be shown from Tables (9.4) and (9.5) as follows:

TABLE (9.4)

The Effect of the Straight-Line Method of Depreciation on the
Rate of Return Earned, with a Residual Value of the Asset

	Year					
	1	2	3	4	5	6
(1) Total Capital invested at the beginning of the Year	5000	5000	5000	5000	5000	
(2) Value of machine at the beginning of Year	5000	4200	3400	2600	1800	1000
(3) Investment in securities at the beginning of Year	-0-	800	1600	2400	3200	
(4) Operating income less operating expenses other than depreciation	1250	1250	1250	1250	1250	
(5) Depreciation	800	800	800	800	800	
(6) Net operating income	450	450	450	450	450	
(7) Interest on securities	-0-	64	128	192	256	
(8) Total Income	<u>450</u>	<u>514</u>	<u>578</u>	<u>642</u>	<u>706</u>	
(9) Reported rate of return on total investment	9%	10%	11.5%	12.8%	14%	

TABLE (9.5)

The Effect of Straight-Line Method of Depreciation on the Rate of Return
Earned - without Considering a Residual Value of the Asset

	Year				
	1	2	3	4	5
(1) Total Capital invested at the beginning of the year	5000	5000	5000	5000	5000
(2) Value of machine at beginning of year	5000	4000	3000	2000	1000
(3) Investment in Securities at beginning of Year	-0-	1000	2000	3000	4000
(4) Operating income less operating expenses other than depreciation	1250	1250	1250	1250	1250
(5) Depreciation	1000	1000	1000	1000	1000
(6) Net Operating income	250	250	250	250	250
(7) Interest on Securities	-0-	80	160	240	320
(8) Total income	<u>250</u>	<u>330</u>	<u>410</u>	<u>490</u>	<u>570</u>
(9) Reported rate of return on total investment	5%	6.6%	8%	9.8%	11.4%

Source: Derived mainly from Table (5) in: Hendriksen, Eldon S., "Accounting Theory", revised edition, Richard D. Irwin, Inc., Homewood, Illinois, 1970, p.407

From the above tables, the following should be noted:

- (1) revenues and operating costs are assumed to be constant
- (2) the total reported income is assumed to be withdrawn each year
- (3) the interest factor or the cost of capital used in the public enterprise is ignored
- (4) reported rates of return in both tables give an illusion of an upward trend in the income of this public enterprise, while the rate of return would drop back to 9% in the case of Table (9.4) and to 5% in the case of Table (9.5) in the six year, but only if the asset is replaced at the same cost, other things being equal.

If the sponsoring Minister uses this reported rate of return for future projections or as a basis for comparisons erroneous conclusions may be reached. The public also may be misinformed if these rates of return are used to assess the efficiency of the nationalised industries in performing their function.

It may be concluded that the straight line method of depreciation helps to generate misleading information for both the sponsoring Minister and the public. It gives the appearance of a rising rate of return on total invested capital. This information may be obscure instead of illuminating the critical issues. Careful consideration, it is suggested, should be given to those

industries which publish summary of financial results over 5 or 10 years in assessing their affairs and management efficiency as well.

(7) Lack of uniformity in costing systems:

To compare the performance of two or more public enterprises (or nationalised industries), it is necessary to base the comparison on data prepared on a uniform basis, provided they are working in the same industry.

In Egypt all public enterprises produce their financial statements on two bases:

(a) what is termed "generally accepted accounting principles"

(b) the regulations laid down in the System of Unified Accounts.

The latter basis was much concerned with the uniform framework of the financial accounting statements. The costing system which is as important as the financial accounting system has not received sufficient attention by the SUA. Out of the 800 pages of the SUA manual, only 10 pages (pp.119-128) are devoted to elementary definitions of the costing system. The only two cost accounting items mentioned in the manual were depreciation (including rates and method) and inventory valuation. In fact the whole manual was basically concerned with balance sheet accounts and operating and revenue accounts (i.e. accounts 1-4 as illustrated in Table 9.1). The other aspects of accounts 5-9 (analysis of uses of resources) as shown in Table 9.1 seem to have been left to be determined by each enterprise. In fact these other aspects could have a great effect on the items disseminated in the financial accounting statements of the enterprise. If the System of Unified Accounts in Egypt has excluded rules and recommendations concerning costing systems,

one may assume that the system has authorised several different treatments of important transactions. The following transactions, for example, could be subject to different treatments:

- (a) operating costs (direct/indirect)
- (b) allocation of costs to service centres and production centres
- (c) method of allocating costs of service centres into production centres
- (d) transfer pricing in a divisionalised enterprise
- (e) research and development expenses.

The consequences of this is that two similar public enterprises, for example, may report their financial results in accordance with both the SUA and the "accepted accounting principles" - and yet compile their data quite differently.

The British nationalised industries' accounts that were examined have been prepared in accordance with the recommended accounting practices and the Companies Acts of 1948 and 1967, with directions made, from time to time, by the Secretary of State for the particular industry, and under the authority of the appropriate Acts by which they have been established.

Examination of these accounts revealed that not only are their final accounts not presented in a uniform basis but they also differ in their treatment of certain important accounting items. The following examples of their costing systems support this argument:

(1) Depreciation policy: The depreciation policy varies from one industry to another. Some industries calculated their depreciation on the original cost of the assets, examples of these industries are: British Steel Corporation, Central Electricity Generating Board, British Railways Board, and National Coal Board. But other industries, in addition to normal depreciation provided on the historical cost of fixed assets, are charging supplementary depreciation to the profit and loss account to bring the annual depreciation charge into line with replacement costs. Examples of these industries are: British Airways, British Airports Authority, and the Post Office.

(2) Obsolescence provision: There is no unified approach in respect of this item between the British nationalised industries examined in this chapter. Some nationalised industries made provision for obsolescence each year against the probability of changes in technology and changing requirements, as far as fixed assets are concerned. Examples of these industries are the British Airports Authority and British Railways Board. While some other industries do consider this provision in respect of only stocks and material awaiting installation, but no provision for obsolescence is made, or even mentioned in their accounts, in respect of fixed assets. Examples of these industries are: British Gas Corporation, Post Office, British Steel Corporation, National Coal Board, Central Electricity Generating Board and the British Gas Corporation.

(3) Research and development expenditure: The treatment of research and development expenditure also varies between the British nationalised industries examined. Some industries wholly wrote off this expenditure in the year in which it was incurred. Examples of these industries are: National Coal Board, British Gas Corporations, British Railways Board, and the Post Office. While some other industries distinguished between

expenditure on fixed assets used for research and development and other research and development expenditure, the former expenditure is written off over the expected useful life of the relevant asset while the latter is charged to profit and loss account as incurred. Examples of these industries are: British Airways, British Steel Corporation, and Central Electricity Generating Board. Still other industries do not mention any treatment of this expenditure in their annual report and accounts. An example here is the British Airports Authority.

(4) Residual value of an asset: Some British industries take into account the residual value of the assets when considering their depreciation rates, while others do not consider any residual value of the asset. Examples of industries in the first category are British Airways and the Post Office (in the case of certain assets). Further no allowance is made for any residual value for the purpose of depreciation by the Central Electricity Generating Board. The other nationalised industries (British Gas, British Railways, British Airports Authority, British Steel Corporation, and the National Coal Board) also do not clearly identify their accounting policies in respect of the residual value of the assets when calculating their depreciation.

One of the deficiencies to be faced is that the different treatment of some of the important accounting items either by the Egyptian public enterprises or the British nationalised industries examined may limit the value of reported information for the purpose of comparison.

One of the greatest challenges to accounting systems in government enterprises is to provide information to help the sponsoring minister to evaluate effectively the utilisation of resources available to the enterprises for accomplishing the assigned objectives.

To make assessments of public corporations' performances, improvements, trends or other inter-period comparisons, it may be essential for the State (through various ministers) to relate present with past results or performances and with the results of similar corporation (or industry) either in the public or in the private concerns.

These comparisons are essential to aid the sponsoring minister in a better understanding and analysis of the concept of accountability* of the public corporations. But, the different treatments of cost accounting items currently in operation in these public undertakings in both Egypt and Britain are influencing the financial results achieved.

It would have been hoped that the Committee of the System of Unified Accounts in Egypt could have devoted more efforts to design a general framework for determining the uniform treatment of cost accounting items** other than depreciation and inventory valuation.

* The report of the Committee on Concepts of Accounting Applicable to the Public Sector has broken down the concept of accountability into four parts as follows (9, p.81):

- (1) Accountability for financial resources
- (2) Accountability for faithful compliance or adherence to legal requirements and administrative policies
- (3) Accountability for efficiency and economy in operations
- (4) Accountability for the results of government programmes and activities, as reflected in accomplishments, benefits and effectiveness.

** Because the accounting function is controlled by the management of the enterprise and the lack of uniform rules in the costing system, peculiar results in certain cases can be produced. The cost items discussed above can be easily subject to the manipulation when desired results need to be achieved. The auditor's responsibility in this context is to express his opinion on the "fairness" of the accounting statements. Experience showed that the "fairness" of this representation has not worked well in practice. Many companies collapsed because of financial difficulties which has not been mentioned in the auditor's report.

9.5 Summary and Conclusion:

This chapter was basically concerned with assessing the limitations of the Egyptian public enterprises' accounts in comparison with the objectives set for them by the Egyptian government and also in comparison with the accounting practice of eight nationalised industries in the U.K.

The main features of the Unified System of Accounts in Egypt, compulsory for all public enterprises, except banks and insurance companies, were outlined. The major objectives set out for this system by the Egyptian government were:

- (a) to measure the efficiency of the public enterprises
- (b) to provide basic data for planning, management and control of the national economy
- (c) to link the accounts of the micro economic unit with the information required for national accounting purposes.

The comparison between the Egyptian public enterprises' accounts and those of the British nationalised industries revealed that the Egyptian system of public enterprises' accounts would appear to provide a wider scope and clarity of information than their British counterpart for the following reasons:

- (a) their uniform form of published accounts and statements
- (b) the provision of information relevant for national income accounts and the sector balance sheet

- (c) the provision of almost all the company's financial affairs in the main body of its financial accounting statements, thus eliminating the supplementary information presented in notes and schedules to the accounts.

Despite the importance which has been placed by the Egyptian government on the accounts of the public companies sector in fulfilling the objectives set for them in economic management, they fail to convey to the government, including the compiler of national accounting statistics, a message which is both clear and relevant to its needs. Examples of the limitations have been outlined and discussed. The current deficiencies of the British nationalised industries' accounts were also investigated.

Because the public enterprises' accounts in Egypt vastly influence the entire information systems for the government, reformation and modification of their current structure is due. They need to be developed to incorporate more basic and relevant information to serve their designed objectives adequately. The following chapter attempts to suggest the required modifications to these accounts.

Chapter TenProposed Modifications to the Financial
Accounting Statements of the Egyptian Public Enterprises10.1 Introduction:

The object of this chapter is to investigate the hypothesis that modifications should be made to the present form of the financial statements of the Egyptian public enterprises in order to provide greater assistance to the government in performing its functions, including the compilation of national accounting statistics.

It has been argued by the U.N. (193, p.67) that figures representing national economic accounts are meaningless so long as their basic statistics are characterised by serious gaps and shortcomings. Improving the primary statistics has been considered by the UN to be more useful than carrying out operations on the basis of deficient and inaccurate data. Similarly, Blades and Marczewski, (29, p.89) reached the conclusion that the unsatisfactory status of national accounting in the developing world will not be improved by continuing to use existing data sources. They further comment that the only solution for solving the current problems is by improving the primary sources of data.

The importance of the companies sector in the economy has recently stimulated research and debates concerning suggestions to improve the objectives of their financial statements in order to serve more adequately the needs of the users. Most of the efforts made in this direction* have

* see, for example, references (184), (39), (137), (59), (51), (12), (36) and (152)

a pragmatic business orientation, serving primarily the requirements of private users (e.g. the shareholders, private investigators and creditors). No special considerations, for example, have been given by those concerned to specifying particular classifications in the financial reports of companies to serve national accounting construction.

Furthermore, the SUA in Egypt, though it was purposely designed to accommodate part of the information needed for national accounts, seems to have been set up in such a manner that specific classifications have been overlooked.

10.2 The Proposed Modifications to the Current Accounting Models of an Egyptian Public Enterprise:

The purpose of this section is to propose certain modifications in the current accounting models of the Egyptian public enterprises in order to remedy the basic serious flaws in their current form.

Proposals for improving the final accounts of companies, in general, for external users have become a standard feature of the current accounting literature.

Furthermore, despite the efforts made by the Committee of the System of Unified Accounts in Egypt to ensure a link between the financial statements of public enterprises and those of national accounting statistics, the balance sheets of these enterprises are still lacking other classifications that are useful for the sector balance sheet.

The suggested modifications will only be discussed with respect to the following financial statements:

- (a) the balance sheet
- (b) production and trading account
- (c) profit and loss account

for the very reason that these accounting statements are still lacking certain classifications which have potential uses for government needs.

The proposed modifications in these statements will consider that they should be:

- (a) not radically different from those used by the Egyptian public enterprises at present
- (b) provide the government with effective and first hand accounting information
- (c) provide data relevant for the compilation of the balance sheet of the non-financial enterprises sector.

In other words, the proposed modifications in the form and content of these accounting statements are evolutionary rather than revolutionary. That is the modifications will be based on the present accounting models of the Egyptian public enterprises together with their accounting coding system but with added details, reclassifications of certain items and a new accounting statement, namely, "Cost of Social Benefits and Reconciliation of Profit Statement". Most of these modifications could be considered relevant for government needs.

Before discussing the proposed modifications, certain assumptions need to be made. These are:

- (a) competition between economic units within the public enterprises sector does not exist
- (b) taxation is ignored
- (c) exemption will be permitted for those companies whose information needs to be kept confidential for security reasons.

The proposed modifications in each of the accounting statements mentioned above are discussed as follows:

The Balance Sheet:

In the previous discussion references have been made to the importance of the balance sheet of the economic unit as a main source of information for compiling the balance sheet of the non-financial enterprises, corporate and quasi-corporate sector. It has been suggested that the balance sheet of a business firm could provide valuable information for the construction of the former balance sheet system, subject to:

- (a) reformation of its structure to remedy serious flaws in its present form
- (b) consideration of some essential requirements of the system of sector balance sheets
- (c) practicability and acceptability of the modified form to the

management of the enterprise.

The suggested modifications and reclassifications of the balance sheet items together with its supplementary notes are shown in Table (10.1).

Table (10.1)
A Proposed Modified Version of the Balance
Sheet of an Egyptian Public Company

ASSETS

Previous Year Figures	Uniform Accounts No.		£E	£E	£E
	11	<u>Fixed Assets</u>			
		Land		xx	
	111	<u>Bldg. Construction and Roads</u>			
*	1121	Residential Buildings	xx		
*	1122	Non-Residential Buildings	xx		
*	1123	Roads and Other Constructions Work	xx	xx	
	113	Machinery and Equipment		xx	
	114	Transport Equipment		xx	
	115	Tools		xx	
	116	Furniture and Office Equipment		xx	
	117	Livestock and Fisheries		xx	
	118	Deferred Revenue Expenditure		xx	
		Total of Fixed Assets			xxx
	12	<u>Projects in Progress</u>			
	121	Commodities Formation		xx	
	122	Investment Expenditure		xx	
	13	<u>Stocks</u>			
*	131	(a) <u>Materials and Supplies</u>			
	1311	Raw Materials	xx		
	1312	Fuels	xx		xx

(continued)

Table (10.1)
(continued)

	1313	Accessories	xx		
	1314	Factory Packing	xx	xx	
	132	(b) <u>Work in Progress</u>			
*	1321	Partially Processed	xx		
*	1322	Partially Completed	xx	xx	
*	133	(c) <u>Finished Goods</u>			
	1331	Finished Goods	xx		
	1332	Commodities held with others	xx		
	1333	Goods for Sales Purposes	xx	xx	
		Total of Stocks			xxx
	14	<u>Long-Term Loans</u>			
	141	Long-Term Loans - National	xx		
	142	Long-Term Loans - Foreign	xx	xx	
	15	<u>Financial Investments</u>			
	151	Government Bonds	xx		
	152	Corporate Equities - National	xx		
	153	Corporate Equities - Foreign	xx	xx	
	16	<u>Trade Credit</u>			
	161	Debtors:			
*	1611	National	xx		
*	1612	Foreign	xx		
	162	Commercial Papers:			
*	1621	<u>Bills and Bonds - Short-Term:</u>			
*	16211	National	xx		

(continued)

Table (10.1)
(continued)

*	16212	Foreign	xx	xx		
*	1622	<u>Bills and Bonds Long-Term:</u>				
*	16221	National	xx			
*	16222	Foreign	xx	xx		
	163	Various Accounts Receivable		xx	xx	
	17	<u>Other Accounts Receivable</u>				
	171	Different Account Receivable, n.e.c.:				
*	1711	National		xx		
*	1712	Foreign		xx		
	172	Other		xx		
	173	Current Revenue Due		xx	xxx	
*	18	<u>Currency and Transferable Deposits:</u>				
	181	Cash:				
*	1811	National Currency		xx		
*	1822	Foreign Currency		xx		
	182	Bank Current Account:				
*	1821	National		xx		
*	1822	Foreign		xx		
	183	Bank Deposit Account:				
*	1831	National		xx		
*	1832	Foreign		xx	xxx	
	228	Deficit C/F		xx	xx	
						xxx

(continued)

Table (10.1)
(continued)

LIABILITIES

Previous Year Figures	Uniform Accounts No.		£E	£E	£E
	21	<u>Capital</u>			
	211	Authorised Capital	xx		
	212	Government Contribution	xx	xx	
	22	<u>Reserves and Surplus C/F</u>			
	221	Legal Reserve	xx		
	222	Reserve Invested in Government Bonds	xx		
		Reserve for Financing Investment			
	223	Projects, Renewal and Expansion	xx		
	224	General Reserve	xx		
	225	Reserve to Pay Government Contribution	xx		
	226	Reserve for Increase in Assets Prices	xx		
	227	Other Reserves	xx		
	228	Surplus C/F	xx	xxx	
	23	<u>Provisions</u>			
	231	Provision for Depreciation	xx		
	232	Provision for Disputed Taxes	xx		
	233	Provision for Doubtful Debts	xx		
	234	Other Provisions	xx	xx	
	24	<u>Long-Term Loans</u>			
	241	Long-Term Loans - National	xx		
	242	Long-Term Loans - Foreign	xx	xx	

(continued)

Table (10.1)
(continued)

	25	<u>Creditor Bank</u>			
	251	Overdraft:			
*	2511	National Banks	xx		
*	2512	Foreign Banks	xx		
	252	Short-Term Secured Loans:			
*	2521	National Banks	xx		
*	2522	Foreign Banks	xx		
	253	Current Account (for Import/ Export Purposes):			
*	2531	National Banks	xx		
*	2532	Foreign Banks	xx	xx	
	26	<u>Trade Advances</u>			
	261	Creditors:			
*	2611	National	xx		
*	2612	Foreign	xx		
	262	<u>Commercial Papers</u>			
*	2621	Bills and Bonds - Short-Term:			
*	26211	National	xx		
*	26212	Foreign	xx	xx	
*	2622	Bills and Bonds - Long-Term:			
*	26221	National	xx		
*	26222	Foreign	xx	xx	
	263	Various Accounts Payable	xx	xxx	
	27	<u>Other Accounts Payable</u>			
	272	Different Accounts Payable, n.e.c.:			

(continued)

Table (10.1)
(continued)

*	2721	National	xx		
*	2722	Foreign	xx		
	273	Other	xx		
	274	Current Expenses Due	xx	xx	
					xxx

* indicates the suggested modifications in the balance sheet

Suggested Supplementary Notes to Balance Sheet Items

Fixed Assets:

Note (1)

For each type of fixed assets the following information should be disseminated:

(1.1) Details relating to historical cost:

- (a) year of purchase
- (b) new or secondhand acquisitions
- (c) depreciation rate
- (d) expected life of each asset
- (e) disposal and/or reclassification.

(1.2) Leased and/or owned fixed assets

(1.3) Current market value

(1.4) Replacement cost

(1.5) Insured value

(continued)

Financial Assets and Liabilities:

Note (2)

The category of bills and bonds (assets/liabilities) should be sub-divided according to:

- (a) resident corporations
- (b) central government
- (c) local government
- (d) overseas sector.

In addition, long-term bonds should be classified according to whether they are:

- (a) quoted on the Stock Exchange
- (b) unquoted on the Stock Exchange.

They should also be sub-divided according to their maturity i.e.:

- (a) less than one year
- (b) one year or more

From the above suggested modifications in the balance sheet of an Egyptian public enterprise and the proposed supplementary notes the following conclusions may be reached:

- (1) The coding system of the uniform accounts has been retained in the modified version.
- (2) The main amendments that have been incorporated in the balance sheet can be identified as follows:
 - (a) Uniform Account No. 112 (Buildings, Construction and Roads) has been classified into its major components and residential buildings has been segregated from non-residential buildings.
 - (b) Uniform Account No. 131 (Materials and Supplies) is introduced to sum up the different types of materials and supplies into one figure.
 - (c) Uniform Account No. 132 (Work in Progress) is divided into partially processed* and partially completed**.
 - (d) Uniform Account No. 133 (Finished Goods) is introduced to sum up the different types of finished goods into one figure.
 - (e) Uniform Account No. 161 (Debtors) has been divided into National and Foreign.
 - (f) Unified Account No. 162 (Commercial Papers) has been re-classified into two sub-accounts, i.e. account no. 1621 (Bills and Bonds -

* Less than 50% completed

** More than 50% completed

short term) and account no. 1622 (Bills and Bonds - long term). Each has been sub-divided into National and Foreign transactions.

(g) Unified Account No. 171 (Different Account Receivable n.e.c.) has been divided into National and Foreign debtors.

(h) Unified Account No. 18 (Currency and Transferable Deposits) has been disaggregated into its three major components:

(i) Cash

(ii) Bank current accounts

(iii) Bank deposit accounts

as recommended in the System of Unified Accounts in Egypt. Also cash should be categorised into that held in the National or Foreign currencies. While the latter two accounts (i.e. nos. 182 and 183) are also categorised into Foreign and National accounts.

(j) No amendments are introduced in Unified Accounts Nos. 21 (Capital), 22 (Reserves and Surplus C/F), 23 (Provisions) and 24 (Long-Term Loans).

(k) Uniform Accounts Nos. 251, 252 and 253 have been disaggregated into National and Foreign Bank transactions. Account 261 is also sub-divided between National and Foreign creditors.

(m) Uniform Account No. 262 (Commercial Papers) is similarly sub-divided as account 162 as shown above.

- (n) Uniform Account No. 272 (Different Accounts Payable, n.e.c.)
is sub-divided into National and Foreign.

(3) The main character and headings of the balance sheet currently in operation have been retained in the modified version. It follows that the present suggested balance sheet is neither radically different from those used by the Egyptian public enterprises nor does it significantly differ from the practices which are prevalent in business accounting of public companies.

(4) Detailed information in respect of fixed assets and financial assets and liabilities which is not practicable in the main body of the balance sheet has been presented in a supplementary statement. The types of data suggested in this statement together with the reclassification scheme proposed in the revised version of the balance sheet would be of value not only as first hand and effective information to government but would also benefit the compiler of the balance sheet of the non-financial enterprises, corporate and quai corporate sector. It should be noted that detailed information in respect of additions to the different types of fixed assets or financial assets/liabilities was not included in the supplementary statement to the balance sheet. Because this information can be obtained from the Sources and Uses of Capital Statement of the Company which is purposely designed to furnish this type of data.

(5) A basic part of the suggested modifications is incorporated in the main body of balance sheet. This is primarily to be in harmony with the main character of the SUA in Egypt and to reduce the amount of information disseminated in the supplementary statements which may have:

- (a) less impact on the users of the accounting information, including

the government

(b) practical disadvantages in terms of (117, p.79):

(i) duplication of work

(ii) omissions and human errors.

It is hoped that the suggested modifications mentioned above would:

- (a) remedy a major part of the serious flaws currently in operation in the balance sheet of the Egyptian public companies
- (b) provide the government with sufficient and effective first hand information relevant for its decision/policy making needs. Thus it may help to reduce any likely effect on the quality of this information caused by controlling and data collection agencies.
- (c) provide an important part of the information needed for the compilation of the balance sheet and the non-financial enterprises sector
- (d) overcome the problems associated with the indirect approach in the compilation of sector and national balance sheets.

The Production and Trading Account:

As indicated earlier* the flow of financial information in the Unified Accounts of the Egyptian public enterprises is designed not only

* see Chapter 9, Section 9.2

to serve the decision making processes (of either the management of the enterprise or the government), but ultimately also to provide information relevant for the construction of national accounting statistics. So the final accounts of the enterprises are intended to achieve these goals. One of the most significant developments in the financial statement of these public enterprises was the use of the accounting data by the government to assess the quality of financial management of the enterprises. One of the major ways of assessing this quality is to evaluate the profitability of the normal operations of the enterprise.

The ability of the final accounts to aid the government including the compiler of national accounting statistics, is, as yet, not as helpful as it could be as has been discussed in the previous chapter*. In order to overcome this deficiency it is suggested that the following modifications be made to the current accounting framework of the Production and Trading Account of an Egyptian public enterprise:

* see section 9.4, sub-sections (2) and (4)

Table (10.2)
Proposed Modifications to Certain Items
In the Production and Trading Account of
An Egyptian Public Enterprise

Previous Year Figures	Uniform Accounts No.		£E	£E
	53	<u>Cost of Production</u>		
		...		
	532	Raw materials and supplies used:		
	5321	National	xx	
	5322	Imported	xx	
				xx
		...		
		...		
	63	<u>Services Production Centres</u>		
		...		
	631	Raw materials and supplies used:		
	6311	National	xx	
	6312	Imported	xx	
				xx
		...		
		...		xxx
				xxx
		Cost of Production (B/F)		xx
	534	<u>Finished Goods Purchased for Sale</u>		
	5341	National	xx	
	5342	Imported	xx	
			xx	

(continued)

Table (10.2)
(continued)

		...		
		...		
	73	<u>Costs of Marketing Centres</u>		
		...		
	731	<u>Raw materials and supplies used</u>		
	7311	National	xx	
	7312	Imported	xx	
				xx
		...		
		...		
	41	<u>Revenue of the Current Activity</u>		
	411	Net sales of finished goods:		
	4111	National	xx	
	4112	Export	xx	
				xx
		Finished goods purchased for sale		
	4181	Net Sale:		
	41811	National	xx	
	41812	Export	xx	
				xx
		...		
		...		
				xx
				xxx

The main reason for incorporating the above modifications is to extend further the Production and Trading Account in order to encompass data relating to export and import. The disclosure of import and export figures in company financial reports is now an accepted practice in some developed economies such as Britain.

Furthermore, four accounts should not be incorporated and mixed with the normal production and operating transactions of the enterprise. These accounts are:

(a) Operational revenue to external parties (Uniform Account No. 416)

The SUA defined this account as the revenues received from other parties on work occasionally carried out for them on materials or finished products not owned by the company.

(b) Services Sold (Uniform Account No. 417)

This account includes revenues from services occasionally provided by the company to others.

(c) Production Subsidies (Uniform Account No. 421)

This account includes subsidies granted by the State to some enterprises to aid them to continue operating

(d) Export Subsidies (Uniform Account No. 422)

The State grants these subsidies to certain companies in order to enable them to compete with foreign products at the international markets level.

In some companies, the revenues included in these accounts are derived from events normally outside their ordinary activity and are of

a non-recurring nature. Incorporating these types of revenues in the Production and Trading Account would influence its gross production and trading profit/loss and consequently mask the productive efforts of the normal operations of the company. This information is useful for the government in order to assess the operational results of the management against their assigned objectives.

It is therefore suggested that these types of accounts should not be inter-mixed with the normal operations* of the company, rather they should be presented after arriving at the gross production and trading profit of the ordinary activity of the company.

The main advantages of the proposed modifications to the Production and Trade Account of an Egyptian public enterprise are as follows:

- (1) The government can determine which companies, or even sectors, are contributing toward the Balance of Payments surpluses or deficits in that the import/export performances are readily available.
- (2) The elimination of "non recurring" profits and losses will allow the government, and investors, to fully evaluate the normal operational performance of the management of the company.
- (3) The basic coding system of the financial accounts is not significantly altered. All that is required is that specific items are disaggregated into import/export and National classes.

* It should be clear that if the ordinary activity of a company includes the performing of these types of activity identified in accounts 416 and 417, they can be incorporated in its Production and Trading Account.

(4) The data could prove useful for the compiler of national accounts in that another reliable data source, that may be useful for either cross checking or as a basic input for his accounts, is available.

The Profit and Loss Account:

The government as well as investors are likely to look directly at and make greater use of the reported profit of a company as compared with other types of accounting information. The reported profit may be considered as one of the basic criteria relevant for both investors in making their investment decisions and the government in assessing the quality of financial management of a company.

But as mentioned in the previous chapter, one of the main deficiencies of the System of Uniform Accounts in Egypt is the inability to segregate the profits which have resulted from the normal operations of an enterprise and those derived from extraordinary items. A consequence of this deficiency is that the profit and loss accounts of the Egyptian public enterprises are characterised by inadequate disclosure of the profitability of the normal operations of the companies. Examples of some extraordinary items which are included in the current practice of Profit and Loss Account in the Unified System of Accounts in Egypt were mentioned in the previous chapter*. These items have been recommended (either by the professional accounting bodies** or in the current literature*** of accounting) to be excluded from the ordinary activities of the business and consequently from the profit and loss account.

* see section 9.4, sub-section (2)

** see, for example, reference (184, p.30)

***see, for example, reference (69, p.191)

In order to overcome this deficiency it is proposed to re-design the current form of the Profit and Loss Account of the SUA as follows:

Table (10.3)

The Proposed Modified Version of the Profit and
Loss Account of an Egyptian Public Enterprise

Previous Year Figures	Uniform Accounts No.		£E	£E	£E
		Gross Production & Trading Profit			xxx
	43	Share of Profits of Associated Companies (interests of shares and government bonds)	xx		
	44	<u>Transferred Revenues</u>			
	441	Interest earned	xx		
	444	Prior years' revenues	xx		
	445	Fines (penalty payments) received	xx		
		<u>Other Revenues</u>			
	4462	Discount earned	xx		
	4463	Returned bad debts	xx		
	4465	Commissions	xx		
	447	Differences between assumed rents for depreciable assets and their depreciation	xx		
	448	Difference in interest	xx		
				xx	xx
		Total Revenues Derived from the Normal Operations of the Company			xxx
	83	<u>Administrative & Financing Expenses</u>			
	831	Labour Return			
	8311	Wages	xx		
	8312	Salaries	xx		
			xx		

(continued)

Table (10.3)
(continued)

	832	Raw materials and supplies used	xx		
	833	Services acquired	xx		
	835	Current transferred expenses	xx	xx	
	36	<u>Current Transfer</u>			
	361	Gifts	xx		
	362	Contributions to others	xx		
	363	Fines (penalty payments)	xx		
	365	Prior years' expenses	xx		
	366	Bad debts	xx		
	367	Provisions	xx	xx	
		Total Expenses of the Normal Operations of the Company			-xx
		Profits of the Normal Operations			xxx
		<u>Extraordinary Revenues</u>			
	442	Rents earned	xx		
	443	Capital profits	xx		
	4461	Sales of scrap	xx		
	4454	Profits from sales of raw materials	xx		
		Total of Extraordinary Revenues		xx	
		<u>Extraordinary Expenses</u>			
	364	Capital Loss	xx		
		...			
		Total of Extraordinary Expenses		-xx	
		Profits from Extraordinary Items			xx
		Profit for the period			xxx

From the above Table the following conclusions could be reached:

- (1) Transferred and other revenues included only those items which usually related to the normal operations of a company and as identified in the SUA.
- (2) Labour return has been divided into Wages and Salaries
- (3) Administrative and financing expenses together with current expenses only include those items of a recurring nature of the company's business.
- (4) The profits of the normal operations of the company have been clearly identified in the proposed modified version of profit and loss accounts of the SUA.
- (5) Extraordinary items (revenues and expenses) together with extraordinary profits have been shown separately in the account.
- (6) The table includes the same coding system of accounts as currently used in the profit and loss account of the SUA. Thus the modified version of the account does not radically differ from that currently in operation.
- (7) The account provides the government with readily assimilable information necessary to assess the management of the enterprise.

Cost of Social Benefits and Reconciliation of Profit Statement:

As indicated earlier* the mixture of social and commercial objectives

* see Chapter 9, section 9.4, sub-section (3)

of public enterprises which is currently practiced in both Egypt and Britain, together with the government intervention on pricing policies, may limit their ability to achieve their financial objectives.

A public enterprise is normally judged by the following factors:

- (a) a satisfactory return in commercial terms
- (b) its statutory obligation to meet social costs
- (c) its work in conformity with government policies.

To use one of these factors as a criterion to appreciate the performance and efficiency of the management of the enterprise may not be considered relevant. Because conformity with government policies or with social responsibilities of the enterprise may prevent it from either achieving its financial objectives or making decisions on purely commercial grounds.

It is, therefore, suggested that a public enterprise should provide a new statement with its report and accounts in which it shows the scope of its contribution to social obligations. This statement might be termed as "Cost of Social Benefits and Reconciliation of Profit Statement". Table (10.4) shows a possible structure of this statement.

Table (10.4)
Cost of Social Benefits and
Reconciliation of Profit Statement

	Egyptian Pounds	Egyptian Pounds
Operating Profits		xxx
<u>Social Welfare Contributions</u>		
Housing	xx	
Nursing	xx	
Medical Services	xx	
Food Services	xx	
...	xx	
	<hr/>	xx
Losses Resulting from Price Policy Restraint	xx	
- Compensation for Price Restraint	- xx	
	<hr/>	xx
Company's Profits for the Period		<hr/> xxx <hr/>

The information disseminated in the above statement would benefit not only the government but also the employees.

The government may use this information in appraising the investment in certain public enterprises not only in economic terms but also in terms of social costs and benefits. The government can also use the company's profits for the period, shown at the end of the statement, as one of the criteria by which the efficiency of public enterprises may be judged. It can also be used as an indicator of their success or failure particularly if compared with similar industries either in public or private ownership. Because of the growing public interest in the social responsibilities of the company, the government may review its subsidy or compensation policies in the light of the informational content of the above statement. The greater the company's contribution to social, economic and developmental spheres, the more likely it is that the government will increase its subsidy to the company concerned.

Employees may also use this type of statement to assess the extent to which the company is contributing to their social welfare as compared with other companies. And whether the company's management are allocating a fair and reasonable share of the profits to social and developmental contributions.

The question which remains to be answered, however, is to what extent does the proposed modified version of the final accounts of an Egyptian public enterprise differ from those models used by private and public business companies in developed economies. The answer to this question is discussed in the following section.

10.3 Differences Between the Modified Accounting Statements and those Used by Selected Developed Economies:

Some of the accounting items proposed in the modified version of the final accounts and balance sheet of an Egyptian public enterprise will be used as bases to examine the extent to which they differ from those published in the companies' report and accounts in certain developed economies.

The selected accounting items that will be used as the criteria are as follows:

- (a) The presentation of fixed assets in a detailed and homogeneous classification in the balance sheet.
- (b) The division of stocks into their major components in the balance sheet.
- (c) The classification of loans and financial investments into national and foreign transactions.
- (d) Division of trade credit/advances (Debtors/Creditors, Bills and Bonds) into national/foreign and short term/long term classifications.
- (e) Division of Currency and Transferable Deposits and Creditors Banks into national/foreign currencies and into national/foreign banks accounts.
- (f) Detailed information on fixed assets as proposed in the

supplementary notes to the balance sheet.

- (g) Division of sales into national and export
- (h) Division of the basic production and trading inputs into national and imported goods
- (j) Division of labour return into wages and salaries
- (k) Cost of social benefits and reconciliation of profit statement.

These accounting items together with the latter statement will be tested against the published accounting models of the following countries*:

- (a) Britain (the financial accounting statements of a public** and a private enterprise***)
- (b) Sweden

-
- * The main source of the accounting models of the companies in the last five countries is: Committee on International Accounting, "Report of the American Accounting Association Committee on International Accounting : 1974-75, The Accounting Review, supplementary to Vol. XLXI, 1976, pp.70-196.
 - ** The Report and Accounts of the National Coal Board is arbitrarily selected for the purpose of comparison. Source of these accounts is: National Coal Board, "Report and Accounts 1973/74", NCB.
 - *** Defined as non-government owned company and non-quoted operating in the private sector. Appendix 17 shows a model of accounting statements of a private British company.

(c) Netherlands

(d) Germany (financial statements of a public company)

(e) Switzerland

(f) France.

The selection of these developed countries is based on three important factors:

- (a) the availability of their financial accounting models
- (b) that the annual reports and accounts of the companies examined have been regarded by the "Report of the American Accounting Association Committee on International Accounting" as models representing the national accounting principles and practices of the country concerned, (7, pp.70-71)
- (c) the accounting systems of these countries are likely to be more advanced than those in developing economies.

The extent to which the selected accounting items mentioned above differ from those generally practiced in the companies of the developed countries studied is illustrated in Tables (10.5) below:

Table (10.5)
The Availability of Selected Accounting Items in
the Accounting Models of Certain Countries

Selected Accounting Items	Britain		Sweden	Netherlands	Germany A Public Company	Switzerland	France
	Private	Public					
A	3	3	3	3	1	1	1
B	2	3	2	2	2	2	1
C	2	3	3	3	2	3	3
D	2	2	2	2	2	2	2
E	2	2	2	2	2	2	2
F	2	2	2	3	2	3	2
G	2	3	3	2	3	2	3
H	2	2	2	2	2	2	2
I	2	3	2	2	2	2	2
J	2	2	2	2	2	2	2

Explanatory Notes to the Table:

- (1) The letters A to J represent the selected accounting items mentioned earlier.
- (2) 1 indicates that the company in the country concerned has incorporated the proposed accounting item in the main body of its financial statements.
- (3) 2 indicates that the financial statement of the company in the country concerned does not incorporate explicitly one or more of the selected accounting items.
- (4) 3 indicates that the company in the country concerned presents part of the selected accounting items as a supplementary information in notes to the accounts.

From the above table it may be stated that the selected accounting items which have been proposed to be incorporated in the accounting statements of an Egyptian public company differ from those generally practiced in the countries under consideration. Examples of these differences are:

(1) There is no figure provided for export sales in the main body of the income statement nor is it derivable from the notes on the financial statements in some countries, such as Switzerland, Netherlands and the private company in Britain*. The report and accounts of all companies investigated in the different countries do not disseminate figures related to the value of imported materials and goods used in the production and trading processes.

For Egypt, as could be the case in other developing economies, the import and export activities are important in the economy. The composition of imports and exports in developing economies is different from that of developed countries. The exports in most developing economies, for example, consist mainly of raw materials while their imports are capital equipment and finished and semi-finished industrial materials required for the production processes (136, p.422).

The presentation of information covering the import and export activities, as proposed in the modified version of the financial statements of the public enterprises of Egypt, would have many advantages not only for the compiler of national accounting but also for the government in assessing the performances of the public enterprises. Examples of these advantages have

* In the consolidated profit and loss account of the private company shown in Appendix 12, no information on export sales is available from the account, nor is there an indication of supplying this information from the notes to the accounts.

been mentioned in the previous chapter*.

(2) All the reports and accounts investigated fail to distinguish between wages and salaries in the main body of the accounts. A breakdown of the wages - salaries total into its components could provide useful information to the State. Such information would enable the government to gain adequate insight into a major factor (wages/salaries) in determining the cost structure of operations and the extent to which unusual circumstances** account for profit or loss. It may also help the government to compare and analyse wages/salaries structure between similar companies and over time. The government can obtain this type of information in other ways, but under the present systems of control and data collection in Egypt the quality of this information may not be as accurate as it should.

(3) Cost of Social Benefits and Reconciliation of Profit Statement has not been prepared by any company in the countries studied. Two countries (Germany and Switzerland) identified social benefits to employees in the financial statements of their companies. The companies reports and accounts of the other countries examined do not explicitly show the company's contribution towards social benefits to employees.

(4) Three countries (Germany, Switzerland and France) have disseminated their fixed assets in a detailed and homogeneous group in the main body of their companies' balance sheets. While the companies in the other countries (Netherlands, Sweden and Britain) presented the details in notes to their financial statements.

* see chapter 9, section 9.4

** The unusual circumstances may cover such factors as increase in the prices of raw materials, wage increases and inefficiency in the production process.

(5) The major components of stocks are presented in an aggregated figure in the balance sheet of all companies (with the exception of the French company) in the countries under consideration. The report and accounts of the British public company present the components of stocks in notes to the accounts.

(6) The reports and accounts of all companies investigated do not classify currency and transferable deposits as well as creditors banks into national/foreign currencies and into local/foreign banks' accounts in the main body of their balance sheets.

(7) Division of Trade Credit/Advances into national/foreign and short/long term classifications are also lacking in the companies' accounts which were investigated.

(8) The information on fixed assets which is proposed in a supplementary note to the balance sheet has not been considered in the notes to financial statements of the companies in the different countries which were investigated. Though this type of information may not be regarded as normal in the reports and accounts of companies, its incorporation in the companies' reports would provide the compiler of national accounts with information relevant for the compilation of the balance sheet of non-financial enterprises sector.

From the above discussion, the following conclusions may be reached:

(1) The proposed modifications to the financial statements of an Egyptian public enterprise which include the following:

(a) the Balance Sheet

- (b) the Production and Trading Account
- (c) the Profit and Loss Account
- (d) the Cost of Social Benefits and Reconciliation of Profit Statement

may furnish an effective and useful source of information relevant for the government's needs. This information includes:

- (a) data relevant for the compilation of national accounting statistics including the sector balance sheet
- (b) the company's activity in the field of import and export
- (c) profits of the normal operations of the company compared with profits resulting from extraordinary items. This enables the government to assess the effectiveness and efficiency of the management in utilising the company's resources in fulfilling the assigned targeted.
- (d) the extent and scope of the social and welfare contributions of the company towards its employees and the environment. Thus providing the government with adequate means of calculating the social costs and benefits associated with the company's services in the social arena.

(2) The projected modified version of the financial statements mentioned above does not restrict itself solely to satisfying the basic needs of government, but it also meets the needs of internal management. In other

words the proposed modifications are not significantly different from the SUA's practices which have already been accepted in business accounting in Egypt for all public companies.

(3) The proposed version of the balance sheet and accounts includes a good deal of data, which is normally required from a business company, in the main body of the financial statements rather than in supplementary schedules or notes . The advantages of this are:

- (a) the government can obtain readily accessible information directly from the company's accounts at first hand
- (b) the accuracy of the information obtained directly from the company's accounts may be greater than the same information obtained through monthly or quarterly returns, for when this information is presented it has been subject to both internal and external audit procedures.

(4) The added data in the modified version of the final accounts together with the supplementary notes to the balance sheet, may help to reduce part of the problems facing the Egyptian public companies in respect of the overlapping function of data collection bodies. The suggested categorisation and disclosure of information in the financial statements of these companies may furnish a major part of the information required by some of these bodies. Thus companies may be able to eliminate the duplication of work in preparing similar information more than once and to more than one agency.

10.4 Summary and Conclusion:

It has not been the intention in this chapter to solve all the

deficiencies encountered in the preparation and presentation of the final accounts of the Egyptian public companies. Such an aim would be presumptuous as well as futile. The object was to suggest modifications in the present form of the financial statements of the Egyptian public companies in order to:

- (a) overcome part of their current deficiencies
- (b) provide greater assistance to the government in performing its functions including the compilation of national accounting statistics.

The suggested modifications which have been discussed have the following characteristics and advantages:

- (a) the modifications were mainly in the general accounting framework of the following accounts and statement; viz
 - (i) the Balance Sheet
 - (ii) the Production and Trading Account
 - (iii) the Profit and Loss Account
- (b) a new accounting statement "Cost of Social Benefits and Reconciliation of Profit Statement" has been suggested to be included among the financial accounts
- (c) the Uniform Coding System of Accounts in the SUA in Egypt was retained in the proposed modified version of the financial

statements. This was to ensure:

- (i) that the modified version of accounts does not radically differ from those currently in operation
 - (ii) that the modified version is acceptable in business accounting.
- (d) the re-categorisation and disclosure of financial information relevant for government; particularly in assessing the efficiency of the management and the company's contribution towards both the social welfare and to the balance of payments.
- (e) Specifying in the balance sheet a basic part of the information required for the compilation of the sector balance sheet of the non-financial enterprises sector. The supplementary notes to the balance sheet would provide valuable information on the history of each type of asset currently in use in the company.
- Thus remedying:

- (i) lack of suitable data for the compilation of the sector balance sheet
- (ii) problems associated with statistical inquiries or surveys to collect data for the compilation of the balance sheet of the non-financial enterprises sector.

Because the financial statements of the Egyptian public companies represent a major and important source of information either for the construction of national accounting statistics or for the government in

planning and control of the national economy, it is suggested that their structure could be improved by the above proposed modifications.

Nevertheless one must remember the fact that the government can collect any information it needs from these public companies, but the question of its quality remains under the present systems of control and data collection in Egypt.

CHAPTER ELEVEN

Summary and Conclusions

In the investigation of the uses to which the national accounts have been put, in theory and practice, it has been found that they follow various directions. They are related however by a common purpose - the provision of a framework of organised data to assist in understanding the working of the various sectors of a nation and the explanation of their economic behaviour. Though this data may provide initial insight into the functional relationships between variables, the user of these accounts must apply his own analysis and judgement to achieve his goals.

Their importance has been found to be particularly significant in three major directions: economic analysis, government policy making and international comparability. Their various uses, as advocated by economists, have been reviewed in this study. This thesis has explored the implications of these uses, particularly those of the flow of funds system and national balance sheets, in the light of the needs and circumstances of developing economies.

The necessity of state intervention, as an agent of change, together with the imperfections in their capital market, highlight not only the particular importance of national accounts but also their indispensability in developing nations. The flow of funds accounts and national balance sheets have been found to be of particular assistance to the government in formulating their policies and monitoring their economic development.

The difference between countries in the management of their economy

may affect the scope and uses of national accounting information. This fact has been recognised by the U.N. when they advocated modifications to the SNA to meet the needs of developing countries.

It has been postulated that the national accounts considered in this study are constrained by limitations that could affect the achievement of their designed objectives. It has also been advocated that the indirect approach in the compilation of national balance sheets, as recommended by the U.N., may not be directly relevant to the circumstances of developing nations.

The major limitations which were highlighted by this investigation fall into two categories; common limitations and specific limitations applicable to each account. The common limitations are as follows:

- (a) non-homogeneity of the sector account
- (b) delay in publishing the accounts
- (c) the use of "by-product" information in the compilation of these accounts.

It has been argued that certain principles in the process of data assembly to construct a sector account did not pay sufficient consideration to the concept of homogeneity in respect of specific accounts and tables. This is evident from the supplementary tables of the SNA of 1968, the sector components of the system of national balance sheets as recently drafted by the U.N. and the sectoring of the economy in certain OECD countries for the purpose of flow of funds accounts. In all these the trend was to incorporate non-homogeneous economic units to comprise a

sector account. This practice has been considered as the principal deficiency that may result in the distortion of the informational content of the sector accounts and thus impede the achievement of their designed objectives.

The delay in producing these accounts has also been considered as a deficiency that impair their uses particularly in respect to government policies. The by-product approach used in their construction may yield input values and information that is not the type of phenomenon that the economists are interested in measuring or analysing.

The specific limitations embodied in each type of the national accounts examined in this study are summarised below:

Within the scope of national income accounts they are further constrained by three major deficiencies: inaccuracy of their basic statistics, lack of coverage of stock variables (physical and financial) and detailed transactions in the field of financial assets and liabilities. The scope and the consequences of these limitations on the uses of these accounts are comprehensively discussed in the text of this study.

Two basic problems associated with the compilation of national balance sheets were discussed; these are sectoring the economy and the statistical sources. As far as sectoring the economy is concerned it has been concluded that five important factors have to be considered in any attempt to approach the system of national balance sheets. These are:

- (1) the objectives which balance sheets are compiled to fulfil, i.e. observing the concept of homogeneity of the sector components
- (2) the consistency with national income accounts and flow of funds

system

- (3) the special economic circumstances of the country concerned
- (4) international comparability, and
- (5) the availability of data.

These factors have been tested against the limited experience of Egypt in her attempt to approach the system of national balance sheets. The result revealed that Egypt did not pay sufficient attention either to the objectives of balance sheets or to her special economic circumstances as an agricultural country.

In considering the second problem two statistical sources of information have been discussed, viz, the direct and the indirect approaches. It does not appear that it is possible for the compiler to use either approach exclusively. The discussion revealed that the balance sheet of the microeconomic unit, if it is available, seems to be indispensable in both approaches. It has been concluded that the concept of the balance sheet of the private accounts should, in theory, provide a basic part of the data required for sector balance sheets. Within this context the problems of statistical sources, in respect of certain economic sectors, could largely be resolved by designing a balance sheet package acceptable to business accounting, starting with the various components of the public sector. This new look at a balance sheet package emphasised the need for openness and flexibility from the financial accountants of companies and the professional accounting bodies. The aim is to achieve a balance sheet format that publishes information in such a way as to meet the needs of the firm and the interests of the national accountant.

The rejection of the balance sheets of the private accounts, as being fundamentally imperfect and including a variety of deficiencies, as conceived by the U.N., should not be made without considering their advantages. These may outweigh their deficiencies and provide a new outlook to their prospective uses. Having recognised their advantages, adequate facilities to cater for modifications to their framework should be considered. In support of this argument, the experience of Egypt is given as an example of how the balance sheet of the business accounts can be used to furnish information relevant for sector balance sheets. The Egyptian corporate balance sheet has been purposefully designed to aid the construction of national accounts. It has been shown that though the balance sheet still lacks details in certain items, it was able to collect basic information from two important economic sectors in Egypt, namely the public enterprises sector and the private organised business sector.

The other limitations of national balance sheets have been considered within their conceptual and accounting frameworks as proposed by the recent report of the U.N. The investigation started by examining the suitability of the indirect approach for developing economies. This has been reached by looking first at the experiences of certain developed economies in the field of statistical inquiries for the purposes of either national balance sheets or the capital formation account. The results of this investigation suggested that in the developed economies the inaccurate information, low response rate, the considerable costs involved and the deficiencies in the estimates of capital stock and capital consumption are the main problems that were faced in exercising such inquiries. In order to assess the validity of the indirect approach in developing economies, an investigation of their current state of development in the areas of annual sample inquiries and capital finance account was carried out. Fundamentally these are the main sources of information in the indirect approach as

conceived by the U.N. The result illustrated the deficient and unsatisfactory status in these fields in terms of not supplying detailed information on stock variables and capital transactions. Also, it has been indicated that the current state of national accounting statistics in a great number of developing economies prohibits the use of their capital accounts as a basis for national balance sheets. This is mainly due to their inaccuracy, unreliability and incompleteness. These deficiencies have been demonstrated through the provision of evidence on the current status of national income accounts in certain developing economies.

Failure to recognise the inadequacy of the indirect approach for the purposes of national balance sheets in these developing economies may be mainly attributed to the poor understanding of the current state of their annual sample inquiries. It may also relate to inadequate ad hoc investigations into the problems associated with the compilation of capital stocks. The United Nation's experts on national balance sheets seem to have also overlooked the results obtained by other international organisations, such as the IBRD, on the state of information available in certain developing economies (such as Libya, Mexico, Spain, Thailand and Venezuela)*. The indirect approach, by definition, requires detailed and comprehensive information covering all balance sheet items. The collection and supply of this information requires financial as well as skilled manpower resources. This task, as conceived by the U.N., could be very cumbersome, costly and in many instances impracticable in certain developing economies.

* see, for example, Waterstone, (198, pp.170-171).

An attempt, therefore, has been made to improve an existing source of information, concentrating on the balance sheets of the micro economic units of the companies sector for two main reasons:

- (a) the importance of their financial links with other economic sectors
- (b) to resolve the difficulties in using their balance sheets for national accounts purposes*.

These balance sheets should have two basic properties; compatibility with the sector balance sheet and no radical difference from the current accounting standards. In making such improvements, the balance sheet model of the Egyptian public companies has been used as a basis. This will be outlined later in this chapter.

It has been found that the U.N. experts omitted the opening balance sheet account and the capital finance account from the framework of their proposed sector balance sheets and the supplementary tables. This omission may not be in the interest of the users of these accounts and tables. The deficiency of their approach does not allow the analyst, particularly at this early stage of development where the delay in publishing balance sheet information could be a common phenomenon in certain countries, to identify the extent to which the differences between the closing balance sheet and the reconciliation account are the result of the opening balance sheet rather than changes in the total acquisition of assets/or incurred liabilities. It would have been hoped that the essence of tables (29)

* these difficulties have recently (1978) been emphasised by the Central Statistical Office in London, (49, pp.105, 106).

and (30) which were initially proposed by Revell for the U.N., should have been incorporated in the recent U.N. draft on balance sheets. Table (29), however, should have been recommended not only for each institutional sector (as proposed by Revell) but should also be constructed for each sub-sector of the institutional sectors for the reasons discussed earlier. One of the main deficiencies of the standards accounts and tables as recommended by the U.N. is their not considering either the "special circumstances of developing economies" or their basic feature of "economic dualism".

It has been argued by the U.N. that the structure of national balance sheets should follow that of the national income accounts. It has been shown that this argument is only valid if the concept of homogeneity in the components of the sector balance sheet is observed. This is mainly to achieve the objectives of national balance sheets.

The market valuation concept has been shown to include certain practical difficulties. These may either limit their usefulness for balance sheet purposes or represent problems for the compiler.

The U.N. recommendations would also not appear to give a sound basis for the international comparability of national balance sheets. This is mainly due to the freedom given to nations by the U.N. in respect of the conceptual structure of national balance sheets and to their failure to consider the needs and circumstances of developing nations. It has been concluded that for effective international comparisons specific conditions have been shown as a prerequisite for carrying out this type of analysis.

The accounting framework of the flow of funds system in various OECD countries and its Egyptian counterpart (using the U.K. system as a contrast)

together with their current deficiencies were investigated.

It has been shown that the OECD flow of funds accounting framework is deficient in two major factors; (1) the high degree of aggregation of heterogeneous economic units, e.g. "Other Domestic Sectors Column", and (2) the absence of intra-sector flows. It has been argued that this model may not be adequate either for the needs of developing economies or for the users of these accounts.

The conceptual framework that outlines the accounting structure of the Egyptian flow of funds system (old and new) together with the practical problems that faced the compiler were examined. The investigation showed that the system was found to have the following characteristics. Examples are:

- (1) The identification of both the intra and inter sector flow transactions of the economic sectors.
- (2) The disaggregation of the major economic sectors into as many sub-sectors as possible, particularly the financial sector. This has ensured the concept of homogeneity.
- (3) The lack of a wide variety of financial instruments with different levels of risk. This is mainly due to the weakness of both the Egyptian Stock Exchange and the private companies sector.
- (4) The presentation of the financial transactions at various degrees of aggregation and disaggregation.

(5) The Central Bank of Egypt collects information from banks on financial activities not only by sector and its components, but also by kind of major economic activity in terms of trade, agriculture, industry and services.

(6) The banks' returns to the Central Bank have been considered a main source of financial information for the construction of flow of funds accounts.

(7) The provision of detailed data in terms of sources and uses of funds.

(8) The presentation of complete data on the financial activity of the government (central and local) in terms of its surplus/deficit and the transactions in the financial instruments.

The main practical problems that confronted the Egyptian compiler of flow of funds accounts have been investigated. These include lack of balance sheet data of certain sectors, insufficient detail on financial investments of balance sheets available, variability in the treatment of financial transactions, the problems associated with the distribution of notes and coin and the inactive role played by the Institute of National Planning in Cairo in not promoting various economic sub-sectors to participate in, and understand, the flow of funds system.

The comparison of the Egyptian flow of funds system with its British counterpart has shown that most of the characteristics quoted earlier, with the exception of (3) and (6), do not apply to the U.K. system. It has been argued that the characteristics of the Egyptian system are not only of relevance to developing economies but could also benefit the users of

these accounts.

The fundamental problems that could impair the informational content of the flow of funds system were investigated. Special reference was made to the current limitations of both the Egyptian and the U.K. flow of funds accounts that could impair their designed objectives.

It has been shown that the scope of detail of the financial categories, in particular the restriction of the financial transactions only to those undertaken in the market, and the net approach, are among the main problems that could affect the informational content of the flow of funds system. For example, the absence of detail on the financial categories would prevent the analyst examining the various forms of credit used by the saving and deficit sectors. Also, the restriction of the scope of the flow of funds system to include only market transactions may not make the accounts beneficial for a great number of developing economies whose capital markets are either non-existent or inefficient. It would also make the accounts inadequate for the analyst to examine those transactions that may take place outside the capital market such as credit facilities. The net approach would not also enable the analyst to trace the flow of savings; this could constrain the use of the accounts for capital market analysis. It could also limit their use in the study of the activity of the financial institutions in the economy, particularly if their role in the financing process needs to be investigated and analysed.

The fundamental limitations that may detract from the value of the Egyptian and the U.K. flow of funds systems were outlined. It has been shown that the lack of balance sheet data in both countries not only hinders the flow of funds analysis but could constrain the construction of these accounts. It has also been shown that despite the recent efforts

made by the CSO and the Royal Commission to construct sector balance sheets, the personal sector balance sheet thus far developed has been found to be not consistent with the classification of assets and liabilities as identified in the National Income and Expenditure (The Blue Book).

A second major deficiency in both the Egyptian and the British systems is the lack of information covering financial transactions either according to major kind of economic activity or to the kind of economic activity as identified in Table 5.2 of the SNA. The latter classification has been specifically recommended for both national income accounts and national balance sheets and there is no reason why it should not be extended to include the flow of funds system. It has been shown that the Central Bank of Egypt made an effort to collect data on financial transactions according to kind of major economic activity. In contrast the Bank of England does not collect, for the purpose of flow of funds accounts, this type of information.

A third deficiency applicable to the British system is the insufficient breakdown of the financial transaction categories of the sector account. A consequence of this is that their application to the analysis of the financial behaviour of certain economic sectors in respect of a specific financial instrument is limited. It has also been shown that the flow of funds systems of both Egypt, and to a lesser extent Britain, have been constrained by their construction on the basis of "changes in balances" techniques.

The Bank of England's approach to flow of funds accounts is based on recording only those transactions leaving or entering the sector. The omission of the intra sector transactions limits the usefulness of the flow

of funds accounts for the study of the financing process. The scope of the financial activity of a sector might include financial claims within the same family (sector) such as bank loans, special deposits, corporate securities and some forms of book credit. This obliteration also limits the use of the accounts for capital market analysis. The magnitude of the intra-sector flows has been shown by reference to the U.K. banks. In contrast it has been shown that the Egyptian system is conceptually based on recording both intra and inter financial flows, thereby extending the scope of the accounts. Consequently, the Egyptian system disseminates more relevant information on the financial activity in the economy than its British counterpart. It follows that the British system may not fully provide estimates complying with the concepts necessary for the achievement of the purpose of flow of funds accounts.

The scope of investigating the Egyptian public companies in respect of both their financial accounting statements and the controlling and data collection agencies has been attributed to the significant role played by these companies in the Egyptian economy.

It has been shown that there are many agencies whose basic task is to control the activity of the public companies and that this has led to the overlapping functions of data collection and controlling bodies. The extent to which these functions have influenced the quality of information communicated to the sponsoring minister has also been investigated.

The limitations of the published accounts of the Egyptian public companies have been examined and assessed against two important factors. Firstly, the objectives sought by the SUA and secondly the basic information needs for government. The investigation has been carried out with reference to the U.K. nationalised industries' account in order to

provide a model of practice in a developed economy.

The outstanding features together with the objectives of the SUA in Egypt have been outlined. A comparison between the accounts of public companies in Egypt with those of selected British nationalised industries revealed that the former accounts have certain advantages over the latter in terms of:

- (1) The coordination of the financial accounts with national accounts
- (2) The presentation of the accounting information in a uniform format in terms of a uniform terminology and standard
- (3) The availability of almost all the enterprises accounting information from the main body of their accounts.

These three factors combine to make the Egyptian accounts, in this context, more useful for the users than their British counterpart. Despite these advantages, the informational content of these accounts has been found to be seriously blurred by certain limitations, most of which were also found to be applicable to the accounts of the selected British nationalised industries examined. In view of these limitations it is argued that the published accounts of these public undertakings, both in Egypt and Britain, tend to obscure information relevant for government uses. Accordingly, there is a possibility that the inadequate disclosure of the financial results achieved by these enterprises could mislead the government.

It has also been shown that both the Egyptian and the British accounts fail to highlight data on the contribution of these public undertakings to

social and environmental improvements. Failure to furnish this information could undermine the effectiveness of earnings criteria as instruments for evaluating the success or failure of the management of the public enterprises.

Egypt's accounts suffer from non-homogeneity, particularly the industry's accounts, and delay in publication. The British accounts in contrast are presented on a homogeneous basis and are usually published shortly after the end of the financial year.

The depreciation method used, both in Egypt and Britain, could result in presenting misleading information on the profits of the company. This is particularly important if a long time series (10, 15 years) is taken in assessing the company's performance.

The lack of a uniform costing system may also limit the value of reported information for comparative purposes. Though the accounts of the public companies have been designed to furnish information relevant for national accounts, it has been shown that certain important data, of particular relevance for sector balance sheets, seems to have been overlooked by the designer.

The proposed modifications to the financial accounting statements of the public enterprises in Egypt were based on two important factors. Firstly, the final accounts must meet the requirements of the internal management of the firm. Consequently the modifications must be compatible with their needs and the current business practice. Secondly, they should satisfy the basic needs of government.

It has been shown that the modifications suggested are compatible with the Egyptian SUA. Typical concepts, such as coding numbers and the basic structure, have all confirmed the adequacy of the modified package compared to the current practice in Egypt. The modified version of the balance sheet together with its supplementary notes would not only provide the government with sufficient and effective first hand information but it would also remedy an inherent flaw in relation to sector balance sheets. Also, the modifications made to the Production and Trading Account and the Profit and Loss Account have considered the basic needs of government, including the compilation of national income accounts. It has also been shown that in order to improve the existing practice of presenting information relevant to the company's contribution to the social and development arena, a new accounting statement has been suggested. This new statement has been termed "Cost of Social Benefits and Reconciliation of Profit Statement". The structure, scope and advantages of this statement have been outlined and discussed.

The proposed modifications have been compared with typical financial statements of selected development economies. One of the main advantages of the proposed modifications is that they could prove useful for the compiler of national accounts in that another reliable data source is available. Thus the accounts may be useful for either cross checking or as a basic input for his accounts.

The major contributions of this study are:

Firstly, the provision of information on the experience of Egypt in approaching two important components of national accounts. This helps to give insight into the problem of "the limited national experiences" as highlighted by the U.N., particularly in the field of national balance sheets.

Secondly, the comprehensive discussion on national accounts, particularly the identification of their current limitations, should be of great benefit to other countries as well as the international organisations, and will be of particular importance to developing economies.

Thirdly, the economic implications of the significant differences between practice and theory in the approach to the flow of funds system and public enterprises' accounts were examined for both developed and developing countries.

Finally, the Cost of Social Benefits and Reconciliation of Profit Statement is proposed in order to overcome the present problem of measuring the true performance of companies and to allow a uniform interim comparison.

Specifically the analysis recommends that the relevant authorities should give careful consideration and review to the following areas where more research is needed:

United Nations Economic and Social Council : System of National Accounts (SNA):

Here the thesis has examined the following problems:

- The concept of homogeneity
- The needs and circumstances of developing countries in respect of the sources of information for the construction of national balance sheets
- The relationship of the proposed national balance sheets structure to

their specific objectives

- Finally, recommendations have been made for the strengthening of the direct approach to overcome the limitations associated with the indirect approach.

United Kingdom : Statistical Agencies and Financial Accounts:

- It would seem desirable that the Central Statistical Office adopts a common and consistent balance sheet framework, particularly in the categories of financial assets and liabilities. This is also clearly relevant to the work of the Royal Commission on the Distribution of Income and Wealth.
- Further there would seem to be a case for the Central Statistical Office to introduce estimates of financial transactions by kind of economic activity. Further the Bank of England should also collect information in this manner for the purpose of flow of funds accounts.
- Also the Bank of England should give consideration to the benefit associated with measuring intra sector flows and details of financial categories.
- The presentation of nationalised industries' accounts should be improved in terms of the information they provide.
- Finally, the possible use of the modified version of the Egyptian balance sheet model, to collect information for the proposed U.K. industrial and commercial companies balance sheet, should be studied.

Egypt:

- The Central Agency for Public Mobilization and Statistics should reconsider the process of sectoring the Egyptian economy for national balance sheet purposes in order to overcome two major deficiencies associated with the concept of homogeneity and the special economic circumstances of the country. Careful thought should be given to the modified balance sheet suggested in this study.
- The identification of the "key problem areas" that faced the compiler of flow of funds accounts could indicate areas for further improvements. It is suggested that the Institute of National Planning in Cairo should immediately commence a series of seminars dealing with the flow of funds system before the introduction of a unified system of accounts for banks and other financial institutions.
- The Committee of the System of Unified Accounts, established since 1966, should note the comments and modifications detailed in this study in its continuing review of the accounting policies of the Egyptian public companies. The advent of the national balance sheets system and the needs of the government must be taken into account.
- It is strongly suggested that the People's Assembly should review the performance of the data collection and controlling agencies. The system and the modified accounts, proposed in this study, could form a sound basis for such an exercise. The proposal would specifically reduce the number and the bureaucratic nature of these agencies and create a uniform information system that will satisfy the basic requirements of the majority of these authorities.

The appendix provides comprehensive statistical information on the financial accounts of the most important economic sectors in Egypt - namely the public enterprises sector and the organised private business sector. This data, which may not be available elsewhere in the English language, is presented on a disaggregated basis and should be of interest to two groups of users. Firstly academic researchers and secondly, and possibly of greater importance to Egypt, foreign investors who can evaluate the strength and weakness of the various activities in the economy and so determine the profitable areas for investment. - It is hoped that the informational content of these statistics could help to overcome some of Egypt's current problems, to quote President Sadat, (2, p.5):

"We need foreign investment to help promote the much needed growth of our war torn economy ...".